

MINUTES
LOUISIANA UNIVERSITIES MARINE CONSORTIUM
EXECUTIVE BOARD

Wyndham Garden New Orleans Airport Hotel, Marigny Room,
6401 Veterans Memorial Blvd.,
Metairie, LA
April 25, 2016, 3:00 PM

I. Call to Order (Dr. Laura Levy)

Dr. Laura Levy, Chair, LUMCON Executive Board, called the meeting of the Executive Board for the Louisiana Universities Marine Consortium to order on April 25, 2016 in the Marigny Room of the Wyndham Garden New Orleans Airport Hotel, Metairie, at 3:00 p.m.

II. Roll Call (Debbie Cenac)

LUMCON Executive Board members present for the meeting:

* **Dr. Kalliat T. Valsaraj**, Louisiana State University and A&M College
Vice Chancellor for Research and Development

* **Dr. Neal Weaver**, Nicholls State University
Vice President, University Advancement

* **Dr. Ramesh Kolluru**, University of Louisiana at Lafayette
Vice President for Research

* **Dr. Laura Levy**, Tulane University
Vice President for Research

* **Dr. Eric Pani**, University of Louisiana at Monroe
Vice President for Academic Affairs

Dr. Christopher D'Elia, Louisiana State University and A&M College
Dean, School of the Coast & Environment

Dr. John Doucet, Nicholls State University
Dean, College of Arts and Sciences

Uma Subramanian, Deputy Commissioner for Legal and External Affairs
Ex-officio for Board of Regents

***Denotes voting members of the LUMCON Executive Board.**

Guests in attendance:

LUMCON Staff: Debbie Cenac, later joined by Heidi Boudreaux and Dr. Nancy Rabalais

Dr. Levy determined that 5 of 8 voting members of the LUMCON Executive Board constituted a quorum, and Dr. Levy called the meeting to order.

III. Approval of Prior Minutes

Dr. Levy called for the approval of the prior minutes.

MOTION BY DR. KALLIAT T. VALSARAJ, SECONDED BY DR. RAMESH KOLLURU, to approve the minutes of the Executive Board Meeting held on February 29, 2016.

AYE: Valsaraj, Weaver, Kolluru, Levy, Pani

NAY: None

ABSTAINING: None

CARRIED: 7-0

Dr. Levy signed the signature page of the minutes thus certifying them for historical purposes.

IV. Public Comments

Dr. Levy called for public comments; there were none.

V. Reports and Recommendations of Standing and Special Committees

Report from the Chair of the Search Working Group

Dr. Levy expressed her appreciation of the effort put forth by Dr. Neil Weaver in the search for a new Director. She invited Dr. Neil Weaver, lead the Director Search Working Group, to describe the Search Working Group's activities leading up to the present and to give a brief synopsis of the final two candidates. Dr. Weaver stated that the Search Working Group was made up of community members who have interests in LUMCON. He commended the group's work of designing the job posting, advertising, and reviewing candidates. Of the 13 applications received, five were designated for preliminary interviews. Each interview was conducted through Skype, lasted approximately 30 minutes, and had a common set of questions. The Search Working Group unanimously selected two of the candidates for the final selection process. Both possessed the background and qualities that the Search Working Group deemed necessary for the position. The finalists were invited to Louisiana on April 25 to meet with LUMCON personnel, the Search Working Group, and the Executive Board. Both candidates were made aware of the salary range, the business plan and the strategic plan. Both candidates travelled to the Marine Center to introduce themselves, answer questions, tour the facility, and meet with the faculty.

Dr. Weaver described the first candidate Dr. Craig McClain as a person who has a terrific research and management background. Dr. McClain's education started at Hendricks College in Arkansas and then went on to the University of Massachusetts where he earned his Ph.D. in Environmental Biology. He is currently the Deputy Director of the Triangle Center for Evolutionary Medicine at Duke University. He has held that position for less than a year. Prior to that, he was the Assistant Director of Science for the National Evolutionary Synthesis Center at Duke University. Dr. McClain is a well published scientist with management responsibility for the organizations for which he worked.

Dr. Weaver ~~went on to~~ described the second candidate, Dr. Paul Kemp. Dr. Kemp is currently the Associate Director of the Center for Microbial Oceanography (C-MORE) at the University of Hawaii. He has been in that position for approximately 10 years. Dr. Kemp has had a terrific career and is a published scientist who has been very involved in the management of C-MORE.

Dr. Weaver added that Ms. Heidi Boudreaux, the Chief Administrative Officer of LUMCON, was a member of the Search Working Group and was instrumental in the selection process and in coordinating the interviews. He thanked her for her role.

Dr. Levy indicated that the Executive Board would go into Executive Session to interview each candidate and to receive the input from LUMCON personnel and the Search Working Group interviews. Since this process may involve the professional competence and character of those selected, it becomes a personnel item which requires that the Executive Board adjourn into Executive Session pursuant to R.S. 42:11 et seq. Dr. Levy reminded everyone that no action will be taken nor will any polling or voting take place during the Executive Session. The Executive Session is to include voting and non-voting members, the Commissioner, the Deputy Commissioner, as well as Deputy Commissioner for Legal and External Affairs. Written notice of the Executive Session has been given as required under R.S. 42:17 A1. Dr. Levy asked for a motion to enter into Executive Session.

MOTION BY DR. KALLIAT T. VALSARAJ, SECONDED BY DR. RAMESH KOLLURU, to enter into Executive Session.

AYE: Valsaraj, Weaver, Kolluru, Levy, Pani

NAY: None

ABSTAINING: None

CARRIED: 7-0

All non-board members were excused and the executive session was convened.

When regular session was reconvened, Dr. Levy stated for the record that no action or votes were taken during the closed session.

Dr. Levy also re-iterated her thanks for Dr. Weaver spearheading the process and likewise to Heidi Boudreaux for her contribution. She opened the floor for public comments; there were none. Dr. Levy stated she was seeking a motion that both candidates are acceptable subject to further negotiation of key terms and to appoint either candidate, Dr. Paul Kemp or Dr. Craig McClain, as Executive Director of LUMCON following a successful negotiation of the key provisions of the appointment as conducted by the Executive Board Chair. She re-stated that the Board will be voting to appoint one of the individuals and allowing the Executive Board Chair to negotiate terms.

MOTION BY DR. KALLIAT T. VALSARAJ, SECONDED BY DR. RAMESH KOLLURU, to appoint either of the Executive Director Candidates subject to final key provisions negotiated with the Executive Board Chair, Dr. Laura Levy.

VI. Other Business

Dr. Levy stated there was no other business.

VII. Adjournment

MOTION BY DR. WEAVER, SECONDED BY DR. PANI, to adjourn the Executive Board Meeting.

AYE: Valsaraj, Weaver, Kolluru, Napper, Levy, Pani

NAY: None

ABSTAINING: None

CARRIED: 6-0

Dr. Laura Levy announced adjournment of the meeting at 9:00 pm.

Respectfully submitted:

_____(s)_____
Dr. Laura Levy*, Chair
LUMCON Executive Board

*Transcribed and edited by Debbie Cenac, LUMCON Executive Assistant, audio tapes archived.

*Further edited by Dr. Nancy Rabalais, Secretary to the Executive Board.

PAUL F. KEMP

DEPARTMENT OF OCEANOGRAPHY
SCHOOL OF OCEAN AND EARTH SCIENCE AND TECHNOLOGY
UNIVERSITY OF HAWAII
1950 EAST WEST RD, HONOLULU, HI 96822

EDUCATION

1976	B.S. Oceanography, University of Washington
1976	B.A. Zoology, University of Washington
1979	M.S. Oceanography, Oregon State University
1985	Ph.D. Oceanography, Oregon State University

PROFESSIONAL POSITIONS

Oregon State University Graduate Program

Environmental Protection Agency Staff Associate (76-85)

I was funded by EPA as a graduate research assistant, and worked for EPA as a contractor during the last 3 years. Projects included: establishing guidelines for impact assessments, baseline surveys and monitoring; studies of the ecological response to an oil spill in Yaquina Bay; studies of infaunal responses to sediment contamination; and studies of harbor damage caused by wood-boring isopods. EPA-related work resulted in five peer-reviewed publications and a technical report.

University of Georgia Marine Institute

Postdoctoral Associate (Jul 85 to Jul 87)

This postdoctoral position was obtained through a national competition. It included salary, research funding, an independent laboratory, and the freedom to collaborate as I wished with Marine Institute and other University of Georgia faculty. Research foci included benthic ecology and biogeochemistry, population and community ecology, and microbial ecology, particularly within the extensive coastal salt marshes of Georgia. The appointment resulted in five peer-reviewed publications.

Brookhaven National Laboratory, Oceanographic and Atmospheric Sciences

Alexander Hollaender Distinguished Postdoctoral Fellow (Jul 87 to Jun 89)

I received a Hollaender Distinguished Postdoctoral Fellowship in 1987 from the U.S. Department of Energy. During the ensuing two years at Brookhaven National Laboratory, I acted as an independent researcher advised by Oceanography Division Head Paul Falkowski. I provided expertise in microbial oceanography and biogeochemistry to the Shelf Edge Exchange Processes II (SEEP-II) program. The appointment resulted in three peer-reviewed publications.

Associate Oceanographer (Jul 89 to Jun 92)

I obtained funding from the Department of Energy to continue my research at Brookhaven National Laboratory as an Associate Oceanographer, equivalent to a university position of Assistant Research Professor. I was responsible for building an independent research

program funded primarily by the Department of Energy. I provided expertise in microbial oceanography, biogeochemistry and benthic ecology to the SEEP-II program, and directed a research team including a technician, a postdoctoral associate and several students. I participated in the planning and development of the Ocean Margins Program, also funded primarily by the Department of Energy. During this three-year appointment, I published five peer-reviewed journal articles and edited a highly cited book (86 chapters, 777 pages, over 2200 citations).

Oceanographer (Jul 92 to Jun 96)

I was promoted to Oceanographer in 1992, equivalent to an academic position of Associate Professor, and continued to expand my independent research program. Four proposals funded by the Department of Energy generated a total of ca. \$2.05M. I directed a research team of 3-5 including technicians and post-doctoral hires, supervised visiting students, and hosted visiting scientists. The research focused on field measurements of microbial processes in the SEEP II and Ocean Margins programs, development of a benthic lander for in situ microbial incubations, and development of molecular tools for assessing bacterial diversity and specific growth rate. The research resulted in six peer-reviewed publications.

Deputy Division Head, (Sep 93- Jun 96)

In 1993, Dr. Creighton Wirick assumed the position of Oceanography Division Head and I was appointed Deputy Division Head. In that capacity, I acted as liaison to multiple university partners in the Ocean Margins Program and served as coordinator for research cruises, including leading one as chief scientist. I gained experience with budget planning and forecasting for large-scale, multi-institutional projects; with strategic compromise when ambitious fieldwork plans conflict with limited funds; and with the resolution of conflicts arising from personnel disputes.

Stony Brook University, Marine Sciences Research Center (MSRC)

Research Associate Professor (Jul 96- Aug 05)

Research Professor (Sep 05 to Oct 06)

My position at the State University of New York at Stony Brook (later renamed Stony Brook University) offered access to more diverse funding sources, and freedom to explore new research directions and construct interdisciplinary partnerships. I obtained NSF funding to develop an in situ microbial biosensor. I supervised or served on the committees of 4 graduate students, and hosted 11 graduate and undergraduate students as visitors or interns. I volunteered to teach an introductory oceanography course to public school teachers through the School of Professional Development. I developed one of the first online courses offered at Stony Brook and the first online oceanography course offered by a US academic institution. Research conducted at Stony Brook resulted in five peer-reviewed publications, one book chapter and one patent. During that time I was promoted to Research Professor, i.e. a full professor supported on external grants. I continue to be associated with Stony Brook University through an adjunct appointment in the School Of Marine and Atmospheric Sciences.

National Science Foundation, Geosciences Directorate, Biological Oceanography

Associate Program Director (Oct 04 to Sep 06)

During the last two years at Stony Brook University, I served as a rotator at NSF. My purpose in applying for the position was to gain additional experience in science administration. I was responsible for managing a large portfolio of projects, most of which I had recommended for funding. The position offered several opportunities to help coordinate activities across NSF research programs and with other agencies, including serving on cross-directorate NSF working groups for the Genomes for Geosciences program and an Environmental Genomics Initiative; an interagency working group on Marine Genetic Resources; and a Joint Oceanographic Institutes (JOI) Thematic Working Group on The Deep Biosphere. I also contributed to discussions of coordinated data centers and registries through workshops sponsored by the National Center for Ecological Analysis and Synthesis (NCEAS) and by the Joint Oceanographic Institutes (JOI).

University of Hawaii, Center for Microbial Oceanography: Research and Education (C-MORE)

Associate Director (Oct 2006-present)

In 2006, I became Associate Director of the new C-MORE Science and Technology Center, a partnership of the University of Hawaii with 6 other institutions. At UH, I hold the faculty position of Specialist S-5, a non-teaching position equivalent to a full professor. Although most of my time is devoted to duties as C-MORE Associate Director, I advise students conducting research supported by C-MORE and other external funding. I also organize a biannual symposium series supported by NSF, NASA and ONR. Research and education activities at UH have resulted in eight published or submitted publications in journals, one book chapter, and three symposium proceedings volumes containing a total of 22 chapters. A fourth proceedings volume is in preparation.

Substantive accomplishments

- Enforced mandates of the STC program as a whole, and stipulations of the C-MORE cooperative agreement. Updated the C-MORE Strategic and Implementation Plan as needed. Reviewed all work plans and progress across 7 institutions.
- Member of the senior leadership team for a highly interdisciplinary research team with more than 100 participants engaged in research spanning nearshore to open ocean environments. Chaired the C-MORE Executive Committee. Organized annual meetings of C-MORE research and education personnel. Coordinated reporting across 7 partner institutions. Created an administrative infrastructure that functions well and interacts smoothly with the University administration.
- Conducted long range budget planning and forecasting, provided oversight of fiscal operations, and recommended adjustments to program and institutional budgets. Provided administrative oversight for subawards to six partner institutions. Assessed expenditures to determine whether they were cost effective.
- Supervised administrative and support staff. Acted as the interface to the C-MORE administration for students and postdocs. Found solutions to personnel conflicts, budget issues, communication failures, differences of opinion and other challenges.
- Identified opportunities to enhance the effectiveness of education, diversity and training programs. Provided recommendations on internal proposals for research and education projects. Provided managerial oversight for all internal projects.

Raised funds for projects consistent with C-MORE's research, education, and workforce development goals.

UH Oceanography Department Graduate Faculty (2008-present)

The UH graduate faculty is a subset of the entire faculty. Membership is by application and requires approval of the department's current graduate faculty. Graduate faculty may serve as advisors and committee members of graduate students. I am a full member of the Oceanography Department Graduate Faculty. Currently, I advise one graduate student and serve on the graduate committees of five other students.

EDITORSHIPS

1998-present	Web Editor, Association for the Sciences of Limnology and Oceanography
2002-present	Editor-in-Chief, <i>Limnology and Oceanography: Methods</i>
2011-2014	Associate Editor, <i>Limnology and Oceanography e-Books</i>
1996-1999	Co-Editor, <i>Journal of Sea Research</i>

UNIVERSITY, NATIONAL AND INTERNATIONAL SERVICE

Association for the Sciences of Limnology and Oceanography

Sustaining Fellow, 2015

Tommy and Yvette Edmondson Distinguished Service Award, 2009

University of Hawaii

SOEST Student Recruiting Committee

Planning Committees

Data Registries for Ecology, Evolution, and Organismal Biology
NOAA Committee on Professional Certification for Oceanographers
National Security Council, Ocean Policy Coordinating Subcommittee
NSF Committee on Genomes for Geosciences
Interagency Working Group on Marine Genetic Resources
JOI Thematic Working Group on The Deep Biosphere
NSF Working Group, Environmental Genomics Initiative
C-MORE Executive Committee Chair

Planning Workshops

Present and Future Status of DOE's Marine Program, Virginia Beach 1991
Bioluminescence Contributions, ONR Arabian Sea Research Initiative, Stennis, MS 1993
DOE Ocean Margins Program Workshop 1993, 1994
Autonomous and Lagrangian Platforms and Sensors (ALPS), La Jolla CA, 2003
An Ecology, Evolution, and Organismal Biology Societies Summit: Critical Steps Toward a Biological Data Systems Confederation. DC, 2004
Data Centers for Ecology, Evolution, and Organismal Biology, National Center for Ecological Analysis and Synthesis (NCEAS), Santa Barbara, CA, 2006.
Data Registries for Ecology, Evolution, and Organismal Biology, Joint Oceanographic Institutes (JOI), Washington, DC. 2006.
C-MORE Strategic Planning Meeting, Cambridge, MA, 2008.
C-MORE Planning Meeting, Monterey CA, 2008.

Science and Technology Center Directors Annual Conferences, 2007-2015

Proposal Reviews

NSF, ONR, DOE, EPA, CICEET, NY Sea Grant, WA Sea Grant, NH Sea Grant, CA Sea Grant, Israel Science Foundation, Hudson River Foundation, MD Dept Nat. Res., DK-Plus Research Programme, Marine Science and Technology Foundation

Review Panels

NSF Coupled Natural and Human Systems 2008 and 2009
NSF Long Term Ecological Research 2009
NSF Dimensions of Biodiversity 2010 and 2011
NSF Ocean Sciences Postdoctoral Research Fellowship, 2012
NSF Ocean Sciences Research Initiation Grant, 2012
NOAA/UNH, Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET)
NOAA National Undersea Research Program
NY Sea Grant

Manuscript Reviews

Applied and Environmental Microbiology, Aquatic Microbial Ecology, Biological Bulletin, Deep Sea Research II, Ecology, Estuaries, Estuarine and Coastal Shelf Science, FEMS Microbiology Ecology, J. Coastal Research, J. Plankton Research, J. Phycology, J. Geophysical Research-Oceans, J. Sea Research, J. Zhejiang University, Limnology and Oceanography, Limnology and Oceanography: Methods, Marine Ecology Progress Series, Marine Microbial Food Webs, Microbial Ecology, Wiley Press, Science

Professional Committee Memberships

ASLO: Council of Editors, Education Committee, Emerging Issues Committee, Open Access Committee, Public Affairs Committee, Web Books Initiative, Web Lectures Initiative, Publication Committee, Social Media Committee
Council of Science Editors: Membership Committee
GeoScienceWorld: Publisher's Advisory Committee

Conference Organization

Kemp, P.F. DOE Ocean Margins Program, Benthic Processes Chair. Brookhaven National Laboratory

Kemp, P.F. and J.Y. Aller. Landscape Ecology and Environmental Grain from a Microbial Perspective. Aquatic Sciences Meeting 2003, Salt Lake City

Kemp, P.F. and B. Bruno. Advances in Microbial Oceanography, AGU Fall Meeting 2008, San Francisco

Kemp, P.F. Ecological Dissertations in the Aquatic Sciences (Eco-DAS) Symposia in 2008, 2010, 2012, 2014

Kemp, P.F. Eco-DAS Reunion Symposia, in conjunction with the Ocean Sciences Meeting (Feb 2014) and Joint Aquatic Sciences Meeting (May 2014)

STC Directors Annual Conference. Led organizing committee for the 2015 annual conference of the Directors of NSF-funded Science and Technology Centers.

PROFESSIONAL MEMBERSHIPS

Association for the Sciences of Limnology and Oceanography, Council of Science Editors, American Society of Microbiology, The Oceanography Society

PUBLICATIONS: JOURNALS (H-INDEX = 27; I10-INDEX = 34)

Kemp, P.F. 1985. Life history and productivity of the phoxocephalid amphipod *Rhepoxynius abronius* (Barnard). *J. Crust. Biol.* 449-464.

Kemp, P.F. 1986. Deposition of organic carbon on a high-energy sand beach by a mass stranding of the cnidarian *Velella velella* (L.). *Est. Coastal Shelf Sci.* 23:575-79.

Kemp, P.F., R.C. Swartz, and J.O. Lamberson. 1986. Response of the phoxocephalid amphipod, *Rhepoxynius abronius*, to a small oil spill in Yaquina Bay, Oregon. *Estuaries* 9:340-347.

Kemp, P.F. 1986. Direct uptake of detrital carbon by the deposit-feeding polychaete *Euzonus mucronata* (Treadwell). *J. Exper. Mar. Biol. Ecol.* 99:49-61.

Kemp, P.F. 1987. Potential impact on bacteria of grazing by a deposit-feeding polychaete, and the fate of bacterial production. *Mar. Ecol. Prog. Ser.* 36:151-161.

Kemp, P.F. 1988. Production and life history of a deposit-feeding polychaete in an atypical environment. *Est. Coastal Shelf Sci.* 26:437-446.

Kemp, P.F. 1988. Bacterivory by benthic ciliates: Significance as a carbon source and impact on sediment bacteria. *Mar. Ecol. Prog. Ser.* 49:163-169.

Kemp, P.F., R.C. Swartz. 1988. Acute toxicity of interstitial and particle-bound cadmium to a marine infaunal amphipod. *Mar. Env. Res* 26:135-154.

Swartz, R.C., P.F. Kemp, D.W. Schults, and J.O. Lamberson. 1988. Effects of mixtures of sediment contaminants on the marine amphipod *Rhepoxynius abronius*. *Environ. Tox. Chem.* 7:1013-1020.

Swartz, R.C., P.F. Kemp, D.W. Schults, G.R. Ditsworth, and R.J. Ozretich. 1989. Acute toxicity of sediment from Eagle Harbor, Washington to the infaunal amphipod *Rhepoxynius abronius*. *Env. Tox. Chem.* 8:215-222.

Kemp, P.F. The fate of benthic bacterial production. 1990. *Reviews in Aquatic Science* 2:109-124.

- Kemp, P.F., S.Y. Newell, and C. Krambeck. 1990. Effects of filter feeding by the ribbed mussel *Geukensia demissa* on the water-column microbiota of a *Spartina alterniflora* saltmarsh. *Mar. Ecol. Prog. Ser.* 59:119-131.
- Kemp, P.F., S.Y. Newell, and C.S. Hopkinson. 1990. Importance of grazing on the salt-marsh grass *Spartina alterniflora* to nitrogen turnover in a macrofaunal consumer, *Littorina irrorata*, and to decomposition of standing-dead *Spartina*. *Mar. Biol.* 104:311-319.
- Newell, S.Y., T.L. Arsuffi, P.F. Kemp, L.A. Scott. 1991. Water potential of standing-dead shoots of an intertidal grass. *Oecologia* 85:321-326.
- Kemp, P.F., S. Lee, and J. LaRoche. 1993. Estimating the growth rate of slow-growing marine bacteria from RNA content. *Appl. Environ. Microb.* 59:2594-2601.
- Lee, S., C. Malone, and P.F. Kemp. 1993. Use of multiple 16S rRNA-targeted fluorescent probes to increase signal strength and measure cellular RNA from natural planktonic bacteria, *Mar. Ecol. Prog. Ser.* 101:193-201.
- Kemp, P.F. 1994. Microbial carbon utilization on the continental shelf and slope during the SEEP II experiment. *Deep-Sea Res. II* 41: 563-581.
- Kemp, P.F., P.G. Falkowski, C. Flagg, W. Phoel, S. Smith, D.W.R. Wallace, C.D. Wirick. 1994. Modeling oxygen concentration and carbon flow during stratified spring and summer conditions on the continental shelf, Middle Atlantic Bight, eastern U.S.A. *Deep-Sea Res. II* 41: 629-655.
- Anderson, R., G. Rowe, P.F. Kemp, S. Trumbore, P. Biscaye. 1994. Carbon budget for the mid-slope depocenter of the Middle Atlantic Bight. *Deep-Sea Res. II* 41: 669-703.
- Lee, S., and P.F. Kemp. 1994. Single-cell RNA content of natural marine planktonic bacteria measured by hybridization with multiple 16S rRNA-targeted fluorescent probes. *Limnol. Oceanogr.* 39:869-879.
- Kemp, P.F. 1994. A philosophy of methods development: the assimilation of new methods and information into aquatic microbial ecology. *Microbial Ecology* 28:159-162.
- Rappe, M.S., P.F. Kemp, S.J. Giovannoni. 1995. Abundant chromophyte plastid 16S ribosomal RNA genes found in a clone library from Atlantic Ocean seawater. *J. Phycolgy* 31:979-988.
- Rappe, M.S., P.F. Kemp, S.J. Giovannoni. 1997. Phylogenetic diversity of marine coastal picoplankton 16S rRNA genes cloned from the continental shelf off Cape Hatteras, N.C. *Limnol. Oceanogr.* 42:811-826.
- Kerkhof, L., and P.F. Kemp. 1999. Small ribosomal RNA content in marine Proteobacteria during non-steady state growth. *FEMS Microbial Ecology* 30:253-260.

- Sanders, R.W., U.-G. Berninger, E.L. Lim, P.F. Kemp and D.A. Caron. 2000. Mixo- and heterotrophic nanoplankton and their picoplankton prey on Georges Bank and in the Sargasso Sea. *Mar Ecol Prog Ser* 192:103-118.
- Kemp, P.F., J.Y. Aller. 2004. Bacterial diversity in aquatic systems: what can we learn from 16S rDNA libraries? *FEMS Microbiology Ecology* 47:161-177
- H.S. Dhadwal, P.F. Kemp, J.Y. Aller, and M.M. Dantzler. 2004. A capillary waveguide nucleic acid based biosensor, *Analytica Chimica Acta* 501: 205–217
- Kemp, P.F., J.Y. Aller. 2004. Estimating prokaryotic diversity: when are 16S rDNA libraries large enough? *Limnol. Oceanogr.: Methods* 2:114-125.
- Aller, J.Y., M.M. Kuznetsova, C.J. Jahns, P.F. Kemp. 2005. The sea surface microlayer as a source of viral and bacterial enrichment in marine aerosols. *Journal of Aerosol Science* 36(5/6): 801-812.
- Dhadwal, H.S., B. Mukherjee, P. Kemp, J. Aller, Y. Liu, and J. Radway. 2007. A dual detector capillary waveguide sensor for detection and quantification of hybridized target species. *Analytica Chimica Acta* 598: 147–154
- D'Hondt, S., F. Inagaki, T. Ferdelman, B.B. Jørgensen, K. Kato, P. Kemp, P. Sobecky, M. Sogin and K. Takai. 2007. Exploring seafloor life with the Integrated Ocean Drilling Program. *Scientific Drilling* 5: 58-69.
- B.C. Bruno, K. Achilles, K. Weersing, G. Walker, P. Kemp. 2008. Professional Development at the Center for Microbial Oceanography: Research and Education (C-MORE). *The Earth Scientist* 27 (2): 7-10.
- Aller, J.Y. and P.F. Kemp. 2008. Are Archaea inherently less diverse than Bacteria in the same environments? *FEMS Microbiology Ecology* 65:74-87.
- J. Y. Aller, R. C. Aller, P. F. Kemp, A. Y. Chistoserdov and V. M. Madrid. 2010. Fluidized muds: a novel setting for the generation of biosphere diversity through geologic time. *Geobiology*. 8: 169–178.
- L. Baker and P.F. Kemp. 2014. Exploring bacteria-diatom associations using single-cell whole genome amplification. *Aquatic Microbial Ecology* 72: 73–88
- J. Bryant, T. Clemente, D. Viviani, A. Fong, K. Thomas, P. Kemp, D. Karl, A. White, and E. DeLong. Submitted. Diversity and activity of communities inhabiting plastic debris in the North Pacific Gyre. *mSystems*, American Society for Microbiology.
- Baker, L.J. and P.F. Kemp. In revision. Response of diatom-attached bacteria to changes in growth state and nutrients in a diatom-bacteria-virus model system. *FEMS Microbiology Ecology*

In preparation:

Fong, A. A., R. R. Bidigare, D. M. Karl, and P. F. Kemp. Dissimilarities in aggregate-associated microbial assemblages from environments with similar particulate PC:PN ratios.

Fong, A. A., R. R. Bidigare, and P. F. Kemp. Particles as enhancers of bacterial diversity: examination of aggregate-associated assemblages in the ultra-oligotrophic South Pacific gyre.

Fong, A. A., R. R. Bidigare, F. Buttler, D. M. Karl, and P. F. Kemp. Photosynthetic community composition shapes the microbial diversity on sinking POM in the South Pacific Ocean.

PUBLICATIONS: BOOKS AND BOOK CHAPTERS

Kemp, P.F., B.F. Sherr, E.B. Sherr, and J.J. Cole (Eds.). 1993. Handbook of methods in aquatic microbial ecology, Lewis Publishers, Chelsea, MI. 777 pp.

Kemp, P.F., S. Lee, J. LaRoche. 1993. Evaluating bacterial activity from cell-specific ribosomal RNA content measured with oligonucleotide probes. In: Kemp, P.F., B.F. Sherr, E.B. Sherr, and J.J. Cole. (Eds.), Handbook of methods in aquatic microbial ecology, pp. 415-422. Lewis, Chelsea, MI.

Kemp, P.F. 1995. Can we estimate bacterial growth rates from ribosomal RNA content? In: I. Joint et al., *Molecular Ecology of Aquatic Microbes*, NATO ASI Series, 38:279-302.

Aller, R.C., J.Y. Aller, and P.F. Kemp. 2001. Effects of particle and solute transport on rates and extents of remineralization in bioturbated sediments. In: *Organism-Sediment Interactions* (J.Y. Aller, R.C. Aller, and S. Woodin, eds.) Univ. S. Carolina Press, Columbia, S.C.

Kemp, P.F. [ed.] 2010. Eco-DAS VIII Symposium Proceedings. Waco, TX: ASLO. 165 pp.

Harbans S. Dhadwal, JoAnn Radway, Josephine Aller, Paul Kemp, and James Clements. 2012. Development of a Capillary Waveguide Biosensor Analytical Module for Use with the MBARI Environmental Sample Processor. Pp. 33-58. In: Sonia M. Tiquia-Arashiro (ed.), *Molecular Biological Technologies for Ocean Sensing*, Springer Protocols Handbooks, DOI 10.1007/978-1-61779-915-0_2.

Kemp, P.F. [ed.] 2014. Eco-DAS IX Symposium Proceedings. Waco, TX: ASLO. 131 pp.

Kemp, P.F. [ed.] 2014. Eco-DAS X Symposium Proceedings. Waco, TX: ASLO. 105 pp.

OTHER PUBLICATIONS AND PATENTS

Gonor, J.J., P.F. Kemp. 1978. Procedures for quantitative ecological assessments in intertidal environments. EPA Ecological Research Report Series 600/3-78-087. 103 pp.

Kemp, P.F. 1995. Review: *Aquatic Microbiology: an Ecological Perspective*, Ford, T.E. (1993). Oxford Univ. Press. *Ecoscience* 2:211-212

Kemp, P.F. 2000. Review: *Aquatic microbial ecology*, Y.I. Sorokin. *Limnol. Oceanogr.* 45(5):1211.

Kemp, P.F. 2000. The CD Archive: 43 Years of *Limnology and Oceanography*. American Society of Limnology and Oceanography.

Dhadwal, H.S., P.F. Kemp, and J.Y. Aller. 2002. U.S. Patent, *Capillary Waveguide Fluorescence Sensor*. #6,850,657

Sobecky, P. Wolfgang Bach, Heribert Cypionka, Steven D'Hondt, Katrina Edwards, Tim Ferdelman, Philippe Gaillot, Julie Huber, Fumio Inagaki, Kenji Kato, Paul Kemp, R. John Parkes, Mitch Sogin, Ken Takai, Andreas Teske. 2007, Exploring the deep biosphere: Probing microbial systems at Earth's extremes, *Eos Trans. AGU*, 88(34), 336

RESEARCH CRUISES

1971-1976	R/V Kestrel and R/V Hoh, Puget Sound, 8 cruises, 1 day ea
1983	R/V Wecoma, N.E. Pacific, 10 days
1986	R/V Columbus Iselin, Bahamas, 9 days
1988	R/V Endeavor, Middle Atlantic Bight, February, 5 days R/V Cape Hatteras, Middle Atlantic Bight, March, 5 days R/V Endeavor, Middle Atlantic Bight, June, 5 days R/V Endeavor, Middle Atlantic Bight, October, 5 days
1989	R/V Endeavor, Middle Atlantic Bight, March, 7 days
1990	R/V Oceanus, Georges Bank and Sargasso Sea, October, 13 days
1991	R/V Oceanus, Georges Bank and Sargasso Sea, August, 11 days
1993	R/V Gyre, Cape Hatteras, May, 6 days
1994	R/V Columbus Iselin, Cape Hatteras, March, 15 days R/V Gyre, Cape Hatteras, June, 16 days

RESEARCH SUPPORT

R.C. Swartz, P.F. Kemp. 1985. Sediment quality criteria: effects of contaminant partitioning and organic enrichment on sediment toxicity. U.S. E.P.A. \$85K

P.F. Kemp. 1990-1992. Molecular Ecology: Development of field methods for microbial growth rate and activity measurements. Brookhaven National Lab R&D Program. \$100K

P.F. Kemp. 1989-1996. Microbial processes in coastal marine systems. DOE. \$1,000K

P.F. Kemp. 1992-1996. Measurement of marine microbial growth. DOE. \$702K

P.F. Kemp. 1996-1998. Bacterial activity in the Ocean Margins Program, Cape Hatteras. DOE. \$153K

P.F. Kemp, J.Y. Aller, H. Dhadwal. 1999-2003. Development of optical biosensors for marine microbial process studies. NSF. \$78K

P.F. Kemp, J.Y. Aller, H. Dhadwal. 2000-2003. Optical biosensor for marine microbial process studies: development phase II. NSF. \$287K

A. Chistoserdov, J.Y. Aller, P.F. Kemp. 2002-2003. Development of a microarray sensor system for the detection of bacterial contamination in aquatic systems. CICEET Pilot Project \$15K

P.F. Kemp, J.Y. Aller, H. Dhadwal. 2003-2004. Optical biosensor for marine microbial process studies: development phase II. NSF. Supplemental award. \$20K

A. Chistoserdov, J.Y. Aller, P.F. Kemp. 2004-2007. Application of an inexpensive microarray for assessment of microbiological contaminants in water quality control. CICEET. \$260K

P.F. Kemp, J.Y. Aller, H. Dhadwal. 2004-2007. Development of analytical protocols and optimization of a capillary waveguide biosensor for marine microbial process studies. NSF. \$365K

P.F. Kemp. 2008-2013. Eco-DAS: Ecological Dissertations in the Aquatic Sciences. NSF. \$622K

J.Y. Aller, H. Dhadwal, C. Scholin, P.F. Kemp. 2009-2010. EAGER: Collaborative Research: Integration of the Capillary Waveguide Biosensor (CWB) with the Environmental Sample Processor (ESP): Detection of microorganisms in natural samples. NSF. \$279K

J.Y. Aller, H. Dhadwal, P.F. Kemp. 2011-2012. EAGER Collaborative Research: Optimizing RNA binding and detection for use in the Capillary Waveguide Biosensor ESP module for automated, in situ microbial process studies. NSF. \$153K

P.F. Kemp. 2014-2019. Eco-DAS 2.0: Ecological Dissertations in the Aquatic Sciences. NSF. \$551K

ADVISING AND TEACHING

Post-doctoral Associates

Dr. Sang Hoon Lee, SUNY-Stony Brook

Dr. Lee Kerkhof, Scripps Institute of Oceanography

MS/PhD Advisor

M. Megan Dantzler, SBU (MS 2004)

Alexandra Valdés-Wochinger, SBU (PhD 2011, co-advisor)

Yuan Liu, SBU (PhD 2012, co-advisor)

Allison Fong, UH (PhD 2013)

Lydia Baker, UH (MS 2012) (PhD advisor, current)

MS/PhD Advising Committees

Vanessa Madrid, SBU (PhD 2006, PhD committee)
Gordon Walker, UH (MS interim committee)
Jamison Gove, UH (PhD interim committee)
Christina Comfort, UH (MS/PhD interim committee)
Michelle Tigchelaar, UH (MS/PhD interim committee)
Michael Grissom, UH (MS/PhD interim committee)
Kristina Remple, UH (MS/PhD interim committee)
Rebecca Prescott, UH (PhD 2015, PhD committee)

Mentoring undergraduate and visiting students

Jeneen Wagner, SBU (summer student)
Tawa Seabrook, SBU (Howard Hughes Fellow)
Christopher Jahns, SBU (REU)
Chun-Der Li, Harvard University
Mimi Amberger, Rochester Institute Technology
John Pylman, Duke University
Andrew Hellman, Notre Dame
Anish Dhadwal, Rensselaer Polytechnic Institute
Elizabeth Scordato, Duke University (Simons and Intel)
Katherine Chiang, Princeton University (Simons and Intel)
Michael Casimer (Simons)
Carol Falkenhayn, University of Washington
Anne Bierzychudek, University of Southern California
Christian Malone, University of Idaho
Harlan Gothelf, Tufts University
Melissa Vollrath, University of Wisconsin
Jason Rice, University of Southampton, U.K.
Douglas Pace, Long Island University
Seanne (Loke) Andrade, Univ. Hawaii (C-MORE Scholar)
Rebecca Weible, Univ. Hawaii (Honors Program)

Visiting Scientists and Educators

Dr. Karl Ritz, Scottish Crop Research Institute, U.K.
Ms. Elizabeth Obara, Ohio School System
Mr. Chris Arfsten, LI School system

Teaching

Prospects for Planet Earth, 3 credits, Summer 2001
Introduction to Oceanography, 3 credits, Summers 1998-2002
Intro to Oceanography Online, 3 credits, 2001 (F), 2002 (Sp, F), 2003 (Sp, F), 2004 (Sp, Su).

INVITED PRESENTATIONS AND CONFERENCES

In addition to the following, invited seminars were presented at: University of Connecticut; Fordham University; Brookhaven National Laboratory; Stony Brook University; Rutgers

University; Bigelow Laboratory for Ocean Sciences; Oregon State University; University of Georgia, University of Hawaii.

NATO Advanced Studies Institute Protozoa and their role in marine processes, Plymouth Marine Laboratory, U.K. 1988

Kemp, PF. Microbial food webs in marine sediments. Louisiana State University and Southeastern Louisiana University, 1989.

Paradigms and Paradoxes of the Microbial Loop, Univ. Georgia, 1994

NATO ASI Molecular Ecology of Marine Microbes, Il Ciocco, Italy, 1994

Fee, EJ, PF Kemp, LD Doucette. 2001. ASLO's Electronic Publishing Initiatives. Aquatic Sciences Meeting, Albuquerque NM.

Dhadwal, H, PF Kemp, JY Aller, MM Dantzler. Design of Capillary Waveguide Biosensors. The Next Generation of in situ Biological and Chemical Sensors in the Ocean, WHOI Ocean Life Institute and Deep Ocean Exploration Institute, NSF, and ONR. Woods Hole, MA, 2003

Kemp, PF. Bacterial telecommunities and Environmental Grain. Assessing the variability in aquatic microbial populations: Facts and fiction. Austrian Academy of Sciences. Mondsee, Austria, 2003

Kemp, PF. Integrating aquatic microbiology into online resources and courses for K-12 teachers. Society for General Microbiology, Education Group. Symposium on e-Learning, Dublin, 2004

Conference on Emerging Trends in Publishing, Washington DC, 2005.

Kemp, PF, JY Aller, HS Dhadwal, Y Liu. Microbial Ecology in the New World. University of Hawaii, 2006.

Kemp, PF, B Bruno. The Center for Microbial Oceanography: Research and Education. NSF EPSCoR National Conference, Hawaii, 2007.

Kemp, P.F. The role of publication in the scientific process. Student Career Development Workshop, Ocean Sciences Meeting, Portland OR, 2010.

Kemp, P.F. Metaphors, microbes, and metacommunities. National Science Foundation, 2012.

Kemp, P.F. 2013. Advice from the editors! Student Career Development Workshop, Aquatic Sciences Meeting, New Orleans, LA.

Kemp, P.F. 2013. C-MORE Proposal writing workshop, speaker/session moderator.

Kemp, P.F. 2014. Science and Leadership: an introduction. National Science Foundation.

Kemp, P.F. 2015. Proposal writing workshop, panel member. SOEST, Univ. Hawaii.

Kemp, P.F. 2015. The literature, science and theory of leadership. C-MORE Leadership Workshop.

Kemp, P.F. 2015. Science Leadership. EPA Western Ecology Division.

CONTRIBUTED PRESENTATIONS, 2003-PRESENT

Aller, JY and PF Kemp. 2003. Is Bacterial Diversity Underestimated? A meta-analysis of published data. Aquatic Sciences Meeting, Salt Lake City.

Dantzler, MM, PF Kemp, JY Aller, HS Dhadwal. 2003 A capillary waveguide biosensor for marine microbial process studies. Aquatic Sciences Meeting, Salt Lake City

Dantzler, MM, PF Kemp, JY Aller, HS Dhadwal. 2004. Advancements in the use of a nucleic acid hybridization based capillary waveguide biosensor for marine microbial process studies. Aquatic Sciences Meeting, Honolulu HI

Kemp, PF, JY Aller. 2004. Estimating prokaryotic diversity: when is a 16S rDNA library large enough? ASLO Summer Meeting, Savannah.

Aller, JY, RC Aller, AC Chistoserdov, PF Kemp, VM Madrid. 2006. Fluidized Mobile Muds: "Hot Spots" for Microbial Complexity. Ocean Sciences Meeting, Honolulu.

Kemp, PF, BC Bruno. 2007. Research and education in the Center for Microbial Oceanography. Univ. Hawaii, Oceanography Departmental Seminar.

Liu, Y, PF Kemp, JY Aller, J Radway, H Dhadwal. 2007. An evanescent wave based optic biosensor for marine microbial ecology study. ASLO Aquatic Sciences Meeting, Santa Fe NM.

Achilles, K, PF Kemp. 2010. Eco-DAS (Ecological Dissertations in the Aquatic Sciences): Young Scientists Shaping the Future of Aquatic Research. Ocean Sciences Meeting, Portland OR.

Fong, A. A., Clemente, T. M., Viviani, D. A., White, A. E., Wheeler, B. R., Updyke, B. D., Weersing, K. A., Ernst, J. A., Karl, D. M., Kemp, P. F. 2010. Plastic particles create novel microbial microhabitats in the North Pacific. ASLO/NABS Joint Summer Meeting. Santa Fe, NM.

J.Y. Aller, A.Y. Chistoserdov, and P. F. Kemp. 2011. High bacterial phylogenetic diversity and functional redundancy allow fluidized muds to operate as efficient biogeochemical reactors. ASLO Aquatic Sciences Meeting, San Juan, Puerto Rico.

Baker, L. J., Kemp, P. F. 2011. Exploring the bacteria-diatom metaorganism using single-cell whole genome amplification. ASLO Aquatic Sciences Meeting, San Juan, Puerto Rico.

Fong, A., Kemp, P.F. 2012. Identifying the community structure of particle-associated bacteria from the nutrient-rich Chilean coast to the ultra-oligotrophic South Pacific Subtropical Gyre. ASLO Summer Meeting, Lake Biwa, Japan.

Baker, L. J., Kemp, P. F. 2012. Identifying bacteria-diatom consortia using single-cell whole genome amplification. ASLO Summer Meeting, Lake Biwa, Japan.

Allison A. Fong, Robert R. Bidigare, and Paul F. Kemp. 2013. Comparison of aggregate-associated bacterial diversity in episodic phytoplankton blooms in the North Pacific Ocean. Aquatic Sciences Meeting, New Orleans, LA.

Lydia J. Baker and Paul F. Kemp. 2013. Response of diatom-attached and free-living bacteria to changes in growth state of the host cells in a diatom-bacteria-virus model system. Aquatic Sciences Meeting, New Orleans, LA.

Baker, L. J., and Kemp, P. F. 2014. Are diatom-bacterial associations stable and predictable? Ocean Sciences Meeting, Honolulu, HI.

Fong, A. A., Kemp, P.F. 2014. Microbial diversity of sinking particulate organic matter from subtropical oceans. Joint Aquatic Sciences Meeting, Portland OR.

Baker, L. J., Kemp, P.F. 2014. Eco-DAS: Accelerated collaboration and career prep for new scientists. Joint Aquatic Sciences Meeting, Portland OR.

Kemp, P. F.; Baker, L. J. 2015. Ecological Dissertations in the Aquatic Sciences. Aquatic Sciences Meeting, Granada, Spain.

Baker, L.J. and P.F. Kemp. 2015. Bacterial colonization of diatom surfaces: winners and losers. Aquatic Sciences Meeting, Granada, Spain.

Baker, L.J., and P.F. Kemp. 2016. Bacterial Associations with Diatoms Influence Host Health in a Xenic Model System. Ocean Sciences Meeting, New Orleans, LA.

CRAIG R. MCCLAIN

Department of Biology
Duke University
Durham, NC 27708

Education

U. of Massachusetts, Boston | Sept 1998-Dec 2003

Ph.D. in Environmental Biology

NSF Graduate Research Trainee Fellow

Dissertation Title: Deconstructing Patterns of Species Diversity and Body Size in the Deep Sea

Major Supervisor: Dr. Michael Rex

Committee: Drs. Ron Etter, Rob Stevenson, Michael Foote

Harbor Branch Oceanographic Institute | May 1999-Aug 1998

Deep-Sea Biology Field Course

Instructors: Drs. Craig Young and Paul Tyler

Louisiana Universities Marine Consortium | May 1995-Aug 1995

Marine Ecology Course

Hendrix College, Conway, AR | Sept 1993-May 1997

B.A. in Biology/ Minor Religion

Experience

Deputy Director, Triangle Center for Evolution Medicine, Duke University | June 2015-Present

Oversee the management of all the center's science and outreach programs including Triangle scientists, graduate students, and postdoctoral. Development of new initiatives and target research areas. Successfully connecting disparate disciplines to tackle new paradigms in evolutionary medicine. Facilitation of scientific groups. Work in conjunction with board and executive director to define the center's strategic course. Generation of funds to maintain the center including grants to NSF, foundations, and corporations.

Assistant Director of Science, National Evolutionary Synthesis Center, Duke University | June 2015-Nov 2016

Oversee 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 with an annual budget of \$3.5 million. Development of strong postdoctoral and graduate fellow programs that focus on strong mentorship, incorporate outreach, and help build better researchers and members of the scientific community. Successfully connecting disparate disciplines to achieve scientific synthesis. Facilitation of scientific groups. Work in conjunction with board of directors to define the center's strategic course. Develop new initiatives including an outreach program to minority serving institutions and a program promoting writing about evolutionary science on the web. Generation of funds to maintain the center including grants to NSF, foundations, and corporations. Secured funding for center

initiatives for the training for young scientists, outreach activities, a science initiative on the indoor biome, and an initiative on mining big data.

Publications

h-index: 24, i10-index: 31, citations: 1570, papers: 60

McClain, C.R., M.A. Balk, M. Pennell, K. Thomas, and J.C. Uyeda (2015) Shifts in habitat productivity drive body size evolution in cephalopods and elasmobranchs. *Biology Letters* in review

McClain, C.R./J.C. Uyeda, L. Harmon, R. Maia, and M. Pennell (2015) The evolution of energetic scaling across the vertebrate tree of life. *PLoS Biology* in review

McClain, C.R. (2015) Environment and biology shape geographic range size in marine gastropods. *Global Ecology and Biogeography* in review

Von Dassow, Y.J., E.J. Sbrocco, and **C.R. McClain** (2015) Ecology and phylogenetic history as predictors of marine life history mode in a speciose genus of mollusks. *Global Ecology and Biogeography* in review

Webb, T.J. and **C.R. McClain** (2015) Patch-occupancy relationships in experimental, wood-fall communities in the deep sea. *Proceedings of the Royal Society, B* in review

Smith, F.A., J.L. Payne, M. Balk, S. Finnegan, N.A. Heim, M. Kowalewski, S.K. Lyons, **C.R. McClain**, D.W. McShea, P.M. Novack-Gottshall, P.A. Spaeth Anich and S.C. Wang (2016) Body size evolution across the Geozoic. *Annual Review of Earth and Planetary Sciences* in press

McClain, C.R., P. Barry, D. Eernisse, T. Horton, J. Judge, K. Kakui, C. Mah, and A. Warén (2016) Multiple processes generate productivity-diversity relationships in experimental wood-fall communities. *Ecology* in press

Nunn, C.L., S.C. Alberts, **C.R. McClain**, S. Meshnick, T.J. Vison, B.M. Weigmann, A.G. Rodrigo (2015) Linking Evolution, Ecology, and Health: TriCEM. *Bioscience* online early

McClain, C.R. and M.A. Rex (2015) Toward a conceptual understanding of beta-diversity in the deep-sea benthos. *Annual Review of Ecology and Systematics* 46:623-642

Orzechowski, E., R. Lockwood, J. Byrnes, S. Anderson, S. Finnegan, P. Harnik, Z.V. Finkel, D. Lindberg, L. Liow, H. Lotze, **C.R. McClain**, J. McGuire, A. O'Dea, J. Pandolfi, C. Simpson, and D. Tittensor (2015) Marine extinction risk shaped by trait-environment interactions over 500 million years. *Global Change Biology* online early

Finnegan, S., S.C. Anderson, P.G. Harnik, C. Simpson, D.P. Tittensor, J.E. Byrnes, Z.V. Finkel, D.R. Lindberg, L.H. Liow, R. Lockwood, H. Lotze, **C.R. McClain**, J.L. McGurie, A. O'Dean, and J.M.

Pandolfi (2015) Paleontological baselines for evaluating extinction risk in the modern oceans. *Science* 348:567-570

McClain, C.R. and T. Schlacher (2015) On some hypotheses of diversity of animal life at great depths on the seafloor. *Marine Ecology online early*

Bik, H.M., A.D.M. Dove, M.C. Goldstein, R. Helm, R. MacPherson, K. Martini, A. Warneke, **C.R. McClain** (2015) Ten simple rules for effective online outreach. *PLOS Computational Biology* 11:e1003906

McClain, C.R., M.A. Balk, M.C. Benfield, T.A. Branch, C. Chen, J. Cosgrove, A. Dove, R.R. Helm, F.G.E. Hochberg, L.C. Gaskins, F.B. Lee, S.E. McMurray, C. Schanche, S.N. Stone, and A.D. Thaler (2015) Sizing ocean giants: patterns of intraspecific size variation in marine megafauna. *Peer J*, 2:e715

Martin, L.J., R.R. Dunn, R. Adams, A. Bateman, H.M. Bik, J. Hawks, S. Hird, D. Hughes, S. Kembel, K. Kinney, S.-O. Kolokotronis, C. Levy, **C.R. McClain**, J.F. Meadow, R. Medina, G. Mhuireach, C. Moreau, J. Munshi-South, C. Palmer, L. Popova, C. Schal, M. Taubel, M. Trautwein, J. Ugalde, (2015) Evolution of the indoor biome *Trends in Ecology and Evolution* 30:223-232

McClain, C.R. and L. Lundsten (2015) Assemblage structure is related to slope and depth on a deep offshore Pacific seamount chain. *Marine Ecology* 36:210-220

McClain, C.R. and L. Neeley (2015) A critical evaluation of science outreach via social media: its role and impact on scientists. *Faculty of 1000 Research* 3:300

McClain, C.R., R. Filler, and J.R. Auld (2014) Does energy availability predicts diversity in gastropod reproductive strategies? *Proceedings of the Royal Society, B* 281:20140400

McClain, C.R. and J. Barry (2014) Beta-diversity on deep-sea wood falls reflects gradients in energy availability. *Biology Letters* 10:20140129

Payne, J., N. Heim, M. Knope, **C.R. McClain** (2014) Metabolic dominance of bivalves predates brachiopod diversity decline by 200 million years. *Proceedings of the Royal Society, B* 281:20133122

Brault, S., C.T. Stuart, M.C. Wagstaff, **C.R. McClain**, J.A. Allen, M.A. Rex (2013) Contrasting patterns of α - and β -diversity in deep-sea bivalves of the eastern and western North Atlantic. *Deep-Sea Research II* 92:157-164

Rodrigo A., S. Alberts, K. Cranston, J. Kingsolver, H. Lapp, **C.R. McClain**, R. Smith, T. Vision, J. Weintraub, and B. Weigmann (2013) Science Incubators: Synthesis Centers and Their Role in the Research Ecosystem. *PLoS Biology* 11: e1001468

McClain, C.R., P.A.P. Durst, A.G. Boyer, and C.D. Francis (2013) Unraveling the determinants of insular body size shifts. *Biology Letters* 9:1-3

Payne, J.L., F.A. Smith, M. Kowalewski, R.A. Krause, A.G. Boyer, **C.R. McClain**, S. Finnegan, P.M. Novack-Gottshall, and L. Sheble (2012) A lack of attribution: closing the citation gap through a reform of citation and indexing practices. *Taxon*. Online early

Thaler, A.D., K.A. Zelnio, A. Freitag, R. MacPherson, D. Shiffman, H. Bik, M.C. Goldstein, and **C.R. McClain** (2012). Digital Environmentalism: Tools and strategies for the evolving online ecosystem. In D. Gallagher (ed.) *Environmental Leadership: A Reference Handbook*. SAGE Reference

Harnik, P.G., H.K. Lotze, S.C. Anderson, Z.V. Finkel, S. Finnegan, D.R. Lindberg, L.H. Liow, R. Lockwood, **C.R. McClain**, J.L. McGuire, A. O'Dea, J.M. Pandolfi, C. Simpson, and D.P. Tittensor (2012) Extinctions in ancient and modern seas. *Trends in Ecology and Evolution*. 27:608-617

McClain, C.R., A.P. Allen, D.P. Tittensor, and M.A. Rex (2012) The Energetics of Life on the Deep Seafloor. *Proceedings of the National Academy of Science, U.S.A.* 38:15366-15371

McClain, C.R., P. Unmack, J. Jackson-Ricketts, and T. Gullet (2012). Increased Energy Promotes Size-Based Niche Availability in Marine Mollusks. *Evolution* 66:2204-2215

McClain, C.R., J.C. Stegen, and A.H. Hurlbert (2012) Dispersal, Niche Dynamics, and Oceanic Patterns in Beta-Diversity in Deep-Sea Bivalves. *Proceeding of the Royal Society, B* 22:1993-2002

Kowalewski, M., J.L. Payne, F.A. Smith, S.C. Wang, D.W. McShea, S. Xiao, P.M. Novack-Gottshall, **C.R. McClain**, R.A. Krause, A.G. Boyer, S. Finnegan, S.K. Lyons, J.A. Stempien, J. Alroy, and P.A. Spaeth (2011) The Geozoic Supereon. *Paleos* 26:251-255

Tittensor, D.P., M.A. Rex, C.T. Stuart, **C.R. McClain**, and C.R. Smith (2011) Species-energy relationships in deep-sea mollusks, *Biology Letters*, 7:718-722

McClain, C.R., J. Nekola, L. Kuhnz, and J. Barry (2011) Local-scale faunal turnover on the deep Pacific floor. *Marine Ecology Progress Series*, 442:193-200

Finnegan, S., **C.R. McClain**, M.A. Kosnik, and J.L. Payne (2011) Escargot through time: an energetic comparison of marine gastropod assemblages before and after the Mesozoic Marine Revolution. *Paleobiology*, 37:252-269

Payne, J.L., **C.R. McClain**, A.G. Boyer, J.H. Brown, S. Finnegan, M. Kowalewski, R.A. Krause Jr., S.K. Lyons, D.W. McShea, P.M. Novack-Gottshall, F.A. Smith, J.A. Stempien, and S.C. Wang (2011) The evolutionary consequences of oxygenic photosynthesis: a body size perspective. *Photosynthesis Research*, 107:37-57

Rex, M.A., C.T. Stuart, R.J. Etter, and **C.R. McClain** (2010) Biogeography of the deep-sea gastropod *Oocorys sulcata* Fischer 1884. *Journal of Conchology* 40: 287-290

McClain, C.R. and S. Hardy (2010) The dynamics of biogeographic ranges in the deep sea. *Proceeding of the Royal Society, B*, 277:3533-3546

McClain, C.R., L. Lundsten, J. Barry, and A. DeVogelaere (2010) Assemblage structure, but not diversity or density, change with depth on a northeast Pacific seamount. *Marine Ecology*, 31:1-12

McClain, C.R. and Barry, J.P (2010) Habitat heterogeneity, biogenic disturbance, and resource availability work in concert to regulate biodiversity in deep submarine canyons. *Ecology*, 91:964-976

McClain, C.R., A. Rex, and R.J. Etter. (2009) Macroecological Patterns in the Deep Sea. In *Marine Macroecology*. Eds. K. Roy and J. Whitman. University of Chicago Press

Lundsten, L., **C.R. McClain**, J.P. Barry, G.M. Caillet, D.A. Clague, A. DeVogelaere, and J.B. Geller (2009) Ichthyofauna on three seamounts off southern and central California. *Marine Ecology Progress Series*, 398:223-232

McClain, C.R. and A.G. Boyer (2009) Biodiversity and body size are linked across metazoans. *Proceedings of Royal Society B: Biological Sciences*, 276: 2209-2215 [Highlighted by Faculty of 1000]

McClain, C.R., L. Lundsten, M. Ream, J. Barry, and A. DeVogelaere (2009) Endemicity, Biogeography, Composition, and Community Structure On a Northeast Pacific Seamount. *PLoS One*, 4:e4141

Payne, J.L., A.G. Boyer, J.H. Brown, S. Finnegan, M. Kowalewski, R.A. Krause Jr., S.K. Lyons, **C.R. McClain**, D.W. McShea, P.M. Novack-Gottshall, F.A. Smith, J.A. Stempien, and S.C. Wang (2009) Two-phase increase in the maximum size of life over 3.5 billion years reflects

biological innovation and environmental opportunity. *Proceedings of the National Academy of Science, U.S.A.*, 1:24-27 [Highlighted by Faculty of 1000]

McClain, C.R. and J.C. Nekola (2008) The role of local-scale process on terrestrial and deep-sea gastropod body size distributions across multiple scales. *Evolutionary Ecology Research*, 10:129-146

McClain, C.R. (2007). Guest Editorial: Seamounts: Identity Crisis or Split Personality? *Journal of Biogeography*, 34:2001-2008

Johnson, N.A., M.A. Rex, J.W. Campbell, **C.R. McClain**, T.S. Moore, and M.D. Dowell (2007) The relationship between the standing stock of deep-sea macrobenthos and surface production in the western North Atlantic. *Deep-Sea Research*, 54:1350-1360

McClain, C.R., E.P. White, and A.H. Hurlbert (2007) Challenges in the application of geometric constraint models. *Global Ecology and Biogeography*, 16:257-264

Rex, M.A., R.J. Etter, J.S. Morris, J. Crouse, **C.R. McClain**, N.A. Johnson, C.T. Stuart, R. Thies, R. Avery (2006) Global bathymetric patterns of standing stock and body size in the deep-sea benthos. *Marine Ecology Progress Series*, 317:1-8 [featured article]

McClain, C.R. and J. Crouse (2006) The influence of ecological role on bathymetric patterns of deep-sea species: size clines in parasitic gastropods. *Marine Ecology Progress Series*, 320:161-167

McClain, C.R., A. Boyer, G. Rosenberg (2006) The island rule and the evolution of body size in the deep sea. *Journal of Biogeography*, 33:1578-1584 [featured article]

McClain, C.R. (2005) Bathymetric patterns of morphological disparity in deep-sea gastropods from the western North Atlantic Basin. *Evolution*, 59:1492-1499

McClain, C.R., M.A. Rex, and R. Jabbour. (2005) Deconstructing bathymetric patterns of body size in deep-sea gastropods. *Marine Ecology Progress Series*, 297:181-187

Rex, M.A., **C.R. McClain**, N.A. Johnson, R.J. Etter, J.A. Allen, P. Bouchet, A. Warén (2005) A source-sink hypothesis for abyssal biodiversity. *American Naturalist*, 165:163-178 [Am. Nat. Highlight Paper of 2005]

McClain, C.R., and Etter, R.J. (2005) Mid-domain models as predictors of species diversity patterns: a case study using bathymetric diversity gradients in the deep sea. *Oikos*, 109:555-566

McClain, C.R. (2004) Connecting species richness, abundance, and body size in deep-sea gastropods. *Global Ecology and Biogeography*, 13: 327-334

McClain, C.R., M.A. Rex, and N. Johnson (2004) Morphological disparity as a biodiversity metric in lower bathyal and abyssal gastropod assemblages. *Evolution*, 58:338-348

Linse, K., M. Schrödl, **C.R. McClain**, and L. Allcock (2003) Mollusca in the Antarctic deep sea- preliminary notes on their taxonomy, biogeography, and diversity. *Reports on Polar and Marine Research (ANDEEP I & II: Antarctic benthic deep-sea biodiversity)*. 470:95-101

McClain, C.R., M. Fougerolle, M.A. Rex, and J. Welch. (2001) MOCNESS estimates of the size and abundance of a pelagic Gonostomatid fish (*Cyclothone pallida*) off the Bahamas. *Journal of the Marine Biological Association of the United Kingdom*, 81:869-871

McClain, C.R. and Rex, M.A. (2001) The relationship between dissolved oxygen concentration and maximum size in deep-sea Turrid gastropods: an application of quantile regression. *Marine Biology*, 139: 681-685

Popular Writings

McClain, C.R. (in prep) *Science of the South*. HarperCollins Publishers, New York City, New York

McClain, C.R. (2015) 12 Whirling Facts About Tornadoes, *Mental Floss*

McClain, C.R. (2013) Where There's Heat, There Are Cockroaches *Scientific American*

McClain, C.R. (2012) What the deep seas tell us about life on other planets *ion*

McClain, C.R. (2012) On Sticking Your Arm Into an Underwater Cavern and Hoping a Catfish Bites You *Mental Floss*

McClain, C.R. (2011) Scientists Take Charles Darwin on the Road *Pacific Standard*

McClain, C.R. (2011) The Extinction of Species and Scientists Studying Them *Wired*

McClain, C.R. (2010) An Empire Lacking Food *American Scientist*

Invited Scientific Presentations

An energetic view of biodiversity: linking ecology and evolution
University of Alabama, Birmingham, AL | 2016

How metabolic niches shape life in the ocean

University of Southern Mississippi, Hattiesburg, MS | 2016

[An energetic view of marine invertebrate diversity](#)

University of Southern Florida, College of Marine Science, St. Petersburg, FL | 2015

Georgia Southern University, Statesville, GA | 2015

Florida International University, Miami, FL | 2015

University of New Mexico, Albuquerque, NM | 2015

[Testing energetic theory with experimental deep-sea wood falls](#)

University of Sheffield, Sheffield, UK | 2014

[The role of energy in biodiversity and niche evolution in the ocean](#)

Oregon State University, Department of Fisheries and Wildlife, Corvallis, OR | 2014

Oregon Institute of Marine Biology, Coos Bay, OR | 2014

University of New Mexico, Albuquerque, NM | 2014

[An Empire Lacking Food: : Lessons From the Food Limited Abyss](#)

Duke Marine Laboratory, Beaufort, North Carolina | 2013

Hendrix Distinguished Alumni Lecturer, Hendrix College, Conway, AR | 2010

American Scientist Speaker Series at Sigma Xi, the Scientific Research Society | 2009

College of William and Mary, Williamsburg, VA | 2009

University of North Carolina, Wilmington, NC | 2009

[Macroecological Patterns and Processes in the Deep Sea. World Marine Biodiversity Conference](#)

World Marine Biodiversity Conference, Aberdeen Scotland | 2011

[Giant and Dwarfs: The Evolution of Body Size Across the Animal Kingdom](#)

National Evolutionary Synthesis Center, Durham, NC | 2008

[The Evolution of Body Size Across the Animal Kingdom](#)

American Society of Limnology and Oceanography, St. Johns, Newfoundland, Canada | 2008

[The Role of Abrupt Topography in Shaping Deep-Sea Biodiversity](#)

University of North Carolina, Chapel Hill, NC | 2008

[Seamount Biodiversity and Endemicity](#)

World Marine Biodiversity Conference, Valencia, Spain | 2008

[Passive and Directed Evolution of Body Size: A Modern Perspective](#)

Department of Geoscience, University of Chicago, Chicago, IL | 2007

Seamounts: Identity Crisis or Split Personality?

University of South Florida College of Marine Science, St. Petersburg, FL | 2007

The Island Rule and the Evolution of Body Size in the Deep Sea

Moss Landing Marine Labs, Moss Landing CA | 2006

Supersized to Miniaturized Creatures of the Deep

Monterey Bay Aquarium, Monterey, CA | 2006

Macroecological Patterns in the Deep Sea: General Implications for Ecological Systems

90th Ecological Society of America Meetings, Montreal | 2005

Predicting Geographic Variation in Abundance of Deep-Sea Benthic Communities: The Role of Body Size, Temperature, Carbon Flux, and Ocean Production

40th European Marine Biology Symposium, Vienna | 2005

Does the Metabolic Theory of Ecology Apply to Deep-Sea Systems?

Southampton Oceanographic Centre, UK | 2004

University of Rhode Island | 2004

Biogeography of Deep-Sea Benthic Environments.

Guest Lecturer for Biogeography (Inst. J.H. Brown), University of New Mexico | 2004

Ecology and Evolution of Deep-Sea Benthic Communities.

Biocomplexity Seminar Series, Department of Biology, University of New Mexico | 2004

The Relationship Between Size and Latitude in Deep-Sea Turrids.

Texas A&M University | 1997

**Invited Social
Media
Presentations**

Lessons Learned From Building An Online Outreach Empire.

Nicholas School for the Environment, Duke University, Durham, NC | 2015

Plenary at Oceans Online, University of Miami, FL | 2013

Social Media as a Tool for Inreach and Outreach in Science.

Workshop, Department of Biology, Lund University, Sweden | 2014

Becoming the Nerd They Trust and Know With Social Media.

Workshop, Oregon State University, OR | 2013

The Science of Science in Social Media. Panel Participant

Online Web Panel Discussion Sponsored by Union of Concerned Scientists | 2013

Single Subject New Sites

Panel Participant, Columbia School of Journalism, NY | 2013

Public Presentations

An Empire Lacking Food: The Astonishing Existence of Life on the Deep-Sea Floor.

Bruce Museum, Greenwich, Connecticut | 2015

Mote Marine Laboratory, Sarasota, FL | 2015

Hendrix Distinguished Alumni Lecturer, Hendrix College, Conway, AR | 2015

American Scientist Speaker Series at Sigma Xi Durham, NC | 2009

The Evolution of Ocean Giants

K-12 Public Schools on Big Island, Maui, Oahu, and Kauai, HI, Darwin Day Roadshow | 2015

Montgomery and Tuskegee High School, AL, Darwin Day Roadshow | 2014

Northeast High School, Oak Park, FL; and The Pine School, Hobe Sound, FL, Darwin Day Roadshow | 2013

Lincoln High School, Lincoln, AR; McDonald County High School, MO; and Farmington Junior High School, Farmington, AR, Darwin Day Roadshow | 2012

University of Nebraska, Kearney; Grant High School, Grant, NE; and Columbia Falls Junior High School, Columbia Falls, MT, Darwin Day Roadshow | 2012

Monsters of the Deep.

Georgia Aquarium Special Halloween Lecture, Atlanta, GA | 2011

Diversity of the Deep

Monterey Bay Aquarium, Monterey, CA | 2007-2009

Giants and Dwarfs In the Deep

Monterey Kiwanis Club, Monterey, CA | 2007

Invited Workshops

Communicating Science for Policy

Institute on Science for Global Policy, Durham, NC | 2015

C-DEBI (Center for Dark Energy Biosphere Investigations) Evolution and Adaptation Theme Team

National Evolutionary Synthesis Center., Durham, NC | 2013

Organizer: Bill Nelson

UNOLS Chief Scientist Training Workshop

Oregon State Marine Lab, Newport, OR | 2011

Organizer: Clair Reimers

Extinctions in the sea

National Evolutionary Synthesis Center., Durham, NC | 2011-2013

Organizers: Paul Harnik, Rowan Lockwood, and Seth Finnegan

Evolution and climate change in the ocean

Wrigley Institute, Catalina Island, CA | 2011

Organizers: David Hutchins, Gretchen Hofman, Brian Helmuth, and Amy Moran

Phanerozoic body size trends in time and space: macroevolution and macroecology

National Evolutionary Synthesis Center., Durham, NC | 20106-2008

Organizers: Jonathan Payne, Michal Kowalewski, Jennifer Stempien

Stranger than we can suppose: Evaluating ecological possibilities-past, present, and future

National Museum of Natural History, Smithsonian Institution, Washington, DC | 2011

Grants

Deep-Sea Biodiversity: A Morphological Dimension

NSF/Biological Oceanography, \$175,108 | 2002-2004

submitted on behalf by Michael A. Rex)

Ecological Characterization & Habitat Modeling of the Davidson Seamount Fauna

SIMoN/Monterey Bay Sanctuary Foundation, \$45,000 | 2008

Craig R. McClain and Jim Barry

Bathymetric Characterization of a Near Shore Seamount

Census of Marine Life, \$10,540 | 2008

Craig R. McClain

Biodiversity of Davidson Seamount

Save The Earth Foundation, \$5,000 | 2008

Craig R. McClain

NESCent Center Grant: Evolution of the Indoor Biome

Sloan Foundation, \$65,000 | 2012

Craig R. McClain, Rob Dunn, and Jonathon Eisen

Using Digital Libraries to Discover Biodiversity and Evolution

Lounsbery Foundation, \$83,748 | 2013

Craig R. McClain

Establishment of Online Tools and Forums for the Deep-Sea Biology Society

PressForward/Sloan Foundation, \$10,000 | 2015
Craig R. McClain and Holly Bik

Long-Term Temporal Dynamics of Functional and Metabolic Diversity in the Marine Fossil Record

NSF Subcontract, \$20,845 | 2015
Craig McClain

The energetic assembly of invertebrate communities: A test with experimental wood fall systems.

NSF/OCE, \$833,270 | submitted
Craig McClain and Seth Newsome

Preliminary Preproposal: The evolution of metabolic scaling relationships

NSF/DEB | submitted
Craig McClain and Josef Uyeda

Adaptive radiations, diversification, and the evolution of niche width in the deep sea.

NSF/OCE, \$803,421 | submitted
Craig McClain, Sonke Johnson, and Josef Uyeda

Teaching

Focused Research Course: Sizing Ocean Giants

Duke University (storyofsize.com) | 2014

Participant in Effective Teaching Methods in Biology Workshop

National Evolutionary Synthesis Center | 2009-2012:

Lecturer for Biology II (Anatomy, Physiology, Ecology, & Evolution)

University of Massachusetts, Boston | 2002 & 2003

Lab/Teaching Assistant for Invertebrate Zoology

University of Massachusetts, Boston | 2002

Lab Assistant for General Biology I & II

University of Massachusetts, Boston | 2000-2001

Teaching Assistant for Environmental Issues

University of Massachusetts, Boston | 1999-2000

Lab Assistant for General Ecology & Evolution

Hendrix College | 1995-1996

Service + Outreach

Undergraduates: Nicholas Johnson | 1999-2001, Rhanda Jabbour | 2000, Jennifer Crouse | 2001-2002, Jeremy Morris | 2002, Candace Leong | 2007-2009, Micki Ream | 2008-2009, Taylor Gullet | 2009-2010, Justine Jackson | 2009-2010, Wenda Ye | 2010-2011, Ryan Filler | 2010-2011, Shane Stone | 2013-2014, Catherine Chen | 2013-2014, Frank Lee | 2013-2014, Caroline Schanche | 2013-2014, Lindsay Gaskin | 2013-2014

Graduate Students: Paul Durst | visiting: fall 2012, Yasmin Van Dassow | visiting: spring 2013, Meghan Balk | visiting: fall 2013, Katie Thomas | 2014-present

Postdoctoral Fellows: Oversaw the NESCent postdoctoral program with 40+ fellows | 2009-2015

Section Editor for Marine and Aquatic Sciences at PLoS One (Public Library of Science) | 2006-2009

Academic Editor for Journal of Biogeography | 2009-2012

Associate Editor for Proceedings of the Royal Society, B | 2012-present

President for the Deep-Sea Biology Society | 2013-present

Reviewer for Advances in Marine Biology, American Naturalist, Biology Letters, Continental Shelf Research, Deep-Sea Research, Diversity and Distributions, Ecography, Ecology, Ecosystems, Estuaries, Global Ecology and Biogeography, Integrative and Comparative Biology, Journal of Applied Ecology, Journal of Animal Ecology, Journal of Biogeography, Journal of Ecology, Marine Ecology Progress Series, Marine Ecology, PLoS One, Progress in Oceanography, Proceedings of the Royal Society, Trends in Ecology and Evolution

Reviewer for NOAA's Ocean Exploration Grant, National Science Foundation, National Geographic, and Hawai'i Undersea Research Laboratory/NOAA Coral Reef Conservation Program

Society Membership: Ecological Society of America, International Biogeography Society, Society For the Study of Evolution, American Association for the Advance of Science, American Society of Naturalists, American Society of Limnology and Oceanography

Chief Editor of the group blog Deep-Sea News | 2005-present

Ranked most popular marine blog and top ten nature blogs by Nature Blog Network
~500,000 visitors a month

featured in Open Lab: The Best Science Writing on Blogs 2007, 2009, and 2010-2013
winner of the Thinking Blogger Award and Eco-Dardevil Award

featured content on Discovery Channel, Scienceblogs, Seed Media, Science, Nature, and National Geographic
highlighted in the Charlotte Observer by Scott Huler: Online Science Conference Draws 250
featured blog on Nature Blog Network
interview with NewsObserver
mention in Columbian Journalism Review
mentioned as a “great blog” for natural history and deep-sea exploration by Michael Robinson on NPR’s Where We Live: Explorers

Press Coverage

Press on McClain et al. 2006, Journal of Biogeography

Howe, K. Deep-Sea Habitat Changes Snails’ Size, Monterey County Herald
Fu, K. Island Rule May Apply To Pint-Sized Deep-Sea Life: Study, Discovery Reports
Sohn, E. Sea Giants and Island Pygmies, Science News for Kids
Viegas, J. Animal Size Evolves in Seas, Discovery News
Size Matters in the Deep Sea, Study Shows, Vancouver Aquarium Aquanews
Tyrell, A. Secrets of the Deep Sea Revealed, British Science Museum Antenna
Researcher Explores the Puzzle Behind Midgets and Giants in the Deep Sea
UnderwaterTimes.com
Midgets and Giants in the Deep Sea, DiveNews
Midgets and Giants in the Deep Sea, Innovations Report
Midgets and Giants in the Deep Sea, ScienceDaily
Leonard, A.W. Organism Size Tied to Location in Marine Biology, FoxNews.com
El Rafie, Y. Havsdjup styr snäckornas storlek, Svenska Dagbladet (Sweden)
Welner, J. From the Pygmy Mammoth to the Marine Snails: Is the Deep Sea Like a Desert Island? Mid-County Post
Sepulvado, J. Why do Giant Sharks Live In Shallow Water? National Public Radio

Munitions Dumping At Sea

Bahou, A. Underwater Ticking Bomb? ABC News: Brian Ross & The Investigative Team | 2007

Life on Earth Not Getting Much Bigger

Keim, B. Wired Magazine | 2008

Press Based on McClain et al. 2009, PLoS One

A Seamount a Dozen, Conservation Magazine
Sharghi, K. Scientists See Movement of Marine Species, Monterey County Herald

Questions with Craig McClain on Ocean Biodiversity

Duke Research Online | 2009

Academic Editor Interview-Craig McClain

PLoS One Community Blog | 2009

Giants of the Deep
Science Illustrated | 2009

Deep Sea Paradox: Little Food, Tons of Life
Beeland, D. Science in the Triangle | 2009

How oxygen constrained the evolution of life
Podcast and teaching module based on Payne et al. 2009 | 2009
Boyd, R. Like Hungry Teen, Life on Earth Had Big Growth spurts, McClatch Newspapers

Biodiversity of submarine canyons
Podcast detailing my research on in Ecology (Press Release) | 2009

Guest of Radio in Vivo | 2010

Tipping points in the Gulf of Mexico
Interview on Talk Nation Radio | 2010

Press on McClain and Barry 2010, Ecology
Milius, S. Paradox of Dining in Deep, Wet Mud, Science News
Juneja, S. Deep Sea Dibs, Down to Earth

Gulf's Depths Probably Still Clogged With Oil
Kleim, B. Wired | 2010

Press on the capture of a Giant Isopod, *Bathynomus giganteus* | 2010
Kaplan, J. Terrifying Sea Critter Hauled from Ocean's Depths, Fox News
Boyle, A. Monster Bug? It's No Joke!, Cosmic Log on MSNBC
Kaplan, J. Bathynomus giganteus: Terrifying Sea Beast Hauled Up, NatGeo News Watch
Drummond, K. Cockroach of the Sea Wows the Web, AOL News
Creepy Crustacean Hauled from Ocean Depths, Discovery News
Davis, J. Giant, Deep-Sea Bug Surfaces in Gulf of Mexico, Mother Nature Network
Freaky-Looking Giant Sea Louse Surfaces from the Deep, Astounds Everybody Except Scientist, NatGeo Wild Side

Developing an online persona
Interview at Naturejobs.com | 2011

Darwin Day Roadshow
The New York Times | 2011

Too many organisms, not enough scientists

Mayshark, J.F. Metro Pulse | 2011

The deep dive of James Cameron

National Public Radio on Point with Tom Ashbrook | 2012

How geology impacts presidential elections

National Public Radio | 2012

Press on McClain et al. 2012, Proceedings of the Royal Society, B.

Gonzalez, R.T. The ocean floor is like a rainforest where feces and dead animals rain from the sky, io9

Keim, B. The bounty of species in a single scoop of mud, Wired Science

Reed, C. A penny for your bivalves, Discovery News

On organismal body size

This photo of the super jellyfish? It's a lie, Gonzalez, R.T. io9 | 2012

Lion's Mane Jellyfish Image: This is (literally) how things blow up on the internet!, Kosner, A.W. Forbes | 2012

Architeuthis Dux: Why Science Matters, Cowart, L., NSF | 2012

The Global Kraken, Yong, E., National Geographic | 2013

The Scariest Monsters of the Deep, Elliot, B., Audubon Magazine | 2013

James Cameron says today's ocean exploration is "piss poor." He's right

Gonzalez, R.T. io9 | 2012

Press on Woodall Research, e.g. McClain and Barry 2014, Proceedings of Royal Society B

Yong, E., The Second World that Forms on Sunken Wood, National Geographic

Palmer, R., Q&A With A Scientist: Why Is This Marine Biologist Throwing Logs Into The Ocean? International Business Times

Yong, E., The marine creatures that only live on land plants, National Geographic

Zielinski, S., The surprising life of a piece of sunken wood, Science News

Fallen trees form a sea-floor feast, Nature 508:290

Poppick, L., Shipwrecks and dead trees become home for deep-sea life, LiveScience

How New York City would officially respond to a Godzilla attack

O'Connor, B., The Awl

Press based on McClain et al. 2015, Peer J

Main, D., Accurate Size of Largest Sea Creatures Revealed, Newsweek

Lewis, T., Giant Squid and Whale Sharks Not as Big as People Think, Scientific American

Yong, E., How Big Are The Biggest Squid, Whales, Sharks, Jellyfish? National Geographic
Turk, V., Just How Big Are the Biggest Sea Monsters, Really? Motherboard
Just How Giant Are The Ocean's Giants? Earth touch
Osborne, H., Lion's mane jellyfish and giant octopus: How big sea monsters really are,
International Business Times
Viega, J. , The 10 Longest Animals in the Ocean, Discovery News
Keyser, H., The Real Size of Underwater Giants, Mental Floss
Feltman, R., This Chart Of Sea-Dwelling Giants Will Make You Feel Tiny, Washington Post
Misra, R., This Is How Big The Ocean's Most Gigantic Creatures Can Really Get, Io9