

2017 UNOLS COUNCIL SLATE

UNOLS Elections will be held to fill Council member terms that will expire this year. UNOLS Nominating Committee members Elizabeth Kujawinski, Craig Lee, and Rhian Waller 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 December 1, 2016.

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

OPERATOR REPRESENTATIVE (3 year term) – Individual affiliated with any designated UNOLS Operator Member Institution

- ❖ **Dr. James D. Happell, University of Miami, RSMAS**
- ❖ **Dr. Craig R. McClain, Louisiana University Marine Consortium**
- ❖ **Dr. R. Kipp Shearman, Oregon State University**

At-Large REPRESENTATIVE (3 year term) – Individual affiliated with any UNOLS Member Institution

- ❖ **Dr. David Kadko, Florida International University**
 - ❖ **Dr. Elizabeth L. Sikes, Rutgers University**
 - ❖ **Dr. Spahr Webb, Lamont-Doherty Earth Observatory**
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CANDIDATES FOR COUNCIL OPERATOR POSITION

Dr. James D. Happell, University of Miami, RSMAS

Statement of Interest:

I have participated in many research cruises measuring the transient tracers CFC-11, CFC-12 and SF₆ as part of the CLIVAR, GO-SHIP and GEOTRACES programs. I am also the PI on the UNOLS SWAB program, and have personally visited and collected SWAB samples on most vessels in the UNOLS fleet. I have also served on the RSMAS ship operations committee for 20 years. I also have an interest in “green” issues and have been a long term member of the RSMAS green committee, serving as the chair of this committee for the past 5 years. There is an increasing interest in having a “greener” fleet and I would be interested in helping with this. I have always had an interest in the make-up and operations of the UNOLS fleet and would like to have the opportunity to serve on the UNOLS council as an operator member. RSMAS no longer has a representative on the UNOLS council due to the recent retirement of Peter Ortner, and as a ship operator we would like to continue having a representative on the UNOLS council. Thank you for considering me for the operator member opening.

Biographical Sketch: Dr. James D. Happell

Professional Appointments:

2004 – present Associate Research Professor, University of Miami
1996 – 2004 Assistant Research Professor, University of Miami
1992 – 1996 Research Assistant, Brookhaven National Laboratory

Education:

BS, 1984 State University of New York College at Fredonia
MS, 1989 Florida State University
Ph.D., 1992 Florida State University

Research Interests: Use of transient tracers, such as chlorofluorocarbons and tritium, to determine seawater and groundwater flow patterns and rates. The role of soils in the global budget of halogenated atmospheric trace gases. A recent project is focused on obtaining a better estimate of the global soil sink strength for atmospheric carbon tetrachloride. Interests also include developing analytical methods for the measurement of halogenated trace gases in water and air.

Seagoing Experience: I have participated in fourteen research cruises during my career measuring the transient tracers CFC-11, CFC-12 and SF₆. Nine of the 14 cruises were part of the CLIVAR, GO-SHIP and GEOTRACES programs. I will be participating in the 2018 GEOTRACES cruise.

Professional Service: University Committee and Administrative Responsibilities:

- Ship Operations Committee, April 1998 to Jan 2001 and October 2001 to present
- Alternate to University Research Council
- Green Committee Chair

Professional Membership and Honorary Organizations:

- American Geophysical Union

Post Doctoral Fellowships: Department of Energy Global Change Distinguished Postdoctoral Fellowship; Dec. 1992-Dec. 1994.

Publications: Author or co-author of 35 peer reviewed works.

Website: <https://www.rsmas.miami.edu/people/faculty-index/?p=jim-happel>

Dr. Craig R. McClain, Louisiana University Marine Consortium

Statement of Interest:

It is with great enthusiasm that I submit my curriculum vitae and statement of interest for the UNOLS Council Position. As you review my materials you will quickly discover a distinctive research background in deep-sea biology and oceanography as related to carbon cycling and climate change. You will also discover a career built upon a strong commitment to scientific research and discovery through communication and public engagement, service to both my field and the larger scientific community ultimately leading me to several leadership positions. Last, my career has been denoted by both heavy usage and commitment to the UNOLS system. I believe these characteristics and experience will prove an asset if given the opportunity to serve with UNOLS.

Research

My research links the physiology and adaptations of species to broad scale oceanographic patterns and processes focusing specifically on responses of marine invertebrates to changes in food availability, over both spatial and temporal gradients. These linkages provide direction on how species and marine ecosystems will respond to climate change in the form of decreasing ocean productivity. My research falls into three broad categories— how organisms are adapted to specific quantities of carbon availability, how energetic adaptations and tradeoffs play out ecologically and evolutionarily, and understanding how these energetic niches impact marine ecosystem processes and diversity. My research has resulted in 61 peer-reviewed, scientific publications with another five currently in preparation and review. Some of these publications rank in the top journals in biological science including; *American Naturalist*, *Annual Review of Ecology and Systematics*, *Biology Letters*, *Ecology*, *Evolution*, *Proceedings of the National Academy of Science*, *Proceedings of the Royal Society B*, and *Trends in Ecology and Evolution*.

My research has greatly benefited from interacting with scientists from a variety of research backgrounds. These experiences have broadened my own research to encompass universal questions that cross disciplinary boundaries. I collaborate repeatedly with biologists working on other systems. In addition, my former position as Assistant Director of Science at the National Evolutionary Synthesis Center has provided me with the challenging opportunity to coordinate multidisciplinary programs and teams in order to address outstanding questions in evolutionary science. Through these projects I have seen collaborative efforts yield novel and high impact science. I believe this collaborative nature and experience in building collaborative networks could prove useful in service to UNOLS.

Outreach and Education

My accomplishments demonstrate an integration of research and public outreach with an emphasis on science communication. My research continues to generate considerable press from outlets including *Wired*, *Fox News*, *Discovery Channel*, and *NPR*. My public writing is featured in *COSMOS*, *American Scientist*, *io9*, *Mental Floss*, and *Wired*. My online writing on our ocean's future was included in *The Best of Science Writing on Blogs 2007* and *2012*. I also serve as chief editor for *Deep-Sea News (DSN)*, a group blog I founded in 2005 to discuss ocean science. *DSN* is considered the most popular marine blog on the web, receiving upwards of 500,000 visitors a month and multiple awards for outreach and activism. *DSN* has been featured content for outlets like *NPR*, *Science*, *Nature*, *Discovery Channel*, and *Wired*. *DSN* was also featured in the *Columbia Journalism Review*. I also often serve as consultant to mainstream media including *ABC News*, *Wired*, and *NPR*. A key part of my outreach is training and providing commentary on different social media outreach strategies through workshops, consulting, and published peer-reviewed articles.

Leadership

Additionally, I believe I have a great deal of leadership experience to offer. I am a confident leader with a proactive, transformational, and participatory management style. I am a certified facilitator through MG Rush's Facilitative Leadership Training. I previously served at the National Evolutionary Synthesis Center as the Assistant Director of Science overseeing the management of all the center's supported science programs including 1,000 visiting scientists, 15 postdoctoral fellows, 5 graduate fellows, and 3 sabbatical scholars annually. Currently, I serve as the Executive Director of the Louisiana Universities Marine Consortium overseeing a large oceanographic institution with nearly 100 staff members, a \$15 million dollar annual budget, and strong outreach and research programs.

In addition to my commitment to my current posting, I strongly believe that a true leader in the scientific community must demonstrate their dedication to the field through service. I currently serve as reviewer for multiple journals and review grants for several agencies and foundations. I served as an Academic Editor and eventually a Marine and Aquatic Section Editor for *PLoS One*. I have served as editor for *the Journal of Biogeography* and currently for *Proceedings of the Royal Society, B*. In addition, I served as the founding president of the Deep-Sea Biology Society and currently serve on its board.

UNOLS and Research Vessel Experience.

My work is heavily dependent on Remotely Operated Vehicles, corers, and landers. As such, I have been a member of 30 oceanographic expeditions, including an Antarctic expedition. Multiple times I have successfully served as chief scientist facing considerable logistical challenges that required proper planning, crisis management, and teamwork. I have had the pleasure to participate in expeditions on several UNOLS vessels including the R/V's *Hatteras*, *Pt. Sur*, *Wecoma*, and most recently the *Pelican*. I also benefited from a chief scientists training cruise provided by UNOLS. In my current position, I have the honor overseeing marine vessels program that include operations of the both the *Pelican* and the *Pt. Sur*. On both my widely read website, Deep-Sea News, and in the popular media I have served as an advocate of the UNOLS fleet.

Overall, I believe I have much to offer UNOLS in the form a strong research program dependent on UNOLS assets, a commitment to education and outreach, as well as demonstrated leadership and service. Overall, UNOLS has provided much to my career and I welcome the opportunity to serve UNOLS in return.

Biographical Sketch: Dr. Craig R. McClain

Professional Experience:

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|---------------------|---|
| July 2016 – Present | Executive Director, Louisiana Universities Marine Consortium |
| June 2015-May 2016 | Deputy Director, Triangle Center for Evolution Medicine, Duke University |
| Feb 2009-Nov 2016 | Assistant Director of Science, National Evolutionary Synthesis Center, Duke University |
| Feb 2006-Feb 2009 | Postdoctoral Fellow, Monterey Bay Aquarium Research Institute |
| Sept 2003-Feb 2006 | Postdoctoral Fellow, Biocomplexity Group, Department of Biology, University of New Mexico |

Education:

| | |
|-----------------|--|
| 09/1993-05/1997 | B.A. in Biology/ Minor Religion, Hendrix College, Conway, AR |
| 09/1998-12/2003 | Ph.D. In Environmental Biology, U. of Massachusetts, Boston |

Research Interests:

- Deep-sea biodiversity and ecology
- Energetics and metabolism
- Body size evolution and ecology
- Invertebrate zoology
- Climate change impacts on marine invertebrate communities

Seagoing Experience:

- A member of 30 oceanographic expeditions, including an Antarctic expedition (Multiple cruises as chief scientist)
- Expeditions on UNOLS vessels have included the R/V's *Hatteras*, *Pt. Sur*, *Wecoma*, and *Pelican*.

Professional Membership and Selected Service:

- Academic Editor and eventually a Marine and Aquatic Section Editor for *PLoS One*.
- Past editor for *the Journal of Biogeography*
- Current editor for *Proceedings of the Royal Society, B*
- Founding president and current board member of the Deep-Sea Biology Society

Publications: Author or co-author of 61 peer reviewed works.

Website: <https://lumcon.edu/cmclain/>

Dr. R. Kipp Shearman, Oregon State University

Statement of Interest:

Please, consider me for continued service on the UNOLS Council as an operator member. I have been going to sea on UNOLS vessels for nearly 20 years, starting as an undergraduate student. I have participated in 40 cruises (9 as chief scientist) and sailed on global, intermediate, regional and coastal vessels. I am a physical oceanographer, however, much of my research is interdisciplinary, and I have experience carrying-out large, multi-PI, multi-disciplinary and multi-ship research projects. Currently, I serve on the UNOLS Council as an operator member, and Science Advisory Panel for the OCRVs. In addition to being a ship-based, seagoing oceanographer, I have extensive experience operating Autonomous Underwater Vehicle gliders in coordination with ships and as standalone observational platforms.

This is a critical period for ships, UNOLS and seagoing oceanography. Our challenge is to find a way to foster ship-based research, while faced with the realities of a smaller fleet and historically fewer operating days. We can meet this challenge on multiple fronts. First, we have to make the most of limited resources. We must look for ways to improve efficiency and cost-effectiveness of the existing fleet and ships that will be newly added. Developing the ways in which our ships interact with new technologies, such as AUVs, should feature prominently in this effort. Second, we must explore new funding models for our ships, including institutional support, industry-academic collaborations and ties with new federal agencies. Third, we must increase the demand for ship-time, by training and encouraging the next generation of observational oceanographers, empowering them to propose important, new ship-based research. Finally, we must continue to plan for the future by developing the science mission requirements for the next generation of global class research vessels.

Biographical Sketch: Dr. R. Kipp Shearman

Professional Appointments:

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|-----------------------|---|
| June 2010 – present | Associate Professor, COAS, Oregon State University |
| Sept 2004 – June 2010 | Assistant Professor, COAS, Oregon State University |
| May 2002 – Sept 2004 | Assistant Scientist, Woods Hole Oceanographic Institution |

Education:

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|--------------|--|
| B.S., 1993 | University of Colorado, Aeronautical Engineering (with Distinction), |
| Ph.D., 1999 | Oregon State University, Physical Oceanography, |
| Postdoctoral | Woods Hole Oceanographic Institution, Postdoctoral Scholar/Investigator December 1999 – May 2002 |

Research Interests:

My principal research interest is the study of physical processes associated with circulation along oceanic margins. I am most interested in understanding the dynamics of flow over the continental shelf and slope, and the linkages between the coastal and adjacent deep ocean. My approach is observational, using innovative sampling techniques coupled with modeling and analysis, to explain fundamental physical processes. In addition, I believe that such research needs to be approached with an interdisciplinary perspective, extending the understanding of physical processes to their impacts on biological, chemical and environmental processes.

Seagoing Experience:

- Participated in 40 research cruises (sponsored mainly by the NSF and ONR), starting as an undergraduate in 1993, and have been chief-scientist on 9 cruises.
- Sailed on every class of UNOLS vessel from Coastal to Global, and have worked from a variety of foreign and domestic ports.

- Extensive experience using Autonomous Underwater Vehicle gliders, both in coordination with ship surveys and as stand-alone platforms. Since 2006, the OSU Glider Group has completed 210 deployments totaling 4893 glider-days at sea, working off US coasts and foreign waters.

UNOLS Activities

- UNOLS Council, 2014 - present
- Ocean Class Research Vessel (OCRV) Science Advisory Panel, 2013 – present
- OSU Representative to UNOLS, 2009 – 2013

OSU Activities - OCRV Science Advisory Panel, 2013 – present

Professional Membership and Selected Service:

- Member, American Geophysical Union, 1996 - present
- Member, Marine Technology Society, Advisor for Oregon Student Section, 2011 - present
- NSF Panel, Physical Oceanography, Washington D.C., May 2007, 2014
- Reviewer: *Journal of Physical Oceanography*, *Journal of Geophysical Research*, *Geophysical Research Letters*, *Continental Shelf Research*, *Dynamics of Atmospheres and Oceans*, *Journal of Field Robotics*, *Journal of Atmospheric and Oceanic Technology*, *Deep Sea Research*, *Limnology and Oceanography*, *Nature*

Publications: Author or co-author of 30 peer-reviewed publications.

Website: <http://ceoas.oregonstate.edu/profile/shearman/>

CANDIDATES FOR COUNCIL AT-LARGE POSITION

Dr. David Kadko, Florida International University

Statement of Interest:

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 recently led (2015) an ambitious expedition to the Arctic (US GEOTRACES, USCGC HEALY). The effort required considerable communication and coordination with NSF, the Coast Guard, and the scientific community. In doing so I gained further experience with what UNOLS has to offer the community.

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 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). This is one of the largest minority-serving universities in the nation. It is a leading advocate for promoting STEM education in the diverse minority community of Miami. Through my efforts, FIU in 2015 became a UNOLS institution. I made upper administration of FIU aware of UNOLS and its activities, and was able to go forward with the requisite membership application for the University. This was appropriate as FIU has a growing, robust, marine science program and recently was placed in the Carnegie Classification of Institutions of Higher Education R1: Doctoral Universities – Highest Research Activity.

I also have formal association with Lamont-Doherty and Florida State University which are both UNOLS members.

Biographical Sketch: Dr. David Kadko

Professional Appointments:

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|--------------|--|
| 2014-present | Florida International University, Assoc. Director, Applied Research Center; Professor (res). |
| 2013-present | Florida State University, Courtesy Professor Appointment |
| 2010-present | Lamont-Doherty Earth Observatory, Columbia University Adjunct Senior research scientist |
| 1999-2000 | National Science Foundation, Assoc. Program Officer |
| 1996-2014 | University of Miami, RSMAS, Professor |
| 1996 | University of Cambridge (UK); Fulbright Fellow |
| 1990-1996 | University of Miami, RSMAS, Associate Professor |
| 1989-1990 | College of Oceanography, Oregon State University, Assistant Prof. (Sr. Res.), |
| 1983-1988 | College of Oceanography, Oregon State University, Research Associate |
| 1981-1983 | U.S. Geological Survey, Menlo Park, California, NRC Postdoctoral Fellowship, |
| 1974-1980 | Lamont-Doherty Geological Observatory, Columbia University, Research Assistant |
| 1973 | Brooklyn College, Research Assistant |

Education:

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

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 Field Experience: Over 30 research cruises since 1974 including:

- USCG *Healy*: 2015 - US Arctic GEOTRACES (9 weeks), Ch.Scientist; 2004 - Beaufort Sea, Arctic (4 weeks); 2002 - Arctic (6 weeks)
- 1997 - R/V *KOK-Pisces*, LOIHI Seamount (1 week)
- R/V *Atlantic-II/Alvin*: 1995 -Mid-Atlantic Ridge (3 wks) - Chief Scientist; 1994 -Juan de Fuca Ridge (1 wk) - Chief Scientist; 1990 - Juan de Fuca Ridge (3 wks); 1984 - Juan de Fuca Ridge (3 wks)
- 1988 - R/V *Washington*, N. California Coast (4 wks)
- 1986 - R/V *Thompson*, Endeavour Ridge, Co-chief scientist (3 wks)
- 1985 - R/V *Polarstern*, Antarctic (4 wks), R/V *Surveyor*, Gorda Ridge (3 wks), R/V *Wecoma*, Gorda Ridge, Co-chief scientist (1 wk)
- 1979 - R/V *Knorr*, E. Equatorial Pacific (4 weeks)
- 1977 - R/V *Melville*, E. Equatorial Pacific (6 weeks)
- 1975 - R/V *Conrad*, New York Bight (2 weeks)

Professional Membership, Selected Service, and Honorary Organizations:

- American Society of Limnology and Oceanography
- American Geophysical Union
- Sigma Xi
- 2010-present - Chair, US Arctic GEOTRACES
- 2017- US Arctic GEOTRACES-Data Synthesis (organizer), Miami
- 2015 - US Arctic GEOTRACES-Cruise Planning (organizer), Miami
- 2012 - US Arctic GEOTRACES-Implementation (organizer), Wash., DC
- 2010 - US Arctic GEOTRACES (organizer), Wash. DC
- 2009-2014 ARCUS Member Representative
- 1998-2001 -U.S. Representative to InterRidge
- 1998 - RIDGE/NOAA Workshop on the effect of seafloor hydrothermalism on biological productivity (CONVENOR)
- 1994 - RIDGE/NOAA Workshop on the global impact of hydrothermal venting, Boulder, CO (CONVENOR)

Honors, Appointments and Awards:

- 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. Elizabeth L. Sikes, Rutgers University

Statement of Interest:

My first cruise over 35 years ago was on the UNOLS vessel Lulu with Alvin. In the intervening years, I have participated in more than 15 cruises on both UNOLS ships and research vessels from other countries. On these cruises I've participated in different capacities, ranging from student to chief scientist. The cruise objectives have ranged from coring work, to WOCE transects, to sediment trap deployments and recoveries. Field work is a critical component of my research that allows me to place laboratory results into an environmentally relevant context. With the decline in NSF proposal success rates and the pressures of maintaining costly ship operations, I perceive a move towards laboratory-based projects by my peers. In this climate, I believe innovative solutions must be considered to support continued field-going programs.

I am interested in participating in the UNOLS council in order to facilitate and support the UNOLS capability in US-based oceanographic research. As a sea-going scientist, I have been interested in developing and applying proxies for paleoceanographic research. I am interested in exploring and supporting new strategies for enhancing and expanding the coring capabilities of UNOLS vessels. As a scientist who uses natural radioisotopes (^{14}C) in my research I wish to support the efforts to maintaining the fleet's capability for this work while accommodating the range of studies that employ isotope enhancement work. I have a record of supporting outreach from science cruises to K-12 students. During my recent cruises, I have engaged classrooms with blogs about my science activities as well as life at sea. I would be interested in increasing the current capacity for outreach activities on UNOLS vessels and in developing more efficient and effective ways to engage the US public in our activities to understand our oceans and our planet.

Biographical Sketch: Dr. Elizabeth L. Sikes

Professional Appointments:

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| 2017-present | Professor, Marine and Coastal Sciences, Rutgers University |
| 2009-2017 | Associate Professor with tenure, Marine and Coastal Sciences, Rutgers University |
| 2006-2009 | Associate Professor, Institute of Marine and Coastal Sciences, Rutgers University |
| 2001- 2006 | Research Associate Professor, IMCS, Rutgers University |
| 2000- 2001 | Senior Lecturer, University of Auckland |
| 1998- 2000 | Lecturer, Department of Geology and School of Environmental and Marine Sciences, University of Auckland |
| 1997- 1998 | Senior Research Scientist, Australian Geological Survey Organization and Antarctic Cooperative Research Centre |
| 1993- 1997 | Research Scientist, Australian Geological Survey Organization and Antarctic Cooperative Research Centre |

Education:

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|------------|---|
| B.A. 1980 | Wesleyan University, Middletown, CT Environmental Science |
| M.S. 1984 | University of North Carolina-Chapel Hill. Chapel Hill. NC Marine Science |
| Ph.D. 1990 | Massachusetts Institute of Technology/Woods Hole Oceanographic Institution Joint Program in Oceanography and Oceanographic Engineering, Boston & Woods Hole, MA Geological Oceanography |

Post-Doctoral:

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|---------|--|
| 1990-91 | University of Tasmania, Hobart TAS, Australia, Junior Research Fellow, Institute of Antarctic and Southern Ocean Studies |
| 1992-93 | University of Tasmania, Hobart TAS, Australia, Australian Research Council Post-Doctoral Fellow, Institute of Antarctic and Southern Ocean Studies |

Research Interests:

- Investigating circulation in the Southern Ocean to determine how this traps and releases CO₂ from the deep ocean on glacial time scales.
- Investigations of past sea surface temperature changes in the oceans around New Zealand and Australia.
- On shorter timescales, investigating sources, pathways, and sinks of both terrestrial and marine carbon in modern environments with an eye to their interaction with coastal ocean acidification.

Seagoing Experience:

- Participation in 15 oceanographic research cruises.
- Chief scientist of jumbo piston coring cruise on R/V *Roger Revelle* (March 2005).
- Shipboard scientist on five cruises involving piston and box coring, dredging, and single channel seismic profiling. Two CTD cruises involving water column sampling.
- Four cruises involving sediment trap deployment and retrieval.
- Three DSRV *Alvin* dive series.
- Four cruises have been in polar and subpolar waters.
- Weblogging was an important outreach component on the four most recent cruises (2008-2009).

Professional Service:

- Chair of the Organic Chemistry Division of the Geochemical Society 2016 to present
- Associate editor of the journal *Paleoceanography*, 2004-2009 and 2015-present

Distinctions/Fellowships/Awards:

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|---------|--|
| 2012-13 | Hanse Fellow at the Institute of Advanced Study (Hanse-Wissenschaftskolleg, Germany) |
| 2004 | National Science Foundation (NSF) ADVANCE Fellow Award |
| 1997 | American Geophysical Union Editors' Citation for Excellence in Refereeing, <i>Paleoceanography</i> |
| 1991 | Australian Research Council Post-Doctoral Fellowship |
| 1983 | NSF Graduate Fellowship: Honorable Mention |

Publications: Author or co-author of 51 peer-reviewed publications.

Website: <https://marine.rutgers.edu/main/elisabeth-sikes>

Dr. Spahr Webb, Lamont-Doherty Earth Observatory, Columbia University

Statement of Interest:

I write to express my interest in serving on the UNOLS Council. I have sailed on the majority of vessels in the UNOLS fleet both large and small during about 100 cruises over the last 36 years. I have a good understanding of the issues currently affecting the research fleet. My research has been focused on technology and the development of instrumentation for oceanography and geophysics (marine EM, geodesy and seismology). I have worked at three of the major oceanographic institutions (SIO, LDEO and WHOI). I have used the *Jason* ROV for my work and dove in *Alvin* on several cruises. Jason in particular has been vital to my group developing several new types of instrumentation and geophysical methods. I expect *ROVs* and *AUVs* to become an increasingly important component of ocean research. While at SIO, I served on its marine operations committee for about a decade. I was on the RIDGE steering committee for several years as well. I would hope my instrumentation expertise would be useful on the UNOLS council too.

This is a difficult time for UNOLS as it is evident that the primary concern for the UNOLS in the next decades will be cost control. The diversity of institutions operating ships within the UNOLS's fleet has encouraged the development of a broad range of capabilities. A major concern for me is whether UNOLS will be able to maintain this broad range of capabilities while down sizing the number of ships. Optimization of the use of the fleet will require difficult decisions. Fortunately, the newer smaller ships have better station keeping abilities and can replace larger ships for many cruises, although lacking the berthing of the larger ships. I am particularly impressed by the capabilities of the new R/V Armstrong class. I hope the new regional ships are as successful.

Biographical Sketch: Dr. Spahr Webb

Professional Experience:

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|--------------|---|
| Present | Jerome M. Paros/ Lamont Research Professor, Lamont-Doherty Earth Observatory, Columbia University, Palisades, N.Y. |
| 2000-Present | Adjunct Professor, Department of Earth and Environmental Science, Columbia University |
| 1997-2002 | Research Oceanographer, Scripps Institution of Oceanography, University of California, San Diego, La Jolla, CA. |
| 1993-1997 | Associate Research Oceanographer, Scripps Institution of Oceanography, University of California, San Diego, La Jolla, CA |
| 1986-1993 | Assistant Research Oceanographer, Scripps Institution of Oceanography, University of California, San Diego, La Jolla, CA. |
| 1984-1986 | Postdoctoral Scholar, Woods Hole Oceanographic Institution, Woods Hole, MA. |

Education:

B.S., 1978, Massachusetts Institute of Technology, Physics, and Earth and Planetary Science
Ph.D., 1984, University of California, San Diego, Oceanography

Research Interests: Marine instrumentation for geophysical and oceanographic applications. Observations of ocean (infragravity) waves. Broad-band marine seismology. Marine Geodesy. Structure of the oceanic crust and mantle. Recent emphasis has been the structure, deformation, and seismicity of subduction zones with the goal of better understanding seismic and tsunami hazard. Offshore geodetic observations. Slow-slip-earthquakes observed offshore.

Research Cruises: About 100 research cruises on UNOLS and other vessels. Recent cruises have included research from the following vessels:

- UNOLS Ships: *Armstrong*, (2016), *Revelle* (2015, 2009) *Oceanus* (2005), *Ewing* (2003), *Wecoma* (2004), *Sproul* (2005, 2006), *Atlantis* (2007, 2008, 2009 with DSV *Alvin*, 2011 with ROV *Jason*),

Seward Johnson (2007), *Langseth* (2007, 2008, 2011), *Kilo Moana* (2010), *Thompson* (2014, with ROV *Jason*), *Wecoma* (2004), *Endeavor*, (2003), *Weatherbird*, (2001).

- Non-UNOLS Ships: *Kaiyo*, (2003), *Universtatis* (2004, 2005), *Hesperides* (2005), *Las Palmas* (2005), *Seawolf* (2008, 2009, 2010), *Tangaroa* (2014), *Connecticut* (2014, 2015, 2016)

Professional Societies:

- American Geophysical Union
- Seismological Society of America.

Synergistic Activities:

- The development of broad band seismometer systems (OBSs) by Dr. Webb's lab makes it possible to conduct research into the structure of the upper mantle and crust beneath the oceans. Dr. Webb started the NSF OBS Pool at LDEO that now provides OBSs for use by any NSF supported researcher.
- RIDGE 2000 Steering Committee (2008-2011).

Publications: Over 90 peer reviewed publications. Authored or coauthored research papers in publications including *Nature*, *Rev. of Geophysics*, *Bull. Soc. Seism. Amer*, *J. Atm. Oceanic Tech.*, *J. Geophys. Int.*, and *Science*. *J. Geophys. Res.*

Website: <http://www.ldeo.columbia.edu/user/scw>