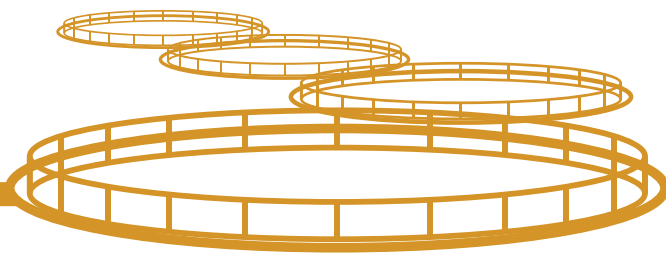


The **Consortium for Ocean Leadership**,
in collaboration with **Meridian Institute**,
convenes the **2018 Industry Forum**

Friday, October 26 at ASAE Conference Center
1575 I Street, NW, Washington D.C.

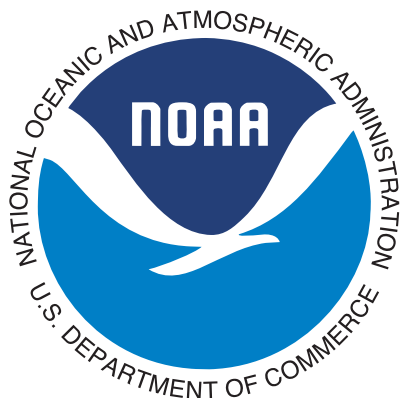


Meridian Institute
Connecting People to Solve Problems



2018 Sponsors

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COL's Industry Forum has benefited from the generous sponsorship gifts of several of our member institutions, federal agencies with responsibilities in this area, industry partners, and other non-governmental organizations. All involved see the collective benefit of bringing together diverse stakeholders to discuss the future of U.S. offshore finfish aquaculture and of working together to advance the science that guides decision-making in all sectors. Please join us in thanking them for their generous support, which has allowed us to bring this group together.

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The Consortium for Ocean Leadership, in collaboration with Meridian Institute, welcomes you to the 2018 Industry Forum

Welcome to the 4th annual Industry Forum, ***U.S. Offshore Aquaculture: Will We Fish or Cut Bait?*** Thank you for joining us!

This year, we have come together as cross-sector stakeholders with a shared interest in exploring the potential for offshore finfish aquaculture in the United States. While our interest and our stake in the topic may vary, we are all reliant upon available science and technology for wise decision-making, which ultimately ensures our ocean can maintain its health and productivity for all. At the same time, there are many perspectives on how the U.S. should approach offshore finfish aquaculture, if at all. We must consider and utilize emerging best practices, intelligence, and tools to close existing knowledge and process gaps and to better inform policies and regulations that support timely and good decisions. All this must be done with an eye toward the careful balance of environmental stewardship and societal benefit. That is what this conversation is about.

I am hopeful that the outcomes will not only identify and codify knowledge gaps but also will be the development of agreed-upon, cross-sector recommendations for how to make improvements to a challenging issue. I also hope we can commit to collaborative efforts to advance the science and technology critical to science-based decision-making. Our advocacy efforts are stronger if we speak with a common message—we all benefit from improvements to the current systems—and robust discussions with varied perspectives are what it takes to get there.

Thank you again for spending a day in conversation with us and with each other about this important topic. I encourage your active participation so all voices are heard and considered.



A handwritten signature in blue ink that reads "Jonathan W. White".

RADM Jonathan W. White, USN (ret.)

President and CEO

Consortium for Ocean Leadership



NOAA FISHERIES

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- **Productive and sustainable fisheries**
- **Safe sources of seafood**
- **Recovery and conservation of protected species**
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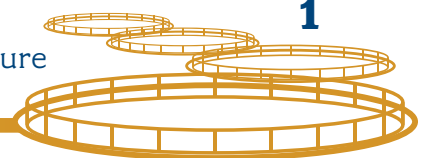
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2018 Industry Forum *U.S. Offshore Aquaculture: Will We Fish or Cut Bait?*

The Industry Forum is a roundtable meeting designed to bring together academia, industry, nonprofits, and the government sector in exploration of pressing issues of mutual concern. This year, the forum focuses on U.S. offshore finfish aquaculture in federal waters. The goals of the forum are to identify and understand where there is cross-sector agreement and disagreement on what ocean science, research, and technology gaps exist; how they might best be addressed collaboratively; and how the represented communities can work together to improve scientific understanding and decision-making around offshore aquaculture in all sectors.

More specifically, the objectives of this meeting are to: (1) Develop a clear, shared understanding of the current state of offshore finfish aquaculture globally and the present opportunities and challenges for establishing such an industry in the U.S.; (2) Illuminate the scientific and technical capacities, environmental safeguards, and investment opportunities needed for responsible offshore finfish aquaculture to be deployed in the U.S.; and (3) Identify specific areas of action that the science and technology community, government, aquaculture industry, and civil society organizations can implement to advance informed decision-making on this emerging industry.

The final proceedings document will be developed without attribution and will include specific recommendations to executive and legislative entities, as well as to industry, academic, nonprofit, and government stakeholders.



Meeting Agenda

- 8:30 a.m.** **Welcome Remarks** (Jonathan White, Consortium for Ocean Leadership)
- 8:45 a.m.** **Opening Remarks: Offshore Finfish Aquaculture as a Means of Advancing Multiple U.S. Priorities** (Paul Doremus, NOAA)
- 9:00 a.m.** **Keynote Remarks: Status of Offshore Finfish Aquaculture Globally and Major Opportunities and Challenges for the United States** (David Fredriksson, United States Naval Academy)
- 9:15 a.m.** **The Science and Technology of Finfish Aquaculture: Past, present, and future advancements and challenges**
Moderator: Jerry Schubel, Aquarium of the Pacific
Sebastian Belle, Maine Aquaculture Association
Sarah Lester, Florida State University
Neil Sims, Kampachi Farms, LLC
Michael Tlusty, University of Massachusetts Boston
- 10:30 a.m.** Break
- 10:45 a.m.** **What Would It Take?: Environmental and regulatory components of a successful offshore finfish aquaculture enterprise**
Moderator: Michael Rubino, NOAA Fisheries
Leigh Habegger, Seafood Harvesters of America
Robert Jones, The Nature Conservancy
David Kelly, InnovaSea
Kevan Main, Mote Marine Laboratories
- 12:00 p.m.** Break to get lunch
- 12:30 p.m.** **What Would It Take?: Identifying investment concerns, economic impacts, and innovation needs for success**
Moderator: Dane Klinger, Conservation International
Antonius Gagern, California Environmental Associates
Max Holtzman, Pontos Aqua Advisory
John C. Molina, Pacific6 Enterprises
- 1:45 p.m.** Break
- 2:00 p.m.** **Survey Says...: Are public perception and science aligned?**
Moderator: Scott Nichols, Food's Future, LLC
Roger Berkowitz, Legal Seafoods
Linda Cornish, Seafood Nutrition Partnership
Bill DiMento, High Liner Foods
Kim Thompson, Aquarium of the Pacific
- 3:15 p.m.** **Spotlight on Recommended Actions**
Moderator: Jonathan White, Consortium for Ocean Leadership
Megan Davis, FAU Harbor Branch Oceanographic Institute
Paul Doremus, NOAA
Don Kent, Hubbs-SeaWorld Research Institute
Aaron McNevin, World Wildlife Fund
- 4:00 p.m.** **Summary and Closing Remarks** (Jonathan White, Consortium for Ocean Leadership)
- 4:20 p.m.** **Sponsor Showcase**

Opening Remarks



Dr. Paul Doremus

National Oceanic and Atmospheric Administration (NOAA)

Dr. Paul Doremus is leading NOAA's strategic initiative to expand U.S. seafood production, primarily through aquaculture. In response to rising global demand for seafood, he is working across government, industry, and nonprofit sectors to provide a predictable regulatory environment and a robust research infrastructure for U.S.-based aquaculture. Dr. Doremus also serves as the chief operating officer for NOAA Fisheries, responsible for the agency's business and

management functions, the Office of International Affairs and Seafood Inspection, and the Office of Law Enforcement.

Dr. Doremus received his Ph.D. in government from Cornell University, and has over 20 years of experience in federal science, technology, and environmental policy and management.

Keynote Speaker

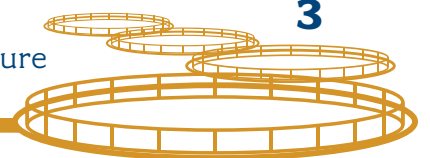


Dr. David Fredriksson

United States Naval Academy

Dr. David Fredriksson is a professor of ocean engineering at the United States Naval Academy (USNA) in Annapolis, Maryland. He has nearly 20 years of experience in the analysis and design of open ocean aquaculture systems for finfish, shellfish and macro-algae using field measurements, physical models and computational techniques.

Dr. Fredriksson is presently working on projects supported by NOAA, the Department of Energy and the National Science Foundation. He has collaborated with researchers from Canada, Mexico, Norway, the Faroe Islands, South Korea and New Zealand. In 2016, he received the *Class of 1951 Civilian Faculty Award for Excellence in Research*, given to only one faculty member at the Naval Academy per year. In addition to research, Dr. Fredriksson thoroughly enjoys teaching midshipmen and serving as the director of ocean engineering at the USNA.



Speaker Bios

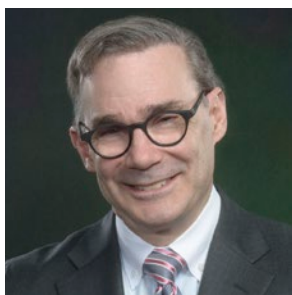


Mr. Sebastian Belle

Maine Aquaculture Association

Mr. Sebastian Belle began his career as a commercial fisherman, working his way through university as a mate on offshore lobster boats. Currently Mr. Belle is the executive director of the Maine Aquaculture Association (MAA), a private nonprofit association representing Maine shellfish and finfish growers. In addition to his role as MAA executive director, he is president of Econ-Aqua, and a founding partner of TAAG. Econ-Aqua is a consulting firm specializing in farm management, financial due diligence and risk analysis and control. TAAG is an international consulting and investment firm specializing in aquaculture projects. Mr. Belle has held previous roles including, the state aquaculture coordinator for the Maine Department of Marine Resources, project manager of the Bluefin Tuna Project at the New England Aquarium in Boston, Massachusetts, and operations manager for Connors Aquaculture Inc. in Eastport, Maine, one of the largest Atlantic salmon farms in the United States.

Mr. Belle holds degrees in fisheries biology and agricultural economics. He served as a technical consultant on over 20 major commercial aquaculture ventures for investment groups from Europe and North and South America. Before returning to North America in 1989, Mr. Belle spent four years managing a commercial scale aquaculture research and development foundation in Norway.

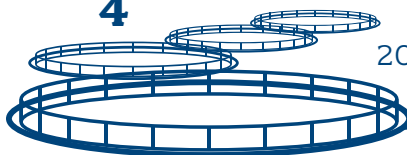


Mr. Roger Berkowitz

Legal Seafoods

Mr. Roger Berkowitz is the president and CEO of Legal Sea Foods, a Boston-based restaurant group that has 33 restaurants, a wholesale business and mail order division. He started working in his family's fish market in the Inman Square section of Cambridge, Massachusetts at the age of 10 and learned every aspect of the business before becoming president and CEO in 1992.

Mr. Berkowitz is a member of the board of directors of the Federal Reserve Bank of Boston since 2012; a regional selection panelist on the President's Commission on Whitehouse Fellowships since 2004; member of the NOAA Marine Fisheries Advisory Committee since 2017; leadership council, Harvard School of Public Health since 1998; and member and past president of the Massachusetts Restaurant Association. He also serves numerous other boards including Dana Farber Cancer Institute; UNICEF; Environmental League of Massachusetts; Blue Frontier Campaign; and Brandeis International Business School. Mr. Berkowitz received the James Beard Award, *Who's Who of Food and Beverage*, in 2017; the Chairman's Award for Distinguished Meritorious Service from the Atlantic States Marine Fisheries in 2011; and was inducted in "Nation's Restaurant News" Menu Masters Hall of Fame in 2008. He was mentioned in the book *"Dare to Lead! Uncommon Sense and Unconventional Wisdom from 50 Top CEOs"* by Mike Merrill, and *"Leadership Secrets of the World's Most Successful CEOs"* by Eric Yaverbaum. Mr. Berkowitz co-wrote *"The New Legal Sea Foods Cookbook"* and is the co-host of "Name Brands," a podcast series launched December 2017.





Ms. Linda Cornish

Seafood Nutrition Partnership

Ms. Linda Cornish is president of Seafood Nutrition Partnership (SNP), a nonprofit organization inspiring a healthier America through a balanced diet that includes seafood. She is a mission-driven executive who is working on addressing America's public health crisis by empowering healthier food consumption. She was instrumental in the formation of SNP and led the launch of a public health campaign in October 2015 during National Seafood Month to help Americans find a path to wellness through healthy eating and seafood nutrition. She has presented to many groups to raise awareness and urgency about the need for the general public to eat more seafood, including Aquaculture America, Aquarium of the Pacific, Bay of Fundy Seafood Forum, Boston Museum of Science, Canadian Aquaculture Industry Alliance, Clinton Global Initiative, Global Aquaculture Alliance — GOAL Conference, Groundfish Forum, NFI Global Seafood Marketing Conference, Seafood Expo North America, Sustainable Seafood Week NYC, World Seafood Congress, and Women of Seafood.

Ms. Cornish has held leadership and management positions with Arthur Andersen, Hitachi Business Consulting, Harrah's Entertainment, Greater Memphis Chamber of Commerce, and Bill of Rights Institute; is co-founder and past chairman for the Memphis Farmers Market; and served on the board of Greening Greater Memphis. She is a graduate of the University of California at Riverside with a bachelor's degree in business administration and holds a Master of Business Administration degree from the University of California at Los Angeles. She lives in Arlington, Virginia with her husband and two Sealyham Terriers.

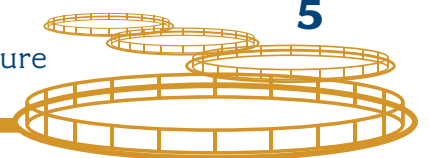


Dr. Megan Davis

Florida Atlantic University, Harbor Branch Oceanographic Institute

For nearly 40 years, Dr. Megan Davis has combined her strengths in aquaculture, marine ecology, technology transfer, business and project management to lead team projects throughout the Caribbean and Florida. As co-founder and chief scientist of the Turks and Caicos Island's queen conch farm she was instrumental in developing commercial techniques for conch aquaculture and restoration. At Harbor Branch Oceanographic Institute (HBOI), she was part of the team that retrained more than 700 commercial fishers, affected by a state-enacted net ban, to be clam farmers. This advanced the clam industry to be one of the leading aquaculture segments in Florida. She was active in establishing HBOI's 30-acre Aquaculture Development Park, which serves the industry through workforce training and the development of new technology and production of species in recirculating systems. In a partnership with Darden Restaurant, Inc., Dr. Davis led the science team on developing components of a large-scale spiny lobster aquaculture project in the Caribbean. She was also lead HBOI administrator for a 10-year cooperative agreement program with USDA-ARS, which advanced domestic warmwater marine fish.

She has served in several leadership roles at FAU HBOI, is a Consortium for Ocean Leadership Trustee, and a NOAA Marine Fisheries Advisory Committee Member. One of her passions is sharing information about healthy seafood and sea vegetable choices through cooking demonstrations combined with presentations about sustainable seafood.





Mr. Bill DiMento

High Liner Foods

Mr. Bill DiMento is vice president of Corporate Sustainability and Government Affairs at High Liner Foods. He oversees corporate-level sustainability initiatives and government affairs ensuring that the company is meeting the strictest of standards in manufacturing, seafood procurement and social compliance through its supply chain. Under his leadership, the company continues to strengthen its commitment to sustainable practices by increasing the amount of products that are certified sustainable, reducing source packaging, reducing food waste, as well as lowering energy and water usage across the company. Mr. DiMento has held key positions at High Liner Foods since 1987, including director of Quality Assurance and Regulatory Affairs, director of International Food Safety and Regulatory Affairs, senior director of Manufacturing and Regulatory Affairs and most recently as V.P. of Quality Assurance, Sustainability and Government Affairs.

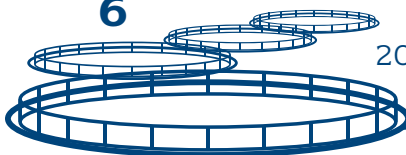
Mr. DiMento is a professional member of the Institute of Food Technologists, chairman of the Executive Committee of the Global Seafood Sustainability Initiative, and has been named chairman of the National Fisheries Institute's Technical Committee. Additionally, he is a past member of the board of directors for the International Association of Fish Inspectors and the Atlantic Fisheries Technology Conference and past U.S. representative to CODEX. He received SeaWeb's first-ever Grand Seafood Champion award in 2015 for his work that stretched across all four award categories: leadership, innovation, vision and advocacy. Mr. DiMento holds a B.S. in food science with engineering coursework from the University of Massachusetts and resides with his wife Beth on the north shore of Massachusetts.



Dr. Antonius Gagern

California Environmental Associates

Dr. Antonius Gagern is a senior associate at California Environmental Associates (CEA), a boutique consulting firm working at the intersection of natural resource economics, policy, finance, and management. At CEA, Dr. Gagern supports large donors (such as the World Bank, NORAD, and major philanthropic foundations) in the prioritization and evaluation of selected programs, including fisheries, aquaculture, agriculture and climate change. Before joining CEA, he was the environmental economist at Rare, an international NGO with programs on fisheries, agriculture and watershed management. In this role, he spearheaded major organizational approaches of market-based solutions to resource management, led Rare's analytical work with the National Economic and Development Authority of the Philippines (cost-benefit analysis of national small-scale fisheries reform and design of sustainable financing mechanisms to inform five-year development plan), and designed the environmental guidelines for the first impact investing fund for tropical small-scale fisheries (Meloy Fund). Before joining Rare, Dr. Gagern worked as an external consultant for CEA between 2010 and 2014. He holds degrees from the German University of Cairo and University of Tübingen (undergraduate in biology), the University of Bremen (M.Sc. in tropical marine ecology), and Autonomous University of Barcelona (M.Sc. in applied economics and Ph.D. in natural resource economics).





Ms. Leigh Habegger

Seafood Harvesters of America

Ms. Leigh Habegger is the executive director of Seafood Harvesters of America, an advocacy group that represents fishermen nationwide who support sustainable fisheries. The purpose of the Seafood Harvesters is to ensure a plentiful and lasting seafood harvest for America through education, stewardship, and accountability in our fisheries.

Prior to joining Seafood Harvesters in May 2018, Ms. Habegger served as the senior manager of External Affairs for Restore America's Estuaries, advocating for policies that conserve our nation's estuaries and encourage the sustainable use of our natural resources. Previously, she worked as a lobbyist on fisheries and maritime policy, facilitated work related to highly migratory species, and served as a Knauss Fellow for Congresswoman Chellie Pingree (ME-01) covering oceans, coastal, and fisheries issues.

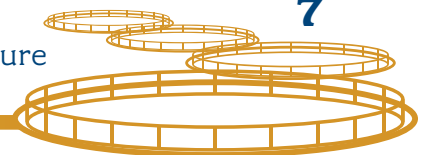


Mr. Max Holtzman

Pontos Aqua Advisory

Mr. Max Holtzman is a principal at Pontos Aqua Advisory, part of the Pontos Aqua ecosystem. His focus is on early stage companies and projects including Pontos' unique risk-focused RAS platform as well as leading its institutional and governmental advisory work. He is also a founding officer of Stronger America through Seafood, which strives to increase the U.S. production of healthy, sustainable and affordable seafood.

Prior to joining Pontos, he was the vice chairman of Capitol Peak Asset Management which focused on infrastructure projects and companies in Rural America. Under a previous administration Mr. Holtzman was appointed by the President of the United States as the senior advisor to the Secretary of Agriculture, where he advised the Secretary on the development of new public-private partnerships, aquaculture, trade, biotechnology and international food security. Additionally, he served as acting deputy under secretary for Farm and Foreign Agricultural Services and as acting deputy under secretary of Marketing and Regulatory Programs. In these roles, he represented the U.S. in its negotiations with the People's Republic of China as a four-time delegate on the Joint Committee on Commerce and Trade and was regularly involved with a multitude of international trade issues, trade missions and trade negotiations. He also served as the United States Chairman of the North American Biotechnology Initiative, which includes the United States, Canada and Mexico. He holds an undergraduate degree in agricultural economics from the University of Florida's Institute of Food and Agricultural Sciences and his law degree from the University of Miami.





Mr. Robert Jones

The Nature Conservancy

Mr. Robert Jones is the global lead for The Nature Conservancy's new Aquaculture Program. The program consists of active projects in seven countries designed to demonstrate the environmental, social, and economic benefits aquaculture provides for people and nature. Prior to joining The Nature Conservancy in February 2016, Mr. Jones served as the program coordinator for the NOAA Fisheries Office of Aquaculture.

Previously, he served as a Knauss Fellow with the U.S. Department of State where he served as point of contact on aquaculture and represented the U.S. at international fisheries negotiations in the North Pacific Ocean. Earlier, Mr. Jones served in diverse roles for NOAA Fisheries, including as an economic analyst for the Gulf Shrimp Fishery and as a Commercial Fisheries Observer in the Mid-Atlantic. He holds a M.S. in marine affairs and policy from the University of Miami Rosenstiel School of Marine and Atmospheric Science with a concentration in marine aquaculture, focusing on new species and offshore aquaculture and a B.A. from Boston College in international studies. He grew up fishing with his family on the New Jersey shore.



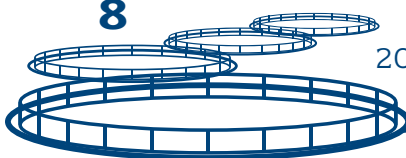
Mr. David Kelly

InnovaSea Systems, Inc.

Mr. David Kelly is CEO & CTO of InnovaSea Systems, Inc. He is responsible for setting InnovaSea's overall strategy and leads the research and development efforts to create advanced open ocean aquaculture farming systems. Prior to InnovaSea, Mr. Kelly served as president and chief executive officer of Bluefin Robotics, a provider of autonomous underwater vehicles (AUV) and related marine robotics technology. He is a senior executive and technologist with

experience ranging from early-stage high tech companies to Fortune 500 firms.

Mr. Kelly holds a Bachelor of Science degree in electrical engineering from Worcester Polytechnic Institute, a Master of Science in computer science from the University of Texas at Dallas and an MBA from Southern Methodist University.





Mr. Don Kent

Hubbs-SeaWorld Research Institute

Since 1998, Mr. Don Kent has been president and CEO of Hubbs-SeaWorld Research Institute, an international marine research institute dedicated to ensuring future generations experience the benefits of a healthy environment by gaining scientific knowledge and finding solutions to conservation challenges facing marine ecosystems and species. He came to the Institute in 1977 as a San Diego State University graduate student and has participated in programs studying gray whales, assessing noise effects on animals, minimizing killer whale impacts on fishing operations, and developing marine finfish aquaculture. Mr. Kent was instrumental in initiating the Ocean Resources Enhancement and Hatchery Program, a partnership with recreational and commercial fishing communities and the California Department of Fish and Wildlife to investigate ways to counteract the depletion of coastal marine fisheries through stock replenishment. He is responsible for planning and construction of the Leon Raymond Hubbard, Jr. Marine Fish Hatchery, where more than 2.4 million white seabass have been reared, raised, and released.

Mr. Kent is also president and CEO of Rose Canyon Fisheries, a commercial-scale fish farm proposed off the coast of southern California, and chairman of the California Artificial Reef Enhancement foundation, which supports marine research and education about offshore energy platforms off the southern California coast.

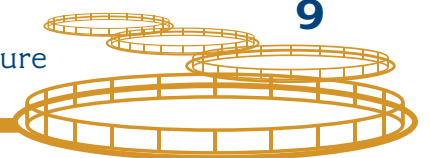


Dr. Dane Klinger

Conservation International

Dr. Dane Klinger is the aquaculture innovation fellow at Conservation International (CI), where he leads CI's work on aquaculture governance, finance, and innovation. Dr. Klinger has worked for and with corporations, foundations, NGOs, and universities in the United States and abroad to develop solutions to a range of challenges in commercial aquaculture and the global seafood trade.

He holds a Ph.D. from Stanford University and was a postdoctoral researcher at Princeton University. Dr. Klinger's work has been published in magazines such as *Foreign Policy* and *Global Aquaculture Advocate* and in peer-reviewed journals such as *Science*, *Aquaculture*, *Marine Policy*, *Marine Pollution Bulletin*, *Environmental Science & Technology*, and *Conservation Biology*.





Dr. Sarah Lester

Florida State University

Dr. Sarah Lester is an assistant professor in the Department of Geography at Florida State University (FSU). She received her Ph.D. in marine ecology from the University of California Santa Barbara (UCSB), and prior to coming to FSU, was the research and program director of the Sustainable Fisheries Group at UCSB. Her expertise includes marine conservation and protected areas, natural resource management and policy, marine spatial planning and ocean zoning, siting of offshore aquaculture, sustainable seafood, and fisheries management. Her current research projects focus on revealing drivers of global patterns of marine aquaculture development, designing ocean zoning and fisheries management around small island states, modeling ecosystem services provided by seagrass beds in the Gulf of Mexico, disentangling interactions between fisher behavior and coral reef ecosystem state, and understanding the effectiveness of different types of marine protected areas. Dr. Lester applies an interdisciplinary lens to all of these research topics and is dedicated to conducting research that can inform policy and management.

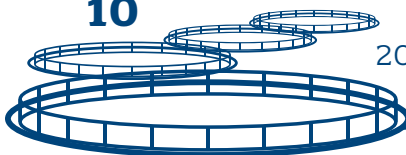


Dr. Kevan L. Main

Mote Marine Laboratory

Dr. Kevan Main has worked in the field of aquaculture for more than 30 years. She has been a senior scientist at Mote Marine Laboratory since 2001, where she also serves as the director of Mote's 200-acre aquaculture research field station. Dr. Main and her team are developing biotechnological tools and sustainable farming methods to produce several high-value marine fish species. These young marine fish (fingerlings) are needed to stock offshore cage systems and land-based recirculating systems, and to restore declining marine fish stocks.

Dr. Main served as president of the World Aquaculture Society in 2012-2013 and was inducted as a fellow of the World Aquaculture Society in 2016. She was recognized in 2016 by the White House as a Champion of Change for Sustainable Seafood. Dr. Main received her Ph.D. from Florida State University where she studied shrimp and fish behavior in seagrass meadows in the northern Gulf of Mexico.





Dr. Aaron McNevin

World Wildlife Fund

Dr. Aaron McNevin is World Wildlife Fund's (WWF) global network lead for Aquaculture. He started his career farming perchids, esocids and salmonids. In 2005, he began at WWF developing environmental and social standards for responsible aquaculture through a series of multi-stakeholder roundtables (Aquaculture Dialogues). These standards allowed for the formation of the Aquaculture Stewardship Council (ASC).

Dr. McNevin took a hiatus from WWF to manage an undergraduate program in fisheries science and aquaculture, teaching courses from limnology to static and flowing water fish culture to quantitative techniques in fish population assessments. He spends much of his time in the tropics where he focuses on accountability in the global aquaculture sector. He also has played a dual role in a unique partnership between WWF and American Red Cross (ARC) following the 2004 Indian Ocean tsunami where he provided oversight and support to all ARC livelihood projects in Indonesia associated with the disaster response and recovery effort. Dr. McNevin has helped launch an alternative ingredients consortium to allow pooling of resources to make leaps instead of steps in impact reduction. He is the environmental lead for the Seafood Task Force which has been the major change agent in the seafood sector following allegations of human rights abuse in Thailand. Through his work with WWF, Dr. McNevin's team is developing traceability freeware such that actors in upstream reaches of supply chains can be included and is developing forensic chemistry techniques such as elemental profiling to determine country of origin. Aaron has lived and worked in Thailand, Madagascar and Indonesia. He received his M.S. and Ph.D. from Auburn University in water and aquatic soil chemistry.



Mr. John C. Molina, JD

Pacific6 Enterprises

Mr. John C. Molina is founding partner of Pacific6 Enterprises, an organization that seeks to match financial with social capital. Founded in 2017 with five other long-time associates, Pacific6 has a wide variety of investments, including the restoration of an historic hotel in Long Beach, development of an aquafarm outside of San Diego, and a music and cultural festival. Prior to helping found Pacific6, he served as CFO at Molina Healthcare, Inc., a Fortune 150 company.

During his tenure, the company grew from a small, privately held family business to a publicly traded national healthcare company and the company's footprint has expanded from operations in four states to 35 states and the Commonwealth of Puerto Rico, employing over 20,000 people.

He is a board of directors for the Aquarium of the Pacific, the Long Beach Convention and Visitors Bureau, the Charitable Foundation of the California State University System, and previously served on the board of directors of the Los Angeles Branch of the Federal Reserve Bank. In 2016, he was named *Businessman of the Year* by the United States Hispanic Chamber of Commerce. Mr. Molina received his bachelor's degree in economics from California State University, Long Beach, where he was elected to the Phi Beta Kappa Academic Honor Society. He also earned a Juris Doctorate from the University of Southern California.





Dr. Scott Nichols

Food's Future, LLC

Dr. Scott Nichols is the founder of Food's Future, whose mission is to expand responsible aquaculture. He sees aquaculture as the route to a hopeful food future, one with a plentitude of the most nutritious and delicious thing we can eat—seafood. At Food's Future, Dr. Nichols works with clients to develop marketing, communication, and technological strategies that accelerate aquaculture's expansion so it may reach its potential to provide economically and environmentally sustainable food for our expanding world.

Previously, Dr. Nichols was co-founder, managing director, and member of the board of directors of Verlasso Harmoniously Raised Fish. There, he led Verlasso to become the first ocean-raised salmon to receive a positive ranking from the Monterey Bay Aquarium's Seafood Watch program which recognizes environmentally responsible farming practices.

Dr. Nichols is vice chair for the board of directors for the Aquaculture Stewardship Council and a member of the scientific advisory board for the Seafood Nutrition Partnership. He has also worked extensively on biodiversity projects in Africa and South America as a member of the board of directors for the JRS Biodiversity Foundation. His education includes a Ph.D. in biochemistry from the University of California at Los Angeles, and a degree from Wharton School's Advanced Management Program, University of Pennsylvania.

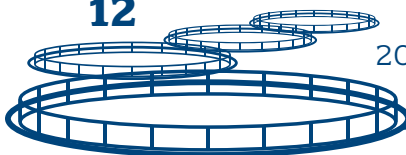


Dr. Michael Rubino

National Oceanic and Atmospheric Administration Fisheries

Dr. Michael Rubino is the director of the Office of Aquaculture at NOAA Fisheries. The office seeks to foster marine aquaculture through policy, science, technology transfer, outreach, and international collaboration. He has led the development of aquaculture regulations for federal waters, the National Shellfish Initiative, NOAA and the Department of Commerce aquaculture policies, and science tools for aquaculture management.

Earlier Dr. Rubino worked at the World Bank and the International Finance Corporation where he designed environmental investment funds. He also was the CEO of an aquaculture research and development company and a partner in a shrimp farm in South Carolina. He holds a Ph.D. in natural resources from the University of Michigan.





Mr. Neil Anthony Sims

Kampachi Farms, LLC

Mr. Neil Sims is co-founder and CEO of Kampachi Farms, LLC, based in Kona, Hawaii. Kampachi Farms is pioneering a permit application for offshore aquaculture in the Gulf of Mexico and is also working to develop offshore culture systems for herbivorous marine fish and macroalgae. Additionally, Mr. Sims is CSO and brand ambassador for Kampachi Worldwide Holdings, an offshore fish farm producing sashimi-grade Cabo Kampachi™ (*Seriola rivoliana*) in the Bay of

La Paz in Baja, Mexico.

Over the past two decades, Mr. Sims has led teams that have accomplished breakthroughs in open ocean mariculture systems and offshore aquaculture legislation and regulation, as well as pearl oyster culture and marine fish hatchery technology. His Kona research team pioneered the Velella project, demonstrating two new concepts in U.S. Federal waters: untethered, open ocean ‘drifter pens’; and “over-the-horizon aquaculture”™ with an unmanned net-pen operation in 6,000 ft of water, six nautical miles offshore.

Mr. Sims also founding president of the Ocean Stewards Institute—the open ocean aquaculture trade association—and is vice-chair of the Technical Advisory Group for the Aquaculture Stewardship Council.



Dr. Jerry R. Schubel

Aquarium of the Pacific

Dr. Jerry R. Schubel has been president and CEO of the Aquarium of the Pacific since 2002. He is president and CEO Emeritus of the New England Aquarium, and from 1974-1994 was dean of Stony Brook University’s Marine Sciences Research Center. For three of those years he served as the University’s provost. Earlier, he was a research scientist and associate director of Johns Hopkins University’s Chesapeake Bay Institute.

Throughout his professional life he has worked at the interfaces of science, management, and policy on issues in the coastal ocean. He has published more than 225 peer-reviewed papers and has written extensively for general audiences. He is a member of the California Ocean Science Trust Board, and the Science Advisory Team for California’s Ocean Protection Council. He was a member of the NOAA Science Advisory Board; National Sea Grant Review Panel; the National Research Council (NRC) Marine Board; the Ocean Research and Resources Advisory Panel; and the NRC Committee on the Value and Sustainability of Biological Field Stations, Marine Laboratories and Nature Reserves in 21st Century.

At the Aquarium of the Pacific, he created the Aquatic Forum that brings together scientists, policy-makers and stakeholders to explore alternative ways of dealing with important, complex, and often controversial environmental issues facing the nation. He also directs the Aquarium’s Marine Conservation Research Institute and the Aquarium’s Aquatic Academy. A recurrent theme for more than the past decade has been marine aquaculture. He created the Seafood for the Future Forum that is led by Ms. Kim Thompson.





Ms. Kim Thompson

Aquarium of the Pacific

Ms. Kim Thompson is the program manager of Seafood for the Future at the Aquarium of the Pacific. She works closely with various stakeholders in the seafood industry, including: fishermen, aquaculture producers, distributors, scientists, and government and nongovernment agencies, among others. Ms. Thompson has made the promotion of local seafood and responsible aquaculture priorities for the Program. She has extensive knowledge of the United States'

fisheries and aquaculture policies and seafood markets, seafood certifications, and best management practices for environmentally responsible aquaculture in the marine environment.

Leveraging her experience and knowledge in messaging on marine aquaculture, she has produced and developed programming to engage and educate the public and industry stakeholders about environmentally responsible seafood, with an emphasis on marine aquaculture. Ms. Thompson has also hosted workshops and forums at the Aquarium to facilitate multi-stakeholder dialogue about marine conservation and responsible seafood.



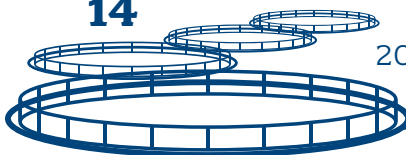
Dr. Michael Tlusty

University of Massachusetts at Boston

Dr. Michael Tlusty is an associate professor of sustainability & food solutions in the School for the Environment at the University of Massachusetts at Boston where he links science, technology, and innovation to help transform the world's aquatic food systems. His approach is to find solutions to create more food, waste less of it, and help the entire value chain do a better job creating the food we already produce. He has an undergraduate degree in animal science

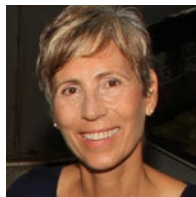
from the University of Illinois, and a Ph.D. in animal behavior and ecology from Syracuse University. It is this combination of agriculture and theoretical ecology that allowed him to successfully engage in the aquaculture arena.

Previously, he has worked with industry to model the carrying capacity of salmon in Newfoundland, and then with NGOs to develop robust certification programs and market-based initiatives. Dr. Tlusty's new incarnation as an academic will allow him to educate the next generation of leader necessary to develop integrative solutions to create enough food for our burgeoning population. In his spare time, he uses the lessons learned in studying seafood value chains to create solutions to stop the trade of illegal wildlife products.



Industry Forum Advisory Committee

The Consortium for Ocean Leadership has been fortunate to have the volunteer efforts of an Advisory Committee during the development of this forum. The Committee's collective expertise has been brought to bear on nearly all elements of this event, and we are certain that it would not be this robust, this diverse in representative perspectives, or this well-attended had it not had the benefit of their exceptional thought and guidance. We all owe the committee a debt of gratitude. Please join us in thanking the following members for their foundational contribution to this event.



Dr. Megan Davis

FAU Harbor Branch Oceanographic Institute and COL Board Member



Ms. Ingrid Irigoyen*

Meridian Institute



Dr. Paul Doremus

National Oceanic and Atmospheric Administration



Mr. Hank Lobe

Severn Marine Technologies, LLC / Sonardyne International and COL Board Member



Ms. Margaret Henderson

Henderson Strategies, Inc. / Stronger America through Seafood, Inc.



Dr. Jerry Schubel

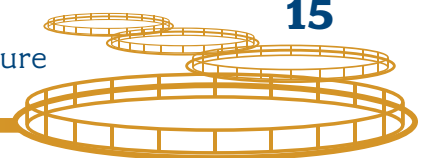
Aquarium of the Pacific



Mr. Rich Innes

Meridian Institute

** After providing critical support through the early stages of planning, Ms. Irigoyen accepted an outstanding new position with The Aspen Institute. We wish her all the best in this new opportunity and gladly welcomed Mr. Innes as her Meridian replacement on the committee.*



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House Committee on Agriculture

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House Committee on Natural Resources

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Hubbs-SeaWorld Research Institute

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Meridian Institute

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NOAA

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NOAA

Jonathan Pennock*Director, National Sea Grant Office*

NOAA

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NOAA Center for Coastal Fisheries and Habitat Research

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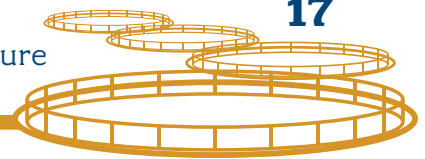
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NOAA Fisheries

Kristine Cherry*Advisor for Operations*

NOAA Fisheries



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Legislative Fellow
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Chloe Cantor

Legislative Correspondent
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Legislative Assistant
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Stronger America through Seafood

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United States Naval Academy

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University of South Florida

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University of Southern Mississippi

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White House Office of Science and Technology Policy

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Ocean Policy Advisor
White House Office of Science and Technology Policy

Paul Dobbins

Senior Specialist
World Wildlife Foundation

Jean Flemma

Consultant



ASC certified farmers...



The ASC runs a certification and labelling programme for responsibly farmed seafood. ASC's standards require that farmers reduce environmental impacts, protect wildlife and support local communities.

Globally recognized as the most robust standard for aquaculture, the ASC is a multistakeholder, transparent, third-party certification programme. The scrutiny arising from the unrivalled level of transparency embedded in the ASC standards— together with the mandate to improve over time to ensure the program continues to be informed by the latest knowledge— have been driving improvements in fish farming. Through accountability and transparency, the ASC provides insights that increase the public's confidence in the fish they eat and drive greater improvements over time. We invite you to learn more about the program on our website or by contacting a member of our team!



The responsible choice for farmed seafood

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The future of farming OFFSHORE AQUACULTURE

Creating the possibility for sustainable use of our oceans



www.innovasea.com

Members of the Consortium for Ocean Leadership

The Consortium for Ocean Leadership is a Washington, D.C.-based nonprofit organization that represents the leading ocean science and technology institutions — public and private, academia, aquaria, and industry. Our mission is to shape the future of ocean science and technology. In addition to our advocacy role as the voice of the ocean research and technology community, COL manages a variety of community-wide research and education programs in areas of ocean observing, ocean exploration, and ocean partnerships.

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Dauphin Island Sea Lab

Alaska

Alaska Ocean Observing System
Alaska SeaLife Center
ARCUS
North Pacific Research Board
University of Alaska Fairbanks

California

Aquarium of the Pacific
Esri
Estuary & Ocean Science Center, San Francisco State University
Hubbs-SeaWorld Research Institute
L-3 MariPro, Inc.
Liquid Robotics, Inc.
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Moss Landing Marine Laboratories
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Teledyne RD Instruments
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UCSD Scripps Institution of Oceanography
University of California, Davis
University of California, Santa Barbara
University of California, Santa Cruz
University of Southern California

Colorado

Cooperative Institute for Research in Environmental Sciences

Connecticut

Mystic Aquarium
Exocetus

Delaware

MARACCOOS
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Earth2Ocean
FAU Harbor Branch Oceanographic Institute
Florida Institute of Oceanography
Mote Marine Laboratory
Nova Southeastern University
University of Florida
University of Miami
University of South Florida

Georgia

Savannah State University
Skidaway Institute of Oceanography of UGA

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Louisiana

ASV Global, LLC
Louisiana State University
Louisiana Universities Marine Consortium

Maine

Bigelow Laboratory for Ocean Sciences
The IOOS Association
University of Maine

Maryland

Johns Hopkins University APL
National Aquarium
Severn Marine Technologies, LLC
University of Maryland Center for Environmental Science

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Woods Hole Oceanographic Institution

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South Carolina Sea Grant Consortium
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Sea-Bird Scientific
University of Washington
Vulcan, Inc.

Washington, D.C.

Marine Technology Society
NOIA
SURA

Wisconsin

University of Wisconsin, Milwaukee

Australia

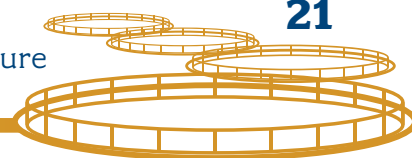
Institute for Marine and Antarctic Studies (UTAS)

Bermuda

Bermuda Institute of Ocean Sciences

Canada

Dalhousie University
Ocean Networks Canada



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ASAE Conference Center
1575 I Street, NW

Forum Hotels:

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999 9th Street, NW

Washington Plaza Hotel
10 Thomas Circle, NW



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