

## EXECUTIVE COMMITTEE BIOS

### EXECUTIVE COMMITTEE CHAIR

**DR. HARVEY SEIM** is an Associate Professor in the Department of Marine Sciences at the University of North Carolina at Chapel Hill. After receiving a B.S. in Marine Sciences and M.S. in Geology at the University of South Carolina he earned his Ph.D. in Oceanography at the University of Washington in 1993. After being a postdoctoral scholar at Woods Hole Oceanographic Institution he joined the faculty at the Skidaway Institute of Oceanography, where he was the lead PI of the South Atlantic Bight Synoptic Ocean Observing Network (SABSOON), one of the first NOPP-funded ocean observatory efforts. SABSOON was the first recipient of the NOPP Excellence in Partnering Award (2001), and led to Dr. Seim being a panelist on partnerships before the U.S. Commission on Ocean Policy. Dr. Seim is currently the lead PI and Chief Operating Officer of SEACOOS and acts as the liaison between the Board and the SEACOOS Executive Committee.



Dr. Seim's research focuses on coastal and estuarine processes, with a special interest in turbulent mixing. His work has taken him to many coastal regions around the world, including the Baltic, Gulf of Mexico, Malaysia, Puget Sound, and the Bosphorus, and he has authored more than 30 refereed publications. Within SEACOOS his group at UNC-CH has developed a stand-alone meteorological and oceanographic instrument package for use of fixed platforms operated on offshore towers and buoys and operates an ocean surface current mapping system along the Outer Banks.



**ROBERT BACON** has worked in the S.C. Sea Grant Extension Program since 1990, and has served as its Leader since 1992. The S.C. Sea Grant Extension Program is a joint outreach program of the S.C. Sea Grant Consortium and the Clemson University Extension Service.

Bacon works primarily on issues related to coastal resources, including coastal, natural resource-based recreation and tourism, coastal hazards, fisheries and coastal ocean observing systems.

Bacon currently serves on the Executive Committee of the South East Atlantic Coastal Ocean Observing System (SEACOOS) initiative, and Chairs the Extension and Education Working Group. He is an advisor to the S.C. Nature-Based Tourism

Association, the S.C. Shrimp Industry Initiative and will serve as president of the Clemson Extension Senate beginning in January 2005.

Bacon received a Bachelor of Arts degree (1972) in Anthropology from the George Washington University in Washington, D.C. and a Master of Arts degree (1979) in Recreational Resource Management from the University of Maryland, College Park.

Bacon is an alumnus of Leadership South Carolina, graduating in the Class of 2003.

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**DR. MADILYN FLETCHER** is currently Director of the Belle W. Baruch Institute for Marine Biology and Coastal Research at the University of South Carolina. In that position, she develops, oversees, and coordinates multi-disciplinary research activities involving faculty in the Departments of Biological Sciences, Geological Sciences, Chemistry, Statistics, and School of Public Health, among others. The Institute also maintains a core research faculty and supporting staff. It operates a field laboratory at the coast near Georgetown, SC, which is also the headquarters for the North Inlet/Winyah Bay National Estuarine Research Reserve (NERR) and the Centralized Data Management Office for the national NERR system.



From 1998-2000, she was also Director of the Marine Science Program at USC, which offers undergraduate and graduate degrees in Marine Science. Before coming to USC, Dr. Fletcher was Director of the Center of Marine Biotechnology, University of Maryland Biotechnology Institute, in Baltimore, Maryland. She received her B.A. from Randolph-Macon Woman's College in Lynchburg, Virginia, and her Ph.D. from the University College of North Wales in the U.K, where she conducted research in marine microbiology at the Marine Science Laboratories at Menai Bridge. She was on the faculty of the University of Warwick, Coventry, England, until 1986 when she returned to the U.S. to take a faculty position at the University of Maryland. She has had an extensive research program focused on marine and aquatic microbial ecology, with a special interest in bacterial biofilms, mechanisms of bacterial attachment, characteristics of attached microorganisms, and the consequences of adhesion to surfaces.

She served as Editor-in-Chief for the journal *Microbial Ecology*, worked for two years (1991-1993) as a Microbiology Consultant for the Office of Health and Environmental Research, U.S.

Department of Energy, and has served on numerous panel reviews, advisory committees, and editorial boards. She served as President of the Southern Association of Marine Laboratories during 1997-1998 and the President of the National Association of Marine Laboratories in 2002-2003. She serves on the Executive Committee of the Board on Oceans and Atmosphere of the National Association of State Universities and Land Grant Colleges (NASULGC), and is a member of the Board on Natural Resources (BNR) and Chair of the Ecology Section of the BNR.

of NASULGC. She represents the South Carolina Consortium on the Board of Governors of the Consortium for Oceanographic Research and Education (CORE).

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**DR. CHRISTOPHER N. K. MOOERS** is a professor of applied marine physics and serves as the director of the Ocean Prediction Experimental Laboratory (OPEL) at University of Miami's Rosenstiel School of Marine and Atmospheric Science. Mooers is known for his contributions in coastal ocean circulation, mesoscale oceanography, and the circulation of marginal and semi-enclosed seas. For example, he was involved in pioneering the direct current measurement of coastal upwelling circulation; the development of inertial-internal wave

theory relevant to oceanic jets, fronts, and eddies; the analysis of coastally-trapped waves; the innovation of data analysis methodology for rotary motions and profiling current meter data; and the conduct of pioneering mesoscale ocean prediction experiments. He has been engaged with the scientific issues underlying practical ocean prediction, including the assessment of numerical circulation models relative to observations and vice versa, plus the determination of the necessary and sufficient prescriptions of atmospheric forcing for the coastal ocean. He has developed and demonstrated prototype nowcast/forecast systems for limited domains. He was the founding director for the Institute for Naval Oceanography under the University Corporation for Atmospheric Research (UCAR) from 1986 to 1989, with its goal of developing and demonstrating mesoscale ocean prediction systems on a global basis.

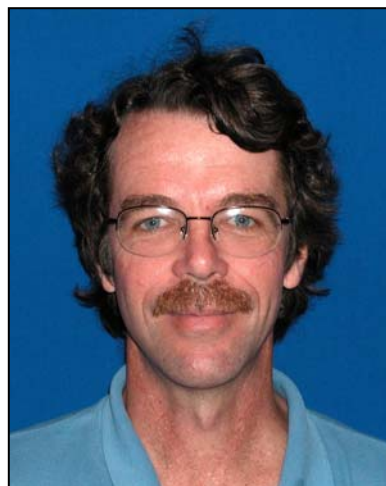
Mooers holds a B.S. in naval science, a M.S. in physics, and a Ph.D. in physical oceanography. As a leader in basic research, he participated in the Coastal Upwelling Ecosystem Analysis (CUEA) Program during the 1970s; was a co-leader of the Ocean Prediction Through Observations, Modeling, and Analysis (OPTOMA) Program during the 1980s; initiated the Coastal Ocean Prediction Systems (COPS) Program and participated in various efforts to advance the Global Ocean Observing System (GOOS) during the 1990s; and has participated in leading the Southeast Atlantic - Coastal Ocean Observing System (SEA-COOS) as part of the Integrated Ocean Observing System (IOOS) in the 2000s.

For more information, including publications, please visit <http://anole.rsmas.miami.edu/people/cmooers.html>

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**DR. JAMES ROBERT NELSON** is an Associate Professor at the Skidaway Institute of Oceanography (SkIO) He is a member of the SEACOOS Executive Committee and co-Chair of the Observations Working Group.

Nelson started at SkIO in 1997 as a Post-Doctoral Associate and joined the faculty in 1999. His research has been mainly in the areas of microalgal primary production and bio-optical oceanography, with field work since arriving at SkIO focused on the South Atlantic Bight continental shelf. Present investigations are focused on benthic diatoms in mid-shelf sediments (contribution to shelf primary production, aspects of their physiological ecology) and applications of ocean color imagery in regional studies of primary production and shelf exchange processes (cross-shelf transport and episodes of sediment resuspension). As part of several field programs, Nelson spent more than 30 days at sea in the SAB in 2003.



Nelson's involvement in coastal ocean observing systems began in 1998 with the South Atlantic Bight Synoptic Offshore Observational Network (SABSOON) project, funded by the National Oceanographic Partnership Program (NOPP). He has also been involved (on the observations side) in a second NOPP project that developed a data-assimilative model for the Georgia shelf. As part of the IOOS planning, Nelson assisted in the assessment of existing SE regional observation and monitoring assets for the U.S. GOOS Steering Committee and for the SURA SCOOP program. Through the SEACOOS program, Nelson has participated in recent COSEE (NSF) activities that seek to link researchers and educators. He serves as a member of the SE COSEE Advisory Board.



**DR. ROBERT WEISBERG** is a Professor of Physical Oceanography in the College of Marine Science, University of South Florida, where he heads the Ocean Circulation Group. He is an experimental physical oceanographer who combines observations with analytical and numerical models for studies of the ocean circulation and ocean-atmosphere interactions in the tropics, on continental shelves, and in estuaries. Weisberg's undergraduate education was at Cornell University. He received the Ph.D. in Physical Oceanography at the Graduate School of Oceanography, University of Rhode Island in 1975. He was an Associate Professor at the North Carolina State University before joining the faculty at USF in 1984. Weisberg is author or co-author on over 100 articles in professional journals. His work as a graduate student began with

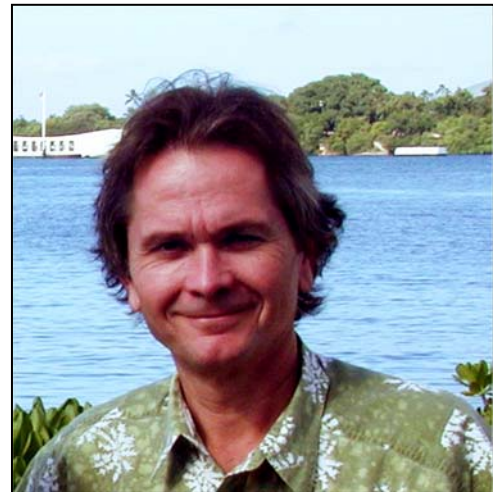
estuaries and then evolved to equatorial ocean studies in the Atlantic and Pacific Oceans of equatorial trapped waves, tropical instability waves, the seasonal cycle, and ENSO. In the early 1990s he began a program of study on the west Florida continental shelf circulation, combining

observations with numerical models. Recently, with the help of associates, he came full circle to write papers on the Charlotte Harbor estuary. His west Florida shelf work led the way for the coastal ocean component of the COMPS Program that began in 1998 and the SEACOOS participation in 2002. Weisberg presently co-chairs the SEACOOS Observational Working Group and sits on the Modeling Working Group. His research presently emphasizes real-time in-situ measurements, analyses, and models of the west Florida shelf circulation and the interactions between the shelf and the estuaries.

Dr. Weisberg is a member of Sigma Xi, AGU, AMS, and TOS. He is Assoc. Ed., Terr., Atm., and Oceanic Sci. (TAO) Jour., Taiwan; received an editor's citation for excellence in refereeing, Geophys Res. Letts., 1995; a USF Professorial Excellence Award in 1998; and a USF President's Award in 2003.

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**DR. FRANCISCO “CISCO” WERNER** is presently at the University of North Carolina at Chapel Hill, USA, where he is a Professor and Chairman of the Department of Marine Sciences. Originally from Venezuela, Cisco completed his graduate work in physical oceanography at the University of Washington in Seattle. His research, conducted also at Dartmouth College (Hanover, New Hampshire) and the Skidaway Institute of Oceanography (Savannah, Georgia), has focused on the development of circulation of coastal ocean models and their coupling to trophodynamic individual-based models of planktonic and early life stages of marine organisms. Recent research efforts also include the implementation of real-time modeling of circulation on continental shelf region of the southeastern US with the aim of establishing an operational coastal ocean observing system with forecasting capabilities.



Cisco is the Chairman of the GLOBEC International Scientific Steering Committee and co-Chair of PICES' MODEL Task Team. He has led training programs in Chile, Venezuela and Mexico on modeling coupled physical-biological interactions in marine systems and he serves on the editorial board of Fisheries Oceanography and the Revista de Biología Marina y Oceanografía.