

# National Sea Grant College Program

## HEALTHY COASTAL ECOSYSTEMS FOCUS TEAM

**Miguel A. Lugo** (backup chair)

### Education:

- Graduated in 2004 with a Master of Marine Science (M.S.) from the University of Puerto Rico at Mayaguez. Research focused on coral reef ecology and population dynamics.
- Have an undergrad in general Biology from University of Puerto Rico at Mayaguez.



### Work Experience

- Worked for the Puerto Rico Sea Grant Program as an assistant investigator for projects related to fisheries and coastal zone management issues. (6 years)
- In 2003 did the Knauss Fellowship in the NOAA Coral Reef Conservation Program (CRDP). In the CRCP I worked in a wide range of different coral reef management issues. (2 years)
- In 2005 went to the NOAA Fisheries Budget Formulation office where I worked in legislative and budget formulation issues in the areas of habitat restoration and protection, aquaculture, enforcement and fisheries management including both Magnuson-Stevens reauthorization and NOAA's Aquaculture Act. (2.5 years)
- Currently I am in Sea Grant working as the coordinator of the John A. Knauss Fellowship. (1 year)



**Barry A. Costa-Pierce** (vice-chair) is Director of the Rhode Island Sea Grant College Program and Professor of Fisheries at the University of Rhode Island (URI). He has a Ph.D. in Oceanography from the University of Hawaii and a M.S. in Zoology from the University of Vermont. He is also a Senior Fellow at the World Fish Center in Penang, Malaysia, a Fellow of the American Institute of Fishery Research Biologists, and a member of the Board of Directors of the World Aquaculture

Society. For the last 10 years he has served as an international editor of *Aquaculture*, managing approx. 500 scientific manuscripts a year. His research interests are in the fisheries science of clupeid, salmonid, and scombrid fish, the environmental impacts of aquaculture, the development of ecological aquaculture systems, and offshore aquaculture. His URI research group is currently funded by the NSF Integrative Graduate Education Research and Training (IGERT) program, the FAO, World Wildlife Fund, and the Packard Foundation. Costa-Pierce has many publications, including the editing/ authoring of 15 scientific books/monographs such as *Ecological Aquaculture* (2002) and *Science for Ecosystem-based Management: Narragansett Bay in the 21st Century* (2008).

Before joining URI, Costa-Pierce held numerous positions in the USA and internationally; he has been the Director of the Mississippi – Alabama Sea Grant Consortium; Director and Research Scientist for the International Center for Living Aquatic Resources Management (ICLARM) in Indonesia and in Africa; a Consultant for the Asian Development Bank and World Bank; and a faculty at a number of universities in New England, the Gulf of Mexico, Great Lakes and the Pacific coast, including the graduate program at the Scripps Institution of Oceanography and a "Student Recommended Faculty in Global Sustainability" at the University of California – Irvine, where he was recognized for making an "exceptional impact on undergraduate education".

**Dr. Judith S. Weis** is a Professor of Biological Sciences at Rutgers University, Newark. She received her bachelor's degree from Cornell University, and MS and PhD from New York University. Her research focuses on estuarine ecology and ecotoxicology, and she has published about 200 refereed papers, focusing mainly on "unhealthy" coastal ecosystems. She is interested in stresses in the estuarine environment (including pollution, invasive species, and parasites), and their effects on organisms, populations and communities. Much of her research has been focused on estuaries in the NY/NJ Harbor area. Particular areas of focus have been effects of metal contaminants on growth, development, and behavior; development of tolerance to contaminants in populations living in contaminated areas; behavior, trophic relationships and population ecology of estuarine animals living in contaminated environments; effects of invasive marsh plant species on estuarine ecology and on fate



of metal contaminants. She serves on the editorial board for BioScience, is one of the editors of the on-line Encyclopedia of Earth, and was for ten years an Associate Editor of the Bulletin of Environmental Contamination and Toxicology. She is a Fellow of the American Association for the Advancement of Science (AAAS). She has been on numerous advisory committees for USEPA, and has served on the Marine Board of the National Research Council. She was the Chair of the Biology Section of AAAS, served on the boards of the Society of Environmental Toxicology and Chemistry (SETAC), the Association for Women in Science (AWIS), and the American Institute of Biological Sciences (AIBS), of which she was the President in 2001. She is a member of the National Sea Grant Review Panel.

**ROGER GRIFFIS** is a marine ecologist by training and came to NOAA in 1994 as a Knauss Sea Grant Fellow. I worked as a policy advisor at NOAA Headquarters in the NOAA Office of Policy and Strategic Planning from 1994-2001. During that time I provided NOAA leadership with policy advice on coastal issues, helped lead strategic planning for NOAA's coastal enterprise and helped develop/implement variety of new initiatives including Presidential executive orders on coral reefs, marine protected areas and the NW Hawaiian Islands Reserve. From 2001-2007 I served as Program Coordinator for NOAA's Coral Reef Conservation Program overseeing all aspects of program planning, implementation, evaluation and communication. I also served as cochair for the U.S. Coral Reef Task Force Steering Committee overseeing planning, coordination, communication and implementation of the interagency, multinational Task Force. Areas of professional interest/expertise include:



- Coastal/marine habitat conservation strategies
- Habitat conservation in a changing climate
- Managing for resilience marine ecosystems
- Building resilient coastal ecosystems and communities
- Building local action towards national goals

Areas of personal interest include:

- Birds of North America



- Birds of the world
- Canoeing
- Landscaping for fun
- Live music (especially blues, R&B, zydeco, gospel)
- Time with family



**Russ Herwig** is a Research Associate Professor in the School of Aquatic and Fishery Sciences, University of Washington (UW). He has a partial appointment with Washington Sea Grant Marine Advisory Services and serves as the Marine Ballast Water Specialist. Dr. Herwig's background and research experiences are primarily in aquatic microbiology and microbial ecology. He received a B.S. in Biology from Muhlenberg College, M.A. in Marine Science from William and Mary, and Ph.D. in Fisheries (emphasis in Marine

Microbiology) from the UW. Russ had postdoctoral experience in the UW's Department of Microbiology before returning to the School of Aquatic and Fishery Sciences in 1995. In previous years, he worked with UW environmental engineers to develop bioremediation strategies for contaminated groundwater and marine nearshore sediments and characterized toxicant-degrading bacteria. About 7 years ago, a chance encounter with a state of Washington regulator led Russ to initiate a new research path. Working with UW scientists and students, Russ is examining non-indigenous organisms that are transported into Washington by ships and is testing technologies that could prevent the spread of invasive aquatic organisms by ships ballast. To relieve stress, Russ enjoys home repair, running, bicycling, doing triathlons, and eating good food.



**Dianne Marie Lindstedt**, Marine Education Coordinator, Louisiana Sea Grant College Program

Education: M.S., 1998: Science Education, Louisiana State University, Baton Rouge. M.S., 1978: Marine Sciences, estuarine ecology, Louisiana State University, Baton Rouge. B.S., 1974: Marine Sciences and Biology, Southampton College, Southampton, N.Y.

From 1979 to 2003 Dianne worked at LSU as an ecologist and principal investigator on a variety of multidisciplinary research

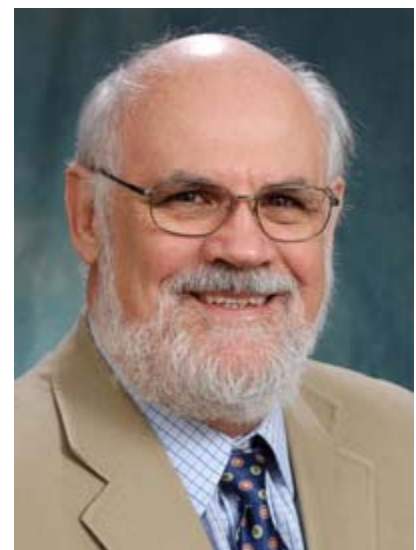
projects relating to the marine and coastal environment of Louisiana. She has worked

with scientists in all disciplines while coordinating research and serving as a member of the synthesis team for the BTNEP Status and Trends and the Brown Marsh Projects. She has experience working with state in federal agencies, served as a team member to develop Louisiana's Coast 2050 Plan and developed plans for diversion, coastal wetland and barrier island restoration projects for NMFS through CWPPRA. Dianne currently serves as the Education Coordinator for the Louisiana Sea Grant College Program and works with educators around the state to develop data-rich curriculum materials, train K-12 teachers and provide students with hands-on experiences in ocean and coastal topics.

**Russell Moll** has worked as a member and director of research teams, administrator of research programs and Program Officer in a federal agency. All of these activities have been in aquatic sciences. He conducted research in the nearshore marine environment, salt marshes, African mangrove systems, the Great Lakes, small lakes, and temperate and tropical rivers. In 1989 Moll became Director of the Cooperative Institute for Limnology and Ecosystems Research at the Univ. of Michigan. In 1994 he took a leave to serve as an Associate Program Director in the Biological Oceanography Program at the National Science Foundation (NSF). Upon return to Michigan from NSF, Moll was appointed Director of the Michigan Sea Grant Program. In 1998 he assumed duties as Associate Director of the University of Michigan Biological Station in charge of the Center for Great Lakes and Aquatic Studies. In 2000 Moll moved to the University of California, San Diego to become Director of the California Sea Grant Program. Moll has a B.A. from the University of Vermont, M.S in marine science from Long Island University, M.S. in biostatistics from the University of Michigan and Ph.D. in marine ecology from Stony Brook University.



**Stephen A. Bortone** is Director of the Minnesota Sea Grant College Program located in Duluth where he has an appointment as Professor of Biology at the University of Minnesota, Duluth. Formerly he held positions as Director of the Marine Laboratory at the Sanibel-Captiva Conservation Foundation in Sanibel, Florida, Director of Environmental Science at the Conservancy of Southwest Florida, and Director of the Institute for Coastal and Estuarine Research while Professor of Biology at the University of West Florida. Dr. Bortone received a B.S. degree from Albright College in Reading, PA; a M.S. degree from Florida State University, Tallahassee; and the



Ph.D. from the University of North Carolina, Chapel Hill in 1973. For the past 40 years, he has conducted research on the life history of aquatic organisms, especially fishes, and seagrasses, chiefly in the southeastern U.S. and the Gulf of Mexico. He has published over 150 scientific articles on the broadest aspects of the Aquatic Sciences. In addition he has edited three books on the aquatic sciences: *Sea Grasses*, *Biology of the Spotted Sea Trout*, and *Estuarine Indicators* – all with CRC Press.

Conducting his research and teaching activities, Dr. Bortone has traveled widely. He has served as Visiting Scientist at The Johannes Gutenberg University (Mainz, Germany) and conducted extensive field surveys with colleagues from La Laguna University in the Canary Islands. He was Mary Ball Washington Scholar at University College Dublin, Ireland. He has received numerous teaching and research awards, including the title “Fellow” from the American Institute of Fishery Research Biologists and “Certified Senior Ecologist” by the Ecological Society of America.

**Anders W. Andren**, a native of Scandinavia, has an undergraduate degree in chemistry from the University of Uppsala. He obtained a Ph. D. in Chemical Oceanography from Florida State University in 1972. After a post-doc at Oak Ridge National Laboratory, he came to University of Wisconsin where he joined the faculty of the Civil and Environmental Engineering Department in the Water Chemistry Program (now called Environmental Chemistry & Technology Program). Anders is also a faculty member of the Limnology and Marine Sciences program, the Environmental Toxicology Program, and the Water Resources Management Program. He teaches courses in aquatic chemistry and environmental organic chemistry. Anders was appointed UW Sea Grant Institute Director in 1990 and Water Resources institute Director in 1998. His research interests include: Aquatic and atmospheric chemistry, geochemistry and analytical chemistry. Specifically: 1) cycling of nutrients, trace metals and organic compounds in the environment; 2) the role of the atmosphere in influencing the



chemical composition of natural waters; 3) air-water interactions of gases and particles; 4) chemical and physical property estimation techniques of very toxic microcontaminants of environmental interest (thermodynamics of fluid phase equilibria); 5) the influence of urbanization on geochemical cycles in the environment; 6) chemistry of wastewater treatment; and 7) structure-activity studies of organic compounds for predicting their fate in air and water. Anders is the author or co-author of over 200 articles on topics dealing with sources, transport and fate of metal and organic compounds in natural waters.

Anders was on the Sea Grant Association Board for over a decade and served as president from 1993 to 1995. He is presently past president and Board member of the

National Institutes for Water Resources (NIWR). He served on EPA's Science Advisory Board in 1987 and 1988, on NOAA's Senior Research Council from 2001 to 2004. He has been a member of numerous NAS/NRC panels. He was a member of the U. S. section of the International Joint Commission's Science Advisory Board from 1992 to 2004.

**Michele Dionne** directs the research program at the Wells National Estuarine Research Reserve. The program aims to produce science-based information needed to protect, sustain and restore Gulf of Maine coastal habitats and resources, especially



those found in salt marsh estuaries and watersheds. Dionne's research interests include fish use of aquatic habitats, marsh-estuarine food web ecology, processes of tidal wetland degradation and restoration, and indicators of coastal/marsh/estuarine ecological status. She is broadly trained in field and experimental aquatic ecology with an undergraduate degree from Bates College, graduate degrees from UNC-Chapel Hill (MS) and Dartmouth College (PhD), and post-doctoral training at Virginia Polytechnic Institute and State University. Other important educational opportunities were a post-bac year spent at the Marine Biological Laboratory Ecosystems Center in Woods Hole, and two winters in Costa Rica teaching tropical ecology.

Dionne was the first scientist to be employed at the Wells NERR (1991), establishing the Reserve's research program. The program has grown to include post-doctoral and staff research associates, post-bac interns, contractors and numerous graduate students, now housed in a new office and laboratory facility (2003). She currently serves on 10 graduate committees and co-advises graduate students at the University of New Hampshire (as adjunct in Zoology) and the University of Southern Maine (as Biology graduate faculty member). She serves on a number of committees concerned with coastal science and management at the regional and national levels, and regularly reviews manuscripts for ecology/aquatic journals and funding agencies, including a term as associate editor for the journal *Wetlands*. She typically oversees 2-4 externally funded research projects annually, producing requisite reports, some of which find their way into the peer-reviewed literature.

The Research Program at the Wells NERR conducts and supports research, monitoring, workshops, and research/resource management planning of relevance at local, regional, national and international levels (US-Canadian Gulf of Maine). The overall aim of our work is to produce science-based information needed to sustain or restore



Gulf of Maine coastal habitats and resources, especially those found in salt marsh estuaries and watersheds.

In a typical year the program provides scientific, staff, and facilities support for more than 20 studies involving 70-80 principal investigators, students, and technicians from up to 20 academic institutions. These studies contribute knowledge to the following priority areas of inquiry: quality of water resources in salt marsh estuaries and watersheds; land conservation strategies to protect coastal watersheds; factors controlling salt marsh accretion, erosion and plant community vigor; the value of salt marsh as habitat for fish, shellfish and birds; the structure and function of marsh-estuarine food webs, and restoration processes in salt marsh habitat degraded through human actions.

### **Robert Kent**

Associate Program Leader/Marine Program Coordinator, NY SG

Robert Kent has 30 years experience planning, conducting, and evaluating extension programs in New York, 11 with Land Grant, 19 with Sea Grant. He established the Allan Overton Endowment at Cornell University which funds small scale youth education restoration projects, and has worked closely with restoration efforts in New York including the New York - New Jersey Harbor Estuary Program, the Long Island Sound Study, and The Peconic Estuary Program. His goal is to bring the best available science to these efforts, to engage faculty in restoration efforts, and to increase citizen participation in restoration. His interests include the impact changing nitrogen levels and changing land use patterns are having on coastal ecosystems. He has a BA from SUNY at Buffalo in sociology, and an MA/LS from SUNY Stony Brook with an emphasis in environmental studies. He has statewide supervisory responsibilities for extension staff in New York.



### **Glenn G. Page**

President, CEO - SustainaMetrix

Glenn has spent more than 20 years in the private and non-profit sectors applying organizational leadership to restoration and protection of the coastal realm. He has received national recognition for his work designing, implementing and





evaluating innovative programs at the National Aquarium in Baltimore, Center for Watershed Protection and Alliance for the Chesapeake Bay.

Glenn developed and directed the conservation program at the National Aquarium in Baltimore pioneering local, national and international stewardship programs featuring community-based coastal habitat restoration, marine animal rescue, sea turtle conservation, schoolyard aquaculture, coral reef and rainforest conservation. Common program elements include extensive networks and partnerships, broad local stakeholder involvement, diverse and innovative funding strategies, performance monitoring and evaluation and reflection. While many projects received local, regional and national awards, in April 2000, Glenn received NOAA's Environmental Hero award from Vice President Gore for significant achievement as "part of a large worldwide community dedicated to building a legacy that will last for centuries." Glenn is also the President of the Center for Watershed Protection, a non-profit corporation that provides local governments, academics, and watershed organizations around the country with the technical tools for protecting some of the nation's most precious natural resources: our streams, lakes and rivers.

Glenn received his B.A. from Guilford College and M.S from Johns Hopkins University and is a Certified Wetland Scientist.



**Dorn Carlson** (chair)

Research Director, NOAA National Sea Grant Office.

In addition to Research Director duties, Dorn Carlson is the Program Officer for NJ SG, CT SG, MA SG, LC SG, WHOI SG, and the manager of the NOAA Invasive Species Program.

Carlson is a long-time Federal bureaucrat, formerly regulation developer for the EPA, Environmental Manager for an R&D Facility, Supervisory Research Chemist for the Navy, and Powder Monkey. Starting in 1979, he worked for 10 years as a research chemist for the Navy, then another seven years as the Environmental Compliance manager of a Naval Sea Systems Command Research facility in Silver Spring, Maryland. He then helped develop joint Navy-EPA environmental regulations, first for the Navy, then for EPA. Since 2000, Carlson has worked for NOAA as a Sea Grant Program Officer and manager of NOAA's Invasive Species Program. In 2007, he became the Research Director of Sea Grant.