

# 2016 UNOLS COUNCIL SLATE

UNOLS Elections will be held to fill Council member terms that will expire this year. UNOLS Nominating Committee members Chris Measures (Chair), Mark Brzezinski, and Kipp Shearman have assembled a slate of candidates for the UNOLS Council positions to be filled. This election will be held in accordance with the UNOLS Charter as readopted 20 December 2013.

The slate and information about the candidates is available on the following pages.

## **CHAIR-ELECT (2 year term) – Individual affiliated with any UNOLS Member Institution**

- ❖ **Dr. Kendra Daly, University of South Florida**
- ❖ **Dr. Craig M. Lee, University of Washington**

## **NON-OPERATOR REPRESENTATIVE (3 year term) – Individual affiliated with any designated UNOLS Non-Operator Member Institution**

- ❖ **Dr. David Kadko, Florida International University**
  - ❖ **Dr. Tammi L. Richardson, University of South Carolina**
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## CANDIDATES FOR COUNCIL OPERATOR POSITION

### Dr. Kendra Daly, University of South Florida

#### Statement of Interest:

Earth systems are rapidly changing due to human activities and climate variation. Well run, well maintained, and capable research vessels, submersibles, and observing facilities are essential for supporting the US oceanographic community in advancing understanding of global ocean processes and responding to societal concerns. These are challenging times financially, but we also have exciting new opportunities. The Regional Class Research Vessel planning and design is well underway and the Ocean Observatories Initiative (OOI) is now actively providing large amounts of data in near-real time. The OOI sensors and instruments captured the eruption of the underwater Axial volcano – a first for science –and have already documented additional interesting phenomena.

I have not previously been a member of the UNOLS Council. However, I am now the UNOLS representative for the University of South Florida and have been a member of the Regional Class Research Vessel Science Oversight Committee since its inception in 2013. I also recently helped to organize a UNOLS OOI Workshop that was held in Portland in September. I have been going to sea since the early 1970's and have accumulated more than nine years of sea time as part of small, medium, and large science programs on university, UNOLS, NOAA, and private contract vessels and Coast Guard icebreakers, a number of times as chief scientist. When I was a Program Manager at NSF, I was involved in some ship scheduling activities and served as the NSF representative for some ship inspections. In addition, I was involved in the planning, construction, and deployment of the OOI for > 15 years, as a member of the OOI Executive Planning Committee, Chair of the Sensor Subcommittee, Director of OOI (2005-2006), and most recently as a Project Scientist for the Cable Array component. Through all of these activities, I have gained an appreciation for the complexities of ship operations, available new technologies, and the ocean community's platform/instrument requirements to achieve excellent science. UNOLS is a highly regarded organization. As Chair Elect of the UNOLS Council, I would work with the UNOLS community to maintain a strong fleet, as well as the deep submergence and observing facilities. The NSF's new facility, the OOI, is in a challenging period as it transitions to its operational phase and develops a new user base. My long experience with the OOI would allow me to make a valuable contribution to the UNOLS mission.

#### Biographical Sketch: Kendra Daly

##### **Professional Appointments:**

2014-present	Professor, College of Marine Science, University of South Florida
2007-2014	Associate Professor, College of Marine Science, University of South Florida
2006-2007	Director, ORION (now OOI) Program, Joint Oceanographic Institutions, Washington, DC
2001-2007	Assistant Professor, College of Marine Science, University of South Florida
1997-2001	Associate Program Director, Biological Oceanography Program, National Science Foundation
1995-2001	Research Associate, University of Tennessee
1995-1997	Hollaender Distinguished Postdoctoral Fellow, Oak Ridge National Laboratory/Department of Energy
1991-1995	Research Assistant, Department of Ecology and Evolutionary Biology, University of Tennessee
1973-1991	Assistant, Associate, Senior Oceanographer, Department of Oceanography, University of Washington

## Education:

1995 Ph.D., Ecology, University of Tennessee  
1990 M.S., Fisheries, University of Washington  
1973 B.S., Biological Oceanography, University of Washington

## Research Interests:

Zooplankton ecology and biogeochemical cycling, marine snow dynamics, effects of climate change on plankton communities, impacts of low oxygen regions and oil on marine snow and plankton, ocean observatories, and sensor technology. Current research topics include marine ecosystem dynamics in McMurdo Sound, Antarctica and impacts of the Deepwater Horizon oil spill on the lower trophic food web in the Gulf of Mexico.

## Seagoing Experience:

More than nine years accumulated sea time.

Ships: *RV Hoh*, *RV Clifford A. Barnes*, NOAA *Oceanographer*, NOAA *Surveyor*, NOAA *Discoverer*, NOAA *Miller Freeman*, USCG *Westwind*, USCG *Glacier*, USCG *Polar Star*, USCG *Polar Sea*, *RV Polar Duke*, *RV Polarstern*, Tracor Marine *Pierce*, *RV Melville*, *RV Acona*, *RV Endeavor*, RVIB *NB Palmer*, *RV LM Gould*, *RV Seward Johnson*, *RV Knorr*, *RV Thomas G. Thompson*.

Geographic regions: Puget Sound; Columbia River; NE Pacific; Central-equatorial Pacific; Alaska: Gulf of Alaska, Southeast Alaska, Prince William Sound, Cook Inlet, Bering Sea, Chukchi Sea, Beaufort Sea; Greenland Sea; Gulf of Mexico; Gulf of Maine; Antarctica: Drake Passage, Scotia Sea, Weddell Sea, Antarctic Peninsula, Ross Sea, McMurdo Sound; western and eastern tropical north Pacific Ocean.

Large Science Programs: **DOMES** (equatorial Pacific), **OCSEAP** (Gulf of Alaska, Bering and Chukchi seas), **IIXTOC-1 NOAA Emergency Response Team** (Gulf of Mexico), **BIOMASS** (FIBEX & SIBEX – Scotia-Weddell seas), **AMERIEZ** (Scotia-Weddell seas), **SCOPEX** (north Atlantic shelf), **NEW Polynya** (Greenland Sea), **WOCE/JGOFS** (Southern Ocean, equatorial Pacific), **APIS** (Ross Sea), **GLOBEC** (Antarctic Peninsula), **Eastern Tropical Pacific Project** (eastern tropical north Pacific), **Deepwater Horizon Oil Spill** (Gulf of Mexico), **McMurdo Sound Antarctic Ecosystem Study** (Ross Sea), **Ocean Observatories Initiative facility deployment (OOI)** (north Pacific)

## Professional Membership and Selected Service:

Professional Societies: Association for the Sciences of Limnology & Oceanography (ASLO), The Oceanography Society, American Geophysical Union, American Association for the Advancement of Science, Marine Technology Society

2016 UNOLS Committee, North East Pacific OOI Workshop, September 27-29, Portland, Oregon.  
2016–present University of South Florida representative to the UNOLS Council  
2016-present Member, Meetings Committee, Association for the Sciences of Limnology & Oceanography (ASLO)  
2014-2017 Chair, International Science Advisory Board (ISAB) for Ocean Networks Canada (ONC); organization responsible for the governance and management of the NEPTUNE Canada and VENUS cabled ocean networks.  
2013-present Member, Regional Class Research Vessel Science Oversight Committee  
2009-2016 Chair (2011-2013)/Member, U.S. Ocean Carbon and Biogeochemistry Scientific Steering Committee (NSF funded program)  
2002-2014 Ocean Observatories Initiative (OOI) (selected examples): Member, OOI Executive Steering Committees (2002-2006); Chair, ORION Sensor Technology Subcommittee (2004-2006); Chair, Ocean Observatories Initiative Design and Implementation Workshop (2006); OOI Director (2006-2007); Chair, Profiling Mooring Assessment Workshop (2007); Project Science, Cabled Array (2007-2014)

2002-2008 Member, U.S. National GLOBEC Executive Steering Committee

**Honors and Awards:**

2016 University of South Florida Outstanding Faculty Award  
2015 Fellow, American Association for the Advancement of Science (AAAS)  
2013 ARCS STEM Collaborative Partnership Award for Gulf Oil Spill First Responder Team.  
2007 Alfred P. Sloan Certificate of Appreciation for mentoring underrepresented minorities.  
1992-1995 Science Alliance Award, Outstanding Scholarly Achievement, University of Tennessee  
1984 Antarctic Service Medal, National Science Foundation

**Publications:** Author or co-author of 66 peer-reviewed publications

**Website:** <http://www.marine.usf.edu/zooplankton/index.shtml>

## **Dr. Craig M. Lee, University of Washington**

### **Statement of Interest:**

Efforts to chart future direction for the US research fleet face diverse challenges, including matching fleet composition to evolving mission requirements (such as the servicing of operational observing systems and the demands of large, integrated, multi-disciplinary programs) and the need to rebalance infrastructure expenditures to release resources to support science. The NRC ‘Sea Change’ report makes a strong case for maintaining seagoing capability, finding that the US Academic research fleet provides critical capabilities for addressing our highest priority science questions, with better alignment to research priorities than the community’s other large infrastructure investments. This resounding support for seagoing science, and the ships required to support it, provides a mandate for steady, thoughtful updating of the fleet. UNOLS must energetically advocate for the resources required to maintain seagoing capability, while also evaluating and optimizing existing vessels and operations to ensure that community resources are used in the best possible manner. Recent and planned actions address the reductions suggested for the fleet in ‘Sea Change’. Equally important are planning for fleet renewal and the training of our next generation of seagoing scientists. UNOLS responded thoughtfully to ‘Sea Change’ questions regarding the size and number of Regional Class research vessels (RCRV), defending the community’s decisions. Replacement of the capability lost with the retirement of *Knorr* and *Melville* represents another significant challenge. ‘Sea Change’ notes that Global class ships are especially important to meeting the community’s science priorities, reflected in the fact that they are the most heavily scheduled vessels in the fleet. Four Global vessels (three AGOR-23 class plus *Langseth*) remain within UNOLS, but of these only two are truly general-purpose, with both based in the Pacific. Ocean class vessels *Neil Armstrong* and *Sally Ride* sport berthing, lab and deck space that fall well short of the Global vessels they replace. Although the Ocean class represents significant new capability, science priorities motivate us to articulate the need for new Global class vessels, specify mission requirements and seek a means (build, lease, borrow) to meet them. Human capital remains critical, and we must foster a new generation of ocean scientists by providing training and mentorship, and by encouraging innovative, sometimes risky, seagoing research. The rapid growth of autonomous observing also offers potential opportunities. Among the models proposed for providing broad access to autonomous gliders is a UNOLS-like approach through which a network of operations centers might provide glider-based sampling in a manner analogous to the provision and operation of research vessels. Could UNOLS play a useful role in such an endeavor? UNOLS might be in a position to serve autonomous observing in other ways, such as developing a protocol for explicitly facilitating deployments and recoveries of autonomous assets as an overlay on other scheduled operations.

My extensive experience with seagoing science and ship operations provides a good basis for UNOLS service. I’ve participated in 46 research cruises, 34 as chief scientist, along with an Antarctic Deployment and an Arctic ice camp. The majority of these have been aboard global class ships operating from foreign ports, though I also have experience with intermediates, regionals, icebreakers, foreign vessels and helicopter operations. I’ve led large, multi-PI science parties, multi-ship operations and autonomous campaigns, conducted logistically and politically complex field programs and often lead or sit on the steering committees of ONR, NSF and NASA supported science programs. I currently chair the Observing Panel for the Study of Environmental Arctic Change (SEARCH), which provides guidance for climate scale measurements in the Arctic and sit on the Science Definition Team for the NASA Export Processes in the Ocean from Remote Sensing (EXPORTS) program. At the Applied Physics Laboratory, I lead a team that conducts both science and instrument development, and have been deeply involved with both the development and application of long-endurance autonomous gliders. I’ve been particularly interested in the application of systems of complementary platforms to sample at the diverse spatial and temporal scales required by many high-priority, multi-disciplinary problems.

I am honored by this nomination to run for UNOLS Council Chair Elect, and excited about the opportunities this might provide to continue working on the many challenges facing the fleet.

## **Biographical Sketch: Craig M. Lee**

### **Professional Appointments:**

2007-present	Applied Physics Laboratory, Univ. of Washington: Senior Principal Oceanographer
2001-2007	Applied Physics Laboratory, Univ. of Washington: Principal Oceanographer
1997-2001	Applied Physics Laboratory, Univ. of Washington: Senior Oceanographer
2016-present	School of Oceanography, Univ. of Washington: Professor
2010-2016	School of Oceanography, Univ. of Washington: Associate Professor
1995-1997	Woods Hole Oceanographic Institution, Postdoctoral Investigator in Physical Oceanography

### **Education:**

Ph.D., 1995	University of Washington, Physical Oceanography
B.S., 1987	University of California, Berkeley, Electrical Engineering & Computer Science

### **Research Interests**

Craig Lee is a physical oceanographer specializing in observations and instrument development. His primary scientific interests include: (1) upper ocean dynamics, especially mesoscale and submesoscale fronts and eddies, (2) interactions between biology, biogeochemistry and ocean physics and (3) high-latitude oceanography. With Dr. Jason Gobat, Lee founded and leads a team of scientists and technologists that pursues a wide range of oceanographic field programs, including intensive studies of the Kuroshio Current, coupled physical-biogeochemical studies such as the recent patch-scale investigation of the North Atlantic spring phytoplankton bloom and studies aimed at quantifying and understanding Arctic change. An important component of this work involves identifying advances that could be achieved through novel measurements and developing new instruments to meet these needs. The teams' accomplishments include autonomous gliders capable of extended operation in ice-covered waters, high performance towed vehicles and light-weight, inexpensive mooring technologies. Within the community, Lee provides leadership through service on the science steering committees for several large research programs, by serving on and chairing advisory panels for U.S. Arctic efforts and through briefings provided to federal and international bodies.

### **Field Experience**

46 major research cruises, 1 Antarctic deployment, 1 Arctic ice camp, 34 as chief scientist. Four cruises on foreign vessels (one icebreaker with extensive aircraft operations). Numerous short test cruises and small boat operations.

### **Select Synergistic Activities**

- NASA Export Processes in the Ocean from Remote Sensing Science Definition Team, 2015 – present.
- University-National Oceanographic Laboratory System (UNOLS) Council, 2012 – present.
- Chief Scientist for ONR Marginal Ice Zone DRI, 2012 – present.
- Co-chair, science steering group for ONR Northern Arabian Sea Circulation program, 2015 – present.
- Co-Chair for the first International Arctic Observing Summit, 2013
- Study of Environmental Arctic Change, Observing Panel. 2006 – present, Chair 2009 – present.
- Exec Committee, Arctic Observing Network Design and Implementation Task Force, 2009 - 2013.
- SEARCH Sea Ice Outlook Advisory Group. 2008 – present.
- Scientific Steering Committee for the Arctic-Subarctic Ocean Flux Program, 2000 – present.
- Science Steering Committee for large, multi-investigator research programs that include Quantifying, Predicting and Exploiting Uncertainty (2007 – 2012), Impact of Typhoons (2008 – 2013), Lateral Mixing Experiment (2008 – 2013), Salinity Processes in the Upper Ocean, Regional Study (SPURS) (2010 – 2015) and Joint US-Vietnam Regional Study (2011 – 2015).
- Organized and led NSF-OPP sponsored workshop on Autonomous and Lagrangian Platforms, 2008.
- Associate Editor for Limnology and Oceanography Methods, 2016 – present, Guest editor for the Journal of Geophysical Research, Arctic, Oceanography, Elementa.
- Reviewer for many oceanographic and Arctic-focused journals

**Publications**

Over 80 peer-reviewed publications and numerous white papers and reports, including sections of the Autonomous and Lagrangian Platforms (ALPS) Report, Ocean Observations 2009 Proceedings and SEARCH (Study of Environmental Arctic Change) planning and implementation documents.

**Website:** <http://www.apl.washington.edu/people/profile.php?last=lee&first=craig>

## **Dr. David Kadko, Florida International University**

### **Statement of Interest:**

I am enthusiastically applying to serve on the UNOLS Council: Non-Operator Position - affiliation with a UNOLS institution other than a facility operator.

I have 40 years of sea-going experience, during which time I have appreciated the efforts of UNOLS in providing support for the academic oceanographic community. Given today's budgetary constraints and political uncertainties, I feel that someone of my experience can contribute to activities within UNOLS including academic research fleet modernization efforts, and in outreach initiatives for students and early career scientists. I am excited about the possibility of working with the scientists, vessel operators, marine technical core, and funding agencies to advance the interests of the oceanographic community.

I just led (2015) an ambitious expedition to the Arctic (US GEOTRACES, USCGC HEALY) and have gained further experience with what UNOLS has to offer the community. It is a vital resource. In addition to my experience as an academic user, I have served as a rotator Program Manager with the National Science Foundation (Chemical Oceanography), gaining experience from the perspective of a major funding agency. I feel I can contribute to efforts that provide advice to the federal agencies that support ocean science facilities. Launching US Arctic GEOTRACES off the ground arose in part due to the good working relationship I have with NSF personnel.

My current position, as Associate Director of the Applied Research Center and Professor, is within Florida International University (FIU). Through my efforts, FIU in 2015 became a UNOLS institution. I made upper administration of FIU aware of UNOLS and its activities, and as a consequence I received the "OK" from FIU's vice president of research to go forward with the requisite membership application for FIU. I also have formal association with Lamont-Doherty (Columbia University) and Florida State University which are both UNOLS members.

### **Biographical Sketch: David Kadko**

#### **Professional Appointments:**

2014-present	Assoc. Director, Applied Research Center; Professor (res), Florida International University
2013-present	Courtesy Professor Appointment, Florida State University,
2010-present	Lamont-Doherty Earth Observatory, Columbia University Adjunct Senior research scientist
1999-2000	Assoc. Program Officer, National Science Foundation
1996-2014	Professor, University of Miami, RSMAS
1996	Fulbright Fellow, University of Cambridge (UK)
1990-1996	Associate Professor, University of Miami, RSMAS
1989-1990	Assistant Prof. (Sr. Res.), College of Oceanography, Oregon State University
1983-1988	Research Associate, College of Oceanography, Oregon State University
1981-1983	NRC Postdoctoral Fellowship, U.S. Geological Survey, Menlo Park, California

#### **Education:**

B.S., 1973	Brooklyn College, City University of New York (Chemistry) - Magna Cum Laude
M.A., 1974	Columbia University (Oceanography)
M.Phil, 1975	Columbia University (Oceanography)
Ph.D., 1981	Columbia University (Oceanography)

**Research Interests:** Utilizing naturally occurring radioactive isotopes for the purpose of tracing the pathways and discovering the rates of a wide range of oceanic processes.



**Selected Research Cruises: Over 30 research cruises since 1974 including:**

- USCG *Healy*: 2015/9 weeks - US Arctic GEOTRACES, Ch. Scientist; 2004/4 weeks - Beaufort Sea, Arctic; 2003/6 weeks - Arctic
- R/V *KOK-Pisces*: 1997/1 week - LOIHI Seamount
- R/V *Atlantis-II/Alvin*: 1995/3 weeks - MAR, Chief Scientist; 1994/1 week – Juan de Fuca (JdF) Ridge, Chief Scientist; 1990/3 weeks –JdF Ridge; 1984/3 weeks - JdF Ridge
- R/V *Washington*: 1988/4 weeks, N. California Coast
- R/V *Thompson*: 1986/3 weeks - Endeavour Ridge, Co-chief scientist
- R/V *Polarstern*: 1985/4 weeks, Antarctic
- R/V *Surveyor*: 1985/3 weeks, Gorda Ridge
- R/V *Wecoma*: 1985/1 week, Gorda Ridge
- R/V *Knorr*: 1979/4 weeks, E. Equatorial Pacific
- R/V *Melville*: 1977/6 weeks, E. Equatorial Pacific
- R/V *Conrad*: 1975/2 weeks, New York Bight

**Professional Membership, Appointments, and Honorary Organizations:**

- American Society of Limnology and Oceanography
- American Geophysical Union
- Sigma Xi
- Chair, US Arctic GEOTRACES, 2010-present
- ARCUS Member Representative, 2009-2014
- U.S. Representative to InterRidge, 1998-2001
- Member, RIDGE Steering Committee, 1998-2001
- NSF Summer Research Grant, Brooklyn College, 1973

**Awards / Honors**

- FIU Community Award, 2016
- Fulbright Fellowship, University of Cambridge, UK, 1996
- National Research Council Fellowship, 1981-83
- NSF Doctoral Fellowship, 1975-78
- Chemistry Department Honors Award, Brooklyn College, 1973

**Publications:** Author or co-author of approximately 60 peer reviewed works.

**Website:** <http://www.arc.fiu.edu/staff/david-c-kadko/>

## **Dr. Tammi L. Richardson, University of South Carolina**

### **Statement of Interest:**

When I first ran for UNOLS Council in 2103 my interest was rooted primarily in my wish to serve an organization from which I had benefited scientifically, both as a cruise participant and Chief Scientist, along with my natural curiosity about ‘how UNOLS works’. Now, three years on, I find that my enthusiasm for serving and supporting UNOLS is even greater than before. I have a better understanding of the many challenges involved in the funding of ship operations and their coordination among multiple agencies, universities, and other entities. I also have a much better appreciation of the incredibly hard work involved with keeping the organizational wheels turning, and of the immense value of UNOLS to oceanographic science in general. I am encouraged by new UNOLS programs (e.g., the Chief Scientist training cruises for new PIs), and by continuing efforts to improve our time at sea, especially those directed towards improved ship-to-shore communications. My work with UNOLS so far has been as part of the Non-Operator’s Committee. I am happy to continue in this capacity but am also open to new responsibilities in my continuing effort to figure out ‘how UNOLS works’!

### **Biographical Sketch: Tammi L. Richardson**

#### **Professional Appointments:**

Jan. 2015- present	Professor, University of South Carolina, Columbia, SC
2011 –2014	Associate Professor, University of South Carolina, Columbia, SC
2005-2010	Assistant Professor, University of South Carolina, Columbia, SC
2000-2004	Assistant Research Scientist, Texas A&M Univ., College Station, TX
1998-2000	Postdoctoral Research Associate, Institute of Marine Sciences, University of North Carolina, Morehead City, N.C.
1996-1998	Postdoctoral Fellow, Queen’s University of Belfast, Northern Ireland

#### **Education:**

Ph.D., 1996	(Oceanography), Dalhousie University, Halifax, N.S., Canada
M.Sc., 1988	(Biology), University of New Brunswick, Canada
B.Sc., 1986	(Honours Biology), University of New Brunswick, Canada

#### **Seagoing Experience:**

R/V *Neil Armstrong*, 6 days, South Atlantic Bight (Chief Scientist)  
R/V *Atlantic Explorer*, 14 days, Sargasso Sea, July 2012 (Chief Scientist)  
R/V *Atlantic Explorer*, 10 days, Sargasso Sea, March 2012 (Chief Scientist)  
R/V *Atlantic Explorer*, 14 days, Sargasso Sea, July 2011 (Chief Scientist)  
R/V *Atlantic Explorer*, 10 days, Sargasso Sea, February 2011 (Chief Scientist)  
R/V *Cape Hatteras*, 5 days, South Atlantic Bight, June 2009 (Chief Scientist)  
R/V *Suncoaster*, 5 days, Gulf of Mexico, September 2002  
R/V *Cape Hatteras*, 5 days, October 1998  
R/V *Columbus Iselin*, 14 days, Caribbean Sea, September 1991

#### **Professional Service:**

- UNOLS Council Member (term 12/13 to 12/16)
- Associate Editor, Continental Shelf Research (current)
- Associate Editor, Limnology & Oceanography Methods (current)
- Member, NASA Ocean Biology & Biogeochemistry Working Group on Field Campaigns (current)
- Advisory Committee Member, North Inlet-Winyah Bay National Estuarine Research Reserve (current)
- Co-Chair, 2016 ASLO Summer Meeting, Santa Fe, New Mexico.
- Elected Member, U.S. National Harmful Algal Bloom Committee (7/1/12 to 5/31/15)

- Discussion Leader, Gordon Research Conference on Marine Microbes, June 2014
- Panel Member, California Sea Grant (2014, 2015, 2016)
- Manuscript reviewer (*pro re nata*) for: Applied and Environmental Microbiology, Biogeosciences Discussions, Continental Shelf Research, Deep-Sea Research Part I and II, Estuaries and Coasts, Estuarine and Coastal Shelf Science, European Journal of Phycology, Freshwater Biology, Geophysical Research Letters, Harmful Algae, Journal of Phycology, Journal of Experimental Marine Biology and Ecology, Journal of Plankton Research, Limnology and Oceanography, L&O Methods, Marine Ecology Progress Series, Nature Communications, Nature Geoscience, Nature Reviews of Microbiology, Optics Express, PLoS One, Water Research.
- Proposal reviewer (*pro re nata*) for: the National Science Foundation (OCE: Biological Oceanography, Chemical Oceanography, Ocean Technology and Interdisciplinary Coordination; BIO: Division of Environmental Biology), NASA (Ocean Biology and Biogeochemistry Program), NOAA (Ecology and Oceanography of Harmful Algal Blooms), US-Israel Binational Science Federation, Natural Sciences and Engineering Research Council (Canada), Natural Environment Research Council (UK).

**Publications: (5 most recent)**

- Cotti-Rausch, B.E., M.W. Lomas, E.M. Lachenmyer, E.A. Goldman, D.W. Bell, S.R. Goldberg, and T.L. Richardson. 2016. Mesoscale and sub-mesoscale variability in phytoplankton community composition in the Sargasso Sea. *Deep-Sea Research I* 110: 106-122.
- Pinckney, J.L. and T.L. Richardson. 2016. Phytoplankton biodiversity in the oligotrophic northwestern Sargasso Sea. Chapter in: *Aquatic Microbial Ecology and Biogeochemistry: A Dual Perspective*, edited by P.M. Glibert and T. Kana, Springer-Verlag.
- Gordon, A.R., T.L. Richardson and J.L. Pinckney. 2015. Ecotoxicology of bromoacetic acid on estuarine phytoplankton. *Environmental Pollution* 206: 369-375.
- Tazik, S., M. Pearl, C. Rekully, N. Viole, S. DeJong, T. Shaw, T.L. Richardson, and M. Myrick. 2015. Focus-independent particle size measurement from streak images: a comparison of multivariate methods. *The Analyst* 140: 1578-1589.
- Sassenhagen, I., K. Rengefors, T.L. Richardson and J.L. Pinckney. 2014. Pigment composition and photoacclimation as keys to ecological success in *Gonyostomum semen* (Raphidophyceae, Stramenopiles). *Journal of Phycology* 50: 1146-1150.

**Website:** <http://www.seoe.sc.edu/richardson>

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