

**BRIAN JOSEPH ROBERTS**

Associate Professor and REU Program Director  
Louisiana Universities Marine Consortium

Defelice Center, 8124 Highway 56, Chauvin, LA 70344

Phone: 985-851-2821. FAX: 985-851-2874. Email: [broberts@lumcon.edu](mailto:broberts@lumcon.edu)

**EDUCATION:**

Ph.D.	Cornell University	Ecology and Evolutionary Biology	2004
M.A.	Boston University (MBL)	Biology (specialization in Marine Science)	1996
B.S.	College of William and Mary	Biology and Philosophy	1995

**PROFESSIONAL EXPERIENCE:**

2015 – present Associate professor, Louisiana Universities Marine Consortium  
2007 – 2015 Assistant professor, Louisiana Universities Marine Consortium  
2010 – present Adjunct Faculty, Dept of Ecology & Evolutionary Biology, Tulane University  
2008 – present Adjunct Faculty, Dept. of Oceanography & Coastal Sciences, LSU  
2008 – present Adjunct Faculty, Dept. of Biology, Nicholls State University  
2007 – present Guest Appointment, Environmental Sciences Division, ORNL  
2003 – 2007 Postdoctoral Research Associate, ESD, ORNL, supervisor: Patrick Mulholland.  
1997 – 2003 Ph. D. Candidate, Cornell University, advisor: Robert Howarth  
1996 – 1997 Research assistant, Marine Biological Laboratory, supervisor: Ivan Valiela  
1997 Research intern, Ecosystems Center, MBL, supervisor: Anne Giblin  
1995 – 1996 Masters degree student, BU Marine Program, advisor: Ivan Valiela  
1994 – 1995 Undergraduate Research Assist., William & Mary, advisor: Gregory Capelli

**AWARDS:**

Baruch Marine Field Laboratory Visiting Scientist Award, 2014  
Hynes Award for New Investigators, North American Benthological Society, 2009  
ORNL ESD Distinguished Achievement Award for Post-Graduate Research, 2005  
DIALOG VI Symposium, 2004  
NSF RTG Fellowship, 1997-1999, 2000-2001

**PROFESSIONAL MEMBERSHIPS:**

Association for the Sciences of Limnology and Oceanography (ASLO)  
American Geophysical Union (AGU)  
Coastal & Estuarine Research Federation (CERF)  
Ecological Society of America (ESA)  
Society for Freshwater Science (SFS)  
Society of Wetland Scientists (SWS)

**TEACHING:**

*Director of LUMCON REU Site Program (2011 – present)*

**Current Courses:**

Changing Coastal Oceans (LUMCON team taught course each spring; 2008-present)  
Marine Field Ecology (taught on even years beginning 2008; last taught 2016)  
Coastal Biogeochemistry (taught on odd years beginning in 2017)

**Previous Teaching Experience:**

Introductory Biology Laboratory Instructor (Fall 1999 – Spring 2000)  
Plant Physiological Ecology (Spring 2003): TA; lectured on ecophysiology of aquatic autotrophs

Introductory Ecology (Fall 2002): TA; lectured on Eutrophication and Biogeochemical Cycles  
Ecosystem Ecology (Guest Lecturer in Spring 2003)

### **ADVISING:**

#### ***Post-doctoral Research Advisees:***

*Current (2):* Ariella Chelsky, PhD Griffiths University, 2015 – present; Anthony Rietl, PhD Louisiana State University, 2016-present

*Former (2):* John M. Marton, PhD Indiana University, 2012 – 2014; Troy Hill, PhD Yale University, 2015

#### ***Graduate Advisees:***

*Chair of Committee (8 total):*

*current (3):* Natalie Ceresnak, MS student in DOCS, LSU (2015-present); Daniel Alt (co-advisor) PhD student, Dept. of CEE, LSU (2015-present); Ronald Scheuermann, MS student in DOCS, LSU (2017-present)

*completed (2):* Susan Doty, MS in Marine & Environmental Biology, Nicholls State University, 2010; Ciara Chambers, MS in Department of Earth and Environmental Sciences, Tulane University, 2014

*others (3):* Tiffany Warner, MS student in DOCS, LSU (2012-2014), Lindsey Green, MS student in DOCS, LSU (2013-2014); Natasha Boot, MS student in DOCS, LSU (2014)

*Committee Member (3): current (1):* David Reeves, PhD, LSU DOCS (expected 2017)

*completed (2):* Jonathan West, PhD, Dept. of Renewable Natural Resources, LSU-Baton Rouge, 2013; Tiffany Pasco, MS, LSU, 2010

#### ***Summer Undergraduate Research Advisees:***

1997 (2): Rosalyn Lee, Laura Heberlig (co-advised)

2009 (2): Lindsey Marcantel (McNeese State Univ.), Nicholas Treusch (Northwestern State Univ.)

2010 (1): Brendan Young (Dickinson College)

2011 (2): Julia Luthringer (Boston University); Tiffany Warner (University of New Orleans)

2012 (3): Shanina Halbert (Haverford College); Aaron Marti (University of Wisconsin-Stevens Point); Matthew Rich (University of Arkansas)

2013 (3): Sara Mack (University of Maryland); Tierra Moore (Rice University); Regina Bledsoe (Nicholls State University)

2014 (3): Mia Dawson (Oberlin College); Brian Donnelly (Villanova University); Regina Bledsoe (Nicholls State University)

2015 (2): Kristen Chatelain (Louisiana Tech); Samanta Fortin (Eckerd College)

2016 (3): Nicole Farley (Wayne State University); David Klinges (Dartmouth College), Madelyn Sorrentino (University of Vermont)

### **RESEARCH SUPPORT:**

#### ***Current Grants***

- “Coastal Waters Consortium: a collaborative approach to evaluate the effects of the Macondo oil spill on coastal ecosystems”; Nancy Rabalais (PI/PD), **Brian J Roberts** (one of 3 executive committee members leading collaboration of ~30 PIs); BP/GoMRI; \$16.1M (Roberts Lab portion ~ \$2M); grant awarded 11/14; 1 January 2015 – 31 December 2017.

- “Influence of river diversions on carbon and nitrogen cycling in Louisiana freshwater, brackish and salt marshes”; Brian J Roberts (PI); \$75,000; Coastal Protection and Restoration Authority (CPRA) Coastal Science Assistantship Program (CSAP)—graduate student assistantship; June 2012 - December 2016.
- “The Central Role of the Mississippi River Delta in the Oceanography of the Gulf of Mexico Large Marine Ecosystem”; Alexander S. Kolker (PI/PD); Brian J. Roberts (one of 5 co-PIs); \$350,000; NOAA RESTORE Act Science Program; 1 October 2015 - 31 December 2017.
- “Enhancement of capabilities to analyze environmental changes in Louisiana’s coastal ecosystems”; Brian J. Roberts (PI/PD); \$44,350 (equipment only); LA Board of Regents Support Fund Traditional Enhancement Program; 1 July 2016 – 31 August 2017

### *Grants pending*

- “LTER: Ecological Interactions on the Mississippi-Atchafalaya River Shelf (MAR); Nancy N. Rabalais (PI/PD); Brian J. Roberts (one of 4 lead co-PIs and member of executive committee); \$6,750,000; National Science Foundation; submitted August 2016.
- “RESTORE: Linking Community and Food-Web Approaches to Restoration: An Ecological Assessment of Created and Natural Marshes Influenced by River Diversions”; Michael J. Polito (PI/PD), Brian J. Roberts (LUMCON lead co-PI); \$2,040,845; NOAA RESTORE Act Science Program; proposal submitted Sep 2016.

### *Previous Grants*

#### *Past LUMCON Funding*

- “NGOMEX09: Integrated Ecosystem Modelling of the Causes of Hypoxia”; LUMCON: Nancy N. Rabalais (PD/PI), **Brian J. Roberts (co-PI)**, Geoffrey A. Sinclair (co-PI); LSU: R. Eugene Turner (PD/PI), Brian Fry (co-PI), Dubravko Justić (co-PI), Chunyan Li (co-PI); UMich: Donald Scavia (PD/PI); NOAA; \$4M; 1 September 2009 – 31 August 2016.
- “The Effects of Macondo Oil Spill on Coastal Ecosystems”; 26 PIs, Nancy N. Rabalais (PI/PD), **Brian J. Roberts (one of 3 executive committee members leading the project)**; Gulf of Mexico Research Initiative (GRI) Consortia; \$12.1M (Roberts Lab portion = \$1.05M); 1 September 2011 – 31 December 2015.
- “REU Site: Interdisciplinary Research Experiences in Changing Coastal Environments”; **Brian J Roberts (PI/PD)**, Nancy N. Rabalais (co-PI); NSF Ocean Sciences; \$ 222,591; 1 April 2011 – 31 March 2015.
- “2014 Visiting Scientist Award from the Belle W. Baruch Institute for Marine and Coastal Sciences”; **Brian J Roberts PI**; \$3000 plus use of facilities and housing; 4/14 – 12/14 (only award given in 2014); collaborating with Erik Smith on project in North Inlet, SC.
- “Sediment dynamics and biogeochemical cycling in a developing deltaic system: understanding land building and habitat quality in a river diversion”; **co-PIs**: Alexander S Kolker and **Brian J Roberts**; LA Sea Grant; \$179,000; 1 February 2012 – 31 May 2014.

- “Collaborative Research: RAPID: The 2011 Atchafalaya River Flood and a possible altered system state for the Atchafalaya River Delta Estuary”; **Brian J. Roberts (PI/PD)**, Alex S. Kolker (co-PI), Nancy N. Rabalais (co-PI), Brad E. Rosenheim (co-PI); NSF Ecosystems Studies / Biological Oceanography (DEB-1141354); \$129,991 (LUMCON portion: \$92,595); 1 July 2011 – 31 January 2014.
- “Effects of oiling and hydrologic remediation on baldcypress swamp elevation and ecosystem processes: RAPID proposal for the Deepwater Horizon Incident”; **Brian J. Roberts (PI/PD)**, Beth Middleton (NWRC, co-PI); NSF Division of Environmental Biology (DEB- 1049838); \$163,395; 1 September 2010 – 31 August 2012.
  - REU Supplement Award granted in 2011 for \$7,500
- “Critical Biogeochemical Processes in the Atchafalaya River Delta”; **Brian J Roberts (PI)**, Nancy N. Rabalais (Co-PI) & R. Eugene Turner (Co-Investigator); LA BoR Support Fund Contract # LEQSF(2008-11)-RD-A-22, \$137,457, 1 June 2008 – 30 June 2011.
- “FSML: Acquisition of environmental chambers to examine the impacts of climate change and anthropogenic disturbance on coastal ecosystems”; **PIs**: Alexander S. Kolker, Nancy N. Rabalais, **Brian J. Roberts**, Paul W. Sammarco, Geoffrey A. Sinclair; NSF Division of Biological Infrastructure FSML program; \$131,076 (equipment only); 1 September 2010 – 31 August 2013.
- “Enhancement of capabilities to analyze impacts of environmental change on ecosystem processes in coastal Louisiana”; **PIs**: Geoffrey A. Sinclair, **Brian J Roberts**, Edward Chesney, Nancy N Rabalais, Paul Sammarco; LA BoR Support Fund Traditional Enhancement Program; \$78,697 (equipment only); 2010 - 2011.
- “Enhancement of Phytoplankton Surveys in Louisiana Waters”; **PIs**: Geoffrey A Sinclair, Nancy N Rabalais, **Brian J Roberts**, Paul Sammarco & Mike Dagg; LA BoR Support Fund Traditional Enhancement Program; \$126,000 (equipment only); 2009 - 2010.
- “Enhancing LUMCON's Ability to Measure Rates of Environmental Change Using Naturally Occurring and Anthropogenic Radionuclides”; **PIs**: Alexander S Kolker, **Brian J Roberts**, Geoffrey A Sinclair, Nancy N Rabalais; LA BoR Support Fund Traditional Enhancement Program; \$67,047 (equipment only); 2010 - 2011.

*ORNL Funding (this research funded by grants with PJ Mulholland as lead PI)*

- Measurements of Ecological Response to Climate Variability and Change in Walker Branch Watershed, US DOE, Program for Ecosystem Research, \$195,000 per year.
- Riparian ecosystem management at military installations: determination of ecological impacts and evaluation of restoration and enhancement strategies. US DOD, SERDP program, \$2,291,900, 6 years, 2001 to 2006 (no cost extension through June 2007).
- Our Fort Benning research group (Pat Mulholland and myself at ORNL and Jack Feminella and Graeme Lockaby at Auburn University) also obtained funding for an add-on project entitled: Assessment of Stream and Riparian Responses to Construction and Operation of the Digital Multipurpose Range Complex, Fort Benning, Georgia, SERDP Program, 4 years, 2004-2008, \$427,803 (ORNL share of \$964,300 total award)

*Dissertation Research (awards totaled over \$40,000)*

- NSF Doctoral Dissertation Improvement Grant, May 2000 – April 2003, \$18,886
- Cornell Sigma Xi Grant (2 awards) 1999 and 2001
- Andrew W. Mellon Foundation Grant (3 awards) 1999, 2000, and 2002
- Department of Ecology & Evolutionary Biology Graduate Research Fund Grant, 1998
- NSF RTG in Biogeochemistry and Environmental Change Small Grants Program  
Six awards (1998, 1999, Summer 2000, Fall 2000, 2001, 2002)
- NSF IGERT in Biogeochemistry & Environmental Biocomplexity Small Grants Program,  
2003

**PUBLICATIONS (underline indicates student author, asterisk indicates post-doc author):**

***In review:***

33. **Roberts BJ**, Warner TR. Background and potential denitrification rates from US Gulf Coast baldcypress swamps. Wetlands.

32. Vastano AR, Able KW, Jensen OP, López-Duarte PC, Martin CW, **Roberts BJ**. *In review*. Age Validation and Seasonal Growth Patterns of a Subtropical Marsh Fish: The Gulf Killifish, *Fundulus grandis*. Environmental Biology of Fishes

31. Walker B, Druffel ERM, Kolasinski J, **Roberts BJ**, Xu X, Rosenheim BE. *In review*. Production of Ancient Dissolved Organic Carbon from the Deepwater Horizon Oil Spill. Nature Communications.

***In revision:***

30. **Roberts BJ**, Mulholland PJ, Houser JN. Effects of in-stream restorations on stream metabolism in headwater streams. Ecological Applications.

***In press:***

29. McCann MJ, Able KW, Christian RR, Fodrie FJ, Jensen OP, Johnson JJ, Lopez-Duarte PC, Martin CW, Olin JA, Polito MJ, **Roberts BJ**, Ziegler SL. 2016. Key taxa in food web responses to stressors: The Deepwater Horizon Oil Spill. Frontiers in Ecology and the Environment. *In press*.

***Published:***

28. Mason OU, Canter E, Gillies LE, Paisie T and **Roberts BJ**. 2016. Mississippi River plume enriches microbial diversity in the northern Gulf of Mexico. Frontiers in Microbiology 7:1048. DOI: 10.3389/fmicb.2016.01048.

27. Bernhard AE, Scheffer R, Giblin AE, Marton JM\*, **Roberts BJ**. 2016. Population Dynamics and Community Composition of Ammonia Oxidizers in Salt Marshes after the Deepwater Horizon Oil Spill. Frontiers in Microbiology 7:854. DOI: 10.3389/fmicb.2016.00854.

26. Weber SC, Peterson L, Battles JJ, **Roberts BJ**, Peterson RN, Hollander DJ, Chanton JP, Joye SB, Montoya JP. 2016. Hercules 265 Rapid Response: Immediate ecosystem impacts of a natural gas blowout incident. Deep Sea Research Part II. DOI: 10.1016/j.dsr2.2015.11.010.



25. **Roberts BJ, Doty SM**. 2015. Spatial and temporal patterns of benthic respiration and net nutrient fluxes in the Atchafalaya River Delta Estuary. Estuaries and Coasts. DOI: 10.1007/s12237-015-9965-z.
24. Middleton BA, Johnson D, **Roberts BJ**. 2015. Hydrologic remediation for the Deepwater Horizon Incident drove ancillary primary production increase in coastal swamps. Ecohydrology. (special issue paper) DOI: 10.1002/eco.1625.
23. Marton JM\*, **Roberts BJ**, Bernhard AE, Giblin AE. 2015. Spatial and temporal variability of nitrification potential and ammonia-oxidizer abundances in Louisiana salt marshes. Estuaries and Coasts. DOI 10.1007/s12237-015-9943-5.
22. Able KW, Lopez-Duarte PC, Fodrie FJ, Jensen OP, Martin CW\*, **Roberts BJ**, Valenti J, O'Connor K, Halbert SC. 2014. Fish Assemblages in Louisiana Salt Marshes: Effects of the Macondo Oil Spill. Estuaries and Coasts. DOI 10.1007/s12237-014-9890-6.
21. Joye SB, Montoya JP, Murawski SA, Özgökmen TM, Wade TL, Montuoro R, **Roberts BJ**, Hollander DJ, Jeffrey WH, Chanton JP. 2014. A Rapid Response Study of the Hercules Gas Well Blowout. Eos 95(38): 341-342. DOI: 10.1002/2014EO380002
20. Hitchcock G, Lenex J, Benner R, Daly K, Murrell M, **Roberts B**, Walsh J. 2014. Chapter 7: Respiration. In: Benway HW, Coble PG (Editors). Report of the U.S. Gulf of Mexico Carbon Cycle Synthesis Workshop, March 27-28, 2013, Ocean Carbon and Biogeochemistry Program and North American Carbon Program, pp. 39-43.
19. Hooper-Bui, LM, Rabalais NN, Engel AS, Turner RE, McClenachan G, **Roberts B**, Overton EB, Justic D, Strudivant K, Brown K, Conover J. 2014. Overview of Research into the Coastal Effects of the Macondo Blowout from the Coastal Waters Consortium: A GoMRI Consortium. International Oil Spill Conference Proceedings May 2014, Vol. 2014, No. 1 (May 2014) pp. 604-617. doi: <http://dx.doi.org/10.7901/2169-3358-2014.1.604>.
18. Marton JM\*, **Roberts BJ**. 2014. Spatial variability of phosphorus sorption dynamics in Louisiana salt marshes. J. Geophys. Res. Biogeosci., 119: 451–465, doi:10.1002/2013JG002486
17. Rosenheim BE, Roe KE, **Roberts BJ**, Kolker AS, Allison MA, Johannesson KH. 2013. River discharge influences on particulate organic carbon age structure in the Mississippi/Atchafalaya River System. Global Biogeochemical Cycles 27:154–166, doi:10.1029/2012GB004339.
16. Lutz BD, Bernhardt ES, **Roberts BJ**, Mulholland PJ, Cory RM. 2012. Distinguishing terrestrial and autochthonous organic matter dynamics in a forested stream using kinetic enrichments and fluorescence spectroscopy. Limnology and Oceanography 57(1): 76-89.
15. Lutz BD, Bernhardt ES, **Roberts BJ**, Mulholland PJ. 2011. Examining the coupling of carbon and nitrogen cycles in Appalachian streams: the role of dissolved organic nitrogen. Ecology 92(3): 720-732.
14. Hill WR, **Roberts BJ**, Francoeur SN, Fanta SE. 2011. Resource energy and the autotrophic:heterotrophic balance in experimental streams. Journal of Ecology 99:454–463. DOI: 10.1111/j.1365-2745.2010.01785.x

13. Fanta SE, Hill WR, Smith TB, **Roberts BJ**. 2010. Testing the light:nutrient hypothesis on stream periphyton. Freshwater Biology 55:931-940.
12. Mulholland PJ, **Roberts BJ**, Hill WR, Smith JG. 2009. Stream ecosystem responses to the 2007 spring freeze in the Southeastern United States: unexpected effects of climate change. Global Change Biology 15:1767-1776. DOI: 10.1111/j.1365-2486.2009.01864.x.
11. Hill WR, Fanta SE, **Roberts BJ**. 2009. Combined effects of phosphorus and light on stream algae: implications for establishing stream nutrient criteria. Limnology and Oceanography 54(1): 368-380.
10. Stewart GS, Cáceres C, Beisner B, (Houser) LaFeir L, **Roberts B**, Stedmon C. 2008. Update from the ASLO Early Career Committee. L&O Bulletin 17(2): 52-53.
9. Hill WR, Fanta SE, **Roberts BJ**. 2008. <sup>13</sup>C dynamics in benthic algae: effects of light, phosphorus, and biomass development. Limnology and Oceanography 53(4):1217-1226.
8. **Roberts BJ**, Mulholland PJ. 2007. In-stream biotic control on nutrient biogeochemistry in a forested headwater stream, West Fork of Walker Branch. Journal of Geophysical Research (Biogeosciences), 112, G04002, doi: 10.1029/2007JG000422.
7. **Roberts BJ**, Mulholland PJ, Hill WR. 2007. Multiple scales of temporal variability in ecosystem metabolism rates: results from two years of continuous monitoring in a forested headwater stream. Ecosystems 10(4):588-606, doi: 10.1007/s10021-007-9059-2 (*\*awarded Hynes award from North American Benthological Society*)
6. **Roberts BJ**, Mulholland PJ, Houser JN. 2007. Effects of upland disturbance and in-stream restorations on hydrodynamics and ammonium uptake in headwater streams. Journal of the North American Benthological Society 26(1):38-53.
5. **Roberts BJ**, Howarth RW. 2006. Nutrient and light availability regulate the relative contribution of autotrophs and heterotrophs to respiration in freshwater pelagic ecosystems. Limnology and Oceanography 51: 288-298.
4. **Roberts BJ**, Russ ME, Ostrom NE. 2000. Rapid and precise determination of  $\delta^{18}\text{O}$  of dissolved and gaseous di-oxygen via gas chromatography-isotope ratio mass spectrometry. Environmental Science and Technology 34:2337-2341.
3. Hairston NG, Jr., Chan F, Pelletier DM, **Roberts BJ**. 1999. Successes, limitations, and frontiers in ecosystem science (book review). Limnology and Oceanography 44: 1595-1596.
2. Heberlig L, Valiela I, **Roberts BJ**, Soucy LA. 1997. Field verifications of predictions of the Waquoit Bay Nitrogen Loading Model. Biological Bulletin 193: 294-295.
1. Lee RY, Joye SB, **Roberts BJ**, Valiela I. 1997. Release of N<sub>2</sub> and N<sub>2</sub>O from salt marsh sediments subject to different land-derived nitrogen loads. Biological Bulletin 193:292-293.

### **PROFESSIONAL AND INSTITUTIONAL SERVICE:**

- Director, LUMCON REU Program, 2011-present
- Executive Steering Committee Member of Coastal Waters Consortium (BP/GoMRI consortium project studying 2010 Gulf Oil Spill), 2012-present
- Louisiana Center of Excellence, Technical Working Group Member-Coastal Ecology
- Association for the Sciences of Limnology and Oceanography (ASLO) Early Career Committee Member (2007 – 2013)
- LUMCON Radiation Safety Officer, 2009-present
- R/V Pelican Radiation Safety Officer, 2009-present
- R/V Pelican Science Advisory Committee, 2014-present
- Member, NEON Reaeration and Metabolism Technical Working Group, 2010-present
- Local Organizing Committee, 2013 ASLO Aquatic Sciences Meeting in New Orleans, LA
- Organizing Committee, Hypoxia Coordination Workshop, Bay St. Louis, MS, March 2012
- Grand Canyon Monitoring and Research Center Aquatic Food Base Study and Protocol Evaluation Panel, 2012
- LUMCON Environmental Monitoring Committee, 2007-present
- Member of LUMCON Web Committee, 2007-present
- Reviewer: *Journals*— Biogeochemistry, Ecology, L & O, L&O Methods, Geochimica et Cosmochimica Acta, Estuaries and Coasts, Marine and Freshwater Research, Restoration Ecology, Aquatic Botany, Aquatic Sciences, ECSS, JNABS, Fundamental and Applied Limnology, MEPS, Deep Sea Research, JGR-Oceans, JEQ, Ecosystems, Forest Ecology & Management, Aquatic Sciences, CJFAS, Freshwater Biology. *Proposals*—NSF Biological Oceanography, NSF Hydrologic Science, NSF OCE Education, Maryland Sea Grant, Illinois Water Resources Center. *Panels*—Grand Canyon Research and Monitoring Center

### **INVITED PARTICIPANT:**

- NSF GEO REU Site Program Director Workshop III, Boulder CO, September 2016
- NSF GEO REU Site Program Director Workshop II, Boulder CO, March 2014
- The Wetlands Initiative, Annual Meeting Keynote speaker, Chicago, IL, October 2013
- Louisiana Statewide Nutrient Strategy Meeting, Invited speaker: Hypoxia Monitoring, Baton Rouge, LA, April 2013
- U.S. Gulf of Mexico Carbon Cycle Synthesis Workshop, St. Petersburg, FL, March 2013
- Panelist, “The Ripple Effect: Connecting Midwest Farming to the Gulf of Mexico Dead Zone”, Connecticut College, February 2013
- Hypoxia Coordination Workshop, Bay St. Louis, MS, March 2012
- Grand Canyon Monitoring and Research Center Aquatic Food Base Study and Protocol Evaluation Panel, 2012
- NSF GEO REU Site Program Director Workshop, San Jose CA, October 2011
- NEON Reaeration and Metabolism Technical Working Group, 2010-present
- NSF Metabolic Theory of Ecology in Stream Ecosystems Working Group, 2007-2010
- DIALOG VI Symposium, 30 October – 6 November 2004
- “Oxygen isotopes as a tracer of global O<sub>2</sub>, CO<sub>2</sub>, and H<sub>2</sub>O cycles” BASIN/SIBAE Workshop, Marconi Conference Center, CA, September 2004
- Dissolved Organic Matter in Aquatic Ecosystems Workshop, Institute of Ecosystems Studies, May 2000.



### CONTRIBUTED TALKS AND POSTERS AT SCIENTIFIC MEETINGS:

103. Weber SC, Fernandez A, Battles JJ, Peterson L, **Roberts BJ**, Peterson RN, Hollander DJ, Chanton JP, Joye SB, Montoya JP. Timescales of ecosystem response: An oil and gas blowout event comparison. 2015 ASLO Aquatic Sciences Meeting. Granada, Spain; Feb 2015 (poster)
102. **Roberts BJ**, Marton JM. Sustained impacts on Louisiana salt marsh soil greenhouse gas fluxes following the Deepwater Horizon oil spill. 2015 Gulf of Mexico Oil Spill and Ecosystem Science Conference. Houston, TX; February 2015 (oral)
101. **Roberts BJ**, Rich MW, Sullivan HL, Bledsoe R, Dawson M, Donnelly B, Marton JM. Spatial patterns in soil biogeochemical process rates along a Louisiana wetland salinity gradient in the Barataria Bay estuarine system. 2015 Gulf of Mexico Oil Spill and Ecosystem Science Conference. Houston, TX; February 2015 (poster)
100. Giblin AE, Tucker J, Bernhard AE, Marton JM, Rich MW, **Roberts BJ (presenter)**. Denitrification rates in marsh sediments exposed to oil from the Deepwater Horizon spill and nearby reference sites in Louisiana salt marshes. 2015 Gulf of Mexico Oil Spill and Ecosystem Science Conference. Houston, TX; February 2015 (oral)
99. Bernhard AE, Sheffer R, Giblin AE, Marton JM, **Roberts BJ**. Potential impacts of oiling on nitrifying communities in Louisiana salt marshes. 2015 Gulf of Mexico Oil Spill and Ecosystem Science Conference. Houston, TX; February 2015 (oral)
98. Martin C, Jensen O, Able K, Fodrie FJ, Lopez-Duarte P, **Roberts BJ**. High Site Fidelity of the Gulf Killifish (*Fundulus grandis*) in Northern Gulf of Mexico Marshes: An Empirical and Modeling Approach to Help Address Oil Effects. 2015 Gulf of Mexico Oil Spill and Ecosystem Science Conference. Houston, TX; February 2015 (poster)
97. Weber SC, Battles JJ, Peterson L, **Roberts BJ**, Özgökmen T, Peterson RN, Hollander DJ, Chanton JP, Joye SB, Montoya JP. Hercules 265 Rapid Response: Immediate ecosystem impacts of a rig natural gas blowout incident. 2015 Gulf of Mexico Oil Spill and Ecosystem Science Conference. Houston, TX; February 2015 (oral)
96. Rogener MK, **Roberts BJ**, Rabalais NN, Joye SB. The effects of nitrogen loading and low oxygen conditions on the fate of nitrogen in coastal ecosystems. 2015 Gulf of Mexico Oil Spill and Ecosystem Science Conference. Houston, TX; February 2015 (oral)
95. **Roberts BJ**, Rich MW, Sullivan HL, Bledsoe R, Dawson M, Donnelly B, Marton JM. Spatial patterns in soil biogeochemical process rates along a Louisiana wetland salinity gradient in the Barataria Bay estuarine system. 2014 AGU Fall Meetin, December 2014 (poster)
94. Rosenheim BE, **Roberts BJ**, Williams E. Ramped pyrolysis  $^{14}\text{C}$  age spectra of riverine particulate organic matter through a record hydrograph – the Great Atchafalaya Flood of 2011. 2014 AGU Fall Meetin, December 2014 (poster)
93. **Roberts BJ**, Marton JM, Bernhard AE, Giblin AE. Louisiana salt marsh biogeochemistry and microbial community dynamics following the deepwater horizon oil spill. 2014 Joint Aquatic Sciences Meeting; Portland, OR, June 2014 (poster)

92. Rich MW, Hopple A, Marton JM, **Roberts BJ**. Temporal patterns in Louisiana salt marsh production and decomposition rates. 2014 Joint Aquatic Sciences Meeting; Portland, OR, June 2014 (poster)
91. Marton JM, **Roberts BJ**, Bernhard AE, Giblin AE, Mack S, Moore T. Differential biogeochemical responses of *Spartina alterniflora* and *Avicennia germinans* soils following the Deepwater Horizon Oil Spill. 2014 Joint Aquatic Sciences Meeting; Portland, OR, June 2014 (oral)
90. Bernhard AE, Pandya K, Sheffer R, Zazueta-Ramirez C, Marton J, **Roberts B**, Giblin A. Impacts of the Deepwater Horizon Oil Spill on Abundance, Activity, and Community Composition of Ammonia-Oxidizing Archaea and Bacteria in Louisiana Salt Marshes. 2014 American Society of Microbiology Meeting; Boston, MA; May 2014 (oral)
89. Zazueta-Ramirez C, Marton J, **Roberts B**, Giblin A, Bernhard A. Relationship of nitrification rates and abundance of ammonia-oxidizers and the potential role of methane oxidizers in Louisiana salt marshes after the Deepwater Horizon oil spill. 2014 American Society of Microbiology Meeting; Boston, MA; May 2014 (poster)
88. Hooper-Bui, LM, Rabalais NN, Engel AS, Turner RE, McClenachan G, **Roberts B**, Overton EB, Justic D, Strudivant K, Brown K, Conover J. 2014. Overview of Research into the Coastal Effects of the Macondo Blowout from the Coastal Waters Consortium: A GoMRI Consortium. International Oil Spill Conference; May 2014 (oral)
87. Chambers CR, **Roberts BJ**, Kolker AS. Spatial and seasonal variability of sediment respiration and nutrient fluxes and their controls in a developing subdelta: the Wax Lake Delta (WLD) and Atchafalaya River Delta Estuary. 2014 State of the Coast Conference, New Orleans, LA; March 2014 (oral)
86. **Roberts BJ**, Marton JM, Bernhard AE, Giblin AE. Biogeochemical responses of Louisiana salt marsh soils following the Deepwater Horizon oil spill. 2014 Gulf of Mexico Oil Spill and Ecosystem Science Conference. Mobile, AL; January 2014 (oral)
85. Bernhard AE, Marton JM, **Roberts BJ**, Giblin AE. Abundance and Community Composition of Ammonia-Oxidizing Microorganisms in Louisiana Salt Marshes Impacted by the Deepwater Horizon Oil Spill. 2014 Gulf of Mexico Oil Spill and Ecosystem Science Conference. Mobile, AL; January 2014 (oral)
84. Marton JM, **Roberts BJ**, Bernhard AE, Giblin AE, Mack S, Moore T. Differential biogeochemical responses of *Spartina alterniflora* and *Avicennia germinans* soils following the Deepwater Horizon oil spill. 2014 Gulf of Mexico Oil Spill and Ecosystem Science Conference. Mobile, AL; January 2014 (oral)
83. **Roberts BJ**, Marton JM, Marti AM, Moore TM. Louisiana salt marsh soil greenhouse gas fluxes following the Deepwater Horizon oil spill. 2014 Gulf of Mexico Oil Spill and Ecosystem Science Conference. Mobile, AL; January 2014 (poster)
82. Giblin AE, Marton JM, **Roberts BJ**, Bernhard AE. Changes in nitrogen cycling in Louisiana salt marsh soils following the Deepwater Horizon oil spill. 2014 Gulf of Mexico Oil Spill and Ecosystem Science Conference. Mobile, AL; January 2014 (poster)

81. Able KW, Lopez-Duarte PC, Fodrie FJ, Jensen O, Martin C, **Roberts BJ**, Valenti J, O'Connor K, Halbert S. Fish Assemblages in Louisiana Salt Marshes: Effects of the Macondo Oil Spill. 2014 Gulf of Mexico Oil Spill and Ecosystem Science Conference. Mobile, AL; January 2014 (oral)
80. Martin CW, Jensen OP, Able KW, Fodrie FJ, Lopez-Duarte PC, **Roberts BJ**. High Site Fidelity of the Gulf Killifish (*Fundulus grandis*) in Northern Gulf of Mexico Marshes: An Empirical and Modeling Approach to Help Address Oil Effects. 2014 Gulf of Mexico Oil Spill and Ecosystem Science Conference. Mobile, AL; January 2014 (poster)
79. Rogener MK, **Roberts BJ**, Rabalais NN, Joye SB. "The Effects of Large Nitrogen Loading and Low Oxygen Conditions on Nitrogen Removal Processes in Coastal Waters. 2014 Gulf of Mexico Oil Spill and Ecosystem Science Conference. Mobile, AL; January 2014 (poster)
78. Goodman K, Hall R, Baxter C, Marcarelli A, **Roberts BJ**, Tank J, Lunch C, Berukoff S. Challenges and Opportunities of Long-Term Continuous Metabolism Measurements at the National Ecological Observatory Network. 2014 AGU Annual Meeting (poster)
77. Kolker AS, Ameen AD, Chambers C, Georgiou IY, Miner MD, **Roberts BJ**, Rosenheim BE, Taylor C. Ecogeomorphology of Developing Deltas: Implications for Restoration. 2013 CERF Meeting.
76. Marton JM, **Roberts BJ**, Bernhard AE, Giblin AE. Location, Location, Location! Spatial Heterogeneity of Salt Marsh Biogeochemical Processes. 2013 CERF Meeting.
75. Giblin AE, Bernhard AE, Marton JM, Tucker J, **Roberts BJ**. Denitrification and dissimilatory nitrate reduction in sediments exposed to oil from the Deepwater Horizon spill. 2013 CERF Meeting.
74. Bernhard AE, Marton JM, **Roberts BJ**, Giblin AE. Community Composition of Ammonia-Oxidizing Bacteria in Louisiana Marshes Impacted by the Deepwater Horizon oil spill. 2013 CERF Meeting.
73. **Roberts BJ**, Marton JM. Louisiana brackish and salt marsh soil greenhouse gas fluxes following the Deepwater Horizon oil spill and salinity manipulations. 2013 CERF Meeting.
72. Rosenheim BE, Williams EK, Schreiner K, Galy V, **Roberts BJ**, Allison MA, Bianchi TS. Particulate Organic Carbon Age Spectra: Evaluating Different Spectra from Different Basin Types. 2013 Goldschmidt Conference.
71. Goodman K, Hall R, Baxter C, Marcarelli A, **Roberts BJ**, Tank J, Lunch C, Berukoff S. Challenges and Opportunities of Long-Term Continuous Metabolism Measurements at the National Ecological Observatory Network. 2013 ESA Annual Meeting.
70. Marton JM, **Roberts BJ**, Bernhard AE, Giblin AE. The Deepwater Horizon Oil Spill: Biogeochemical Impacts Two Years Post-Spill. 2013 SWS Annual Meeting.
69. Griffiths NA, **Roberts BJ**, Hill WR, Mulholland PJ. Nine years of continuous measurements reveal short- and long-term controls on ecosystem metabolism in Walker Branch, a forested headwater stream, 2013 SFS Meeting.

68. **Roberts BJ**, Rich MW. Water column respiration and nutrient uptake linkages along the continuum from the lower Atchafalaya River to the northern Gulf of Mexico. 2013 Hypoxia Coordination Workshop.
67. Rosenheim BE, Galy V, Williams EK, **Roberts BJ**, Allison MA. Particulate Organic Carbon Age Spectra on the Mississippi-Atchafalaya River System: An Emerging Picture of Carbon Export from a Large River through Varying Discharges. 2013 European Geosciences Union Meeting.
66. Chambers CR, Kolker AS, **Roberts BJ**. Biogeochemical and Sedimentological Interactions in a Developing Deltaic System: The Wax Lake Delta and Atchafalaya River Delta Estuary. 2013 ASLO Aquatic Sciences Meeting.
65. Middleton BA, **Roberts BJ**. Remediation after the Deepwater Horizon Incident pushed oil from the coast and provided pulsed hydrology to coastal wetlands. 2013 ASLO Aquatic Sciences Meeting.
64. Rosenheim BE, Galy V, Williams EK, **Roberts BJ**, Allison MA. High Discharge and Particulate Organic Carbon Transport on the Mississippi-Atchafalaya System. 2013 ASLO Aquatic Sciences Meeting.
63. Rich MW, **Roberts BJ**. Water column respiration and nutrient uptake linkages along the continuum from the lower Atchafalaya River to the northern Gulf of Mexico. 2013 ASLO Aquatic Sciences Meeting.
62. Marti AM, Marton JM, **Roberts BJ**. Effects of varying salinity on greenhouse gas production from oiled and unoled coastal Louisiana salt marsh soils. 2013 ASLO Aquatic Sciences Meeting.
61. Marton JM, **Roberts BJ**. Patterns of Phosphorus Sorption in Louisiana Brackish and Salt Marshes Impacted by the Deepwater Horizon Oil Spill. 2013 ASLO Aquatic Sciences Meeting.
60. **Roberts BJ**, Marton JM, Bernhard AE, Giblin AE. Louisiana brackish and salt marsh nitrification potential and microbial diversity following the Deepwater Horizon Oil Spill. 2013 ASLO Aquatic Sciences Meeting
59. Lopez-Duarte P, Fodrie J, Jensen O, Filosa C, Halbert S, O'Connor K, **Roberts B**, Able K. Oil Spill Effects on Salt Marsh Fish Assemblages: Selection of Appropriate Indicator Species. BP GoMRI Gulf of Mexico Oil Spill and Ecosystem Science Conference, January 2013.
58. Marton JM, Bernhard AE, Giblin AE, **Roberts BJ**. Louisiana Brackish and Salt Marsh Nitrification Potential and Microbial Diversity Following the Deepwater Horizon Oil Spill. BP GoMRI Gulf of Mexico Oil Spill and Ecosystem Science Conference, January 2013.
57. **Roberts BJ**, Marton JM, Marti AM. Louisiana brackish and salt marsh greenhouse gas fluxes following the Deepwater Horizon oil spill and salinity manipulations. BP GoMRI Gulf of Mexico Oil Spill and Ecosystem Science Conference, January 2013.

56. Rosenheim BE, Galy V, **Roberts BJ**, Allison MA, Kolker AS. Age spectra of riverine POC – does variability within or between river basins have a larger impact on POC age distributions? 2012 AGU Annual Meeting.
55. Chambers C, Kolker AS, **Roberts BJ**. Sediment Dynamics and Biogeochemical Cycling in a Developing Deltaic System. 2012 GERS Meeting.
54. Rich MW, **Roberts BJ**. Water column respiration and nutrient uptake linkages along the continuum from the lower Atchafalaya River to the northern Gulf of Mexico. 37th Annual Great Plains Limnology Conference.
53. Marti AM, Marton JM, **Roberts BJ**. Effects of varying salinity on greenhouse gas production from oiled and unoled Louisiana salt marsh soils. International Meetings of the Agronomy, Crop and Soil Science Societies of America meeting. (**\*won 2<sup>nd</sup> place in undergraduate student competition**).
52. Middleton BA, **Roberts BJ**. Freshwater diversions provided pulsed hydrology to coastal swamps for remediation. 9<sup>th</sup> INTECOL International Wetlands Conference.
51. Primer SB, Warner TR, Marton JM, **Roberts BJ**. Greenhouse gas emissions and denitrification from US Gulf Coast Baldcypress swamps. 9<sup>th</sup> INTECOL International Wetlands Conference.
50. **Roberts BJ**, Luthringer JE, Warner TR, Semmler CM, Burgin AJ, Kolker AS, Rosenheim BE, Rabalais NN. The 2011 Atchafalaya River Flood, a possible altered system state for the Atchafalaya River Delta Estuary, and implications for hypoxia on the Louisiana shelf. 2012 Hypoxia Coordination Workshop. Bay St. Louis, MS.
49. **Roberts BJ**, Morrison W, Rabalais NN, Turner RE. Spatial and Temporal Patterns in Carbon, Oxygen, and Nutrient Cycling in the northern Gulf of Mexico hypoxic zone. 2012 Hypoxia Coordination Workshop. Bay St. Louis, MS.
48. Warner TR, **Roberts BJ**. Nitrogen fertilization effects on N<sub>2</sub>O fluxes and potential denitrification rates in Gulf Coast Baldcypress swamps. 2012 Ocean Sciences Meeting.
47. **Roberts BJ**, Luthringer JE, Warner TR, Semmler CM, Burgin AJ, Kolker AS, Rosenheim BE, Rabalais NN. The 2011 Atchafalaya River flood and a possible altered system state for the Atchafalaya River Delta Estuary. 2012 Ocean Sciences Meeting.
46. Rosenheim BE, **Roberts BJ**, Allison MA. Quantifying the age spectra of particulate organic carbon in the Lower Mississippi River and Atchafalaya outflow during the Great Flood of 2011. 2011 AGU Annual Meeting.
45. **Roberts BJ**, Semmler CM, Doty SM, Rabalais NN, Turner RE. Biogeochemical processing and hypoxia development in the lower Atchafalaya River and Atchafalaya River Delta Estuary. 2011 NABS Annual Meeting, Providence, RI.
44. Middleton BA, **Roberts BJ**. Impact of hydrologic remediation efforts after the Deepwater Horizon oil spill incident on elevation maintenance and ecosystem processes in Gulf Coast baldcypress swamps. 2011 River Diversions Workshop, New Orleans, LA.



43. Lutz BD, Bernhardt ES, **Roberts BJ**, Mulholland PJ. Examining the coupling of carbon and nitrogen cycles in Appalachian streams: the role of organic nitrogen. 2011 ASLO Aquatic Sciences Meeting, San Juan, Puerto Rico.
42. **Roberts BJ**, Morrison W, Del Rio R, Pride L, Richardi D, Semmler CM, Young B, Rabalais NN, Turner RE. Spatial and temporal patterns in water column and benthic respiration in the northern Gulf of Mexico hypoxic zone. 2011 ASLO Aquatic Sciences Meeting, San Juan, Puerto Rico.
41. **Roberts BJ**, Middleton BA. Effects of oiling and hydrologic remediation on baldcypress swamp elevation and ecosystem processes: a RAPID project in response to the Deepwater Horizon Oil Spill Incident. Collaborative Scientific Research Opportunities Relative to the Gulf Oil Spill Conference.
40. Hill WR, **Roberts BJ**, Mulholland PJ. Light drives grazer stoichiometry in Walker Branch. 2010 ASLO/NABS Joint Meeting.
39. Lutz BD, Bernhardt ES, **Roberts BJ**, Mulholland PJ. What can a stream stand to lose? A New Method for Investigating DOM Biogeochemistry. 2010 ASLO/NABS Joint Meeting.
38. \***Roberts BJ**, Mulholland PJ, Hill WR. Ecosystem metabolism in a forested stream: results from 6 years of continuous monitoring of patterns and controls in the West Fork of Walker Branch. 2010 ASLO/NABS Joint Meeting. (\*invited talk)
37. Roe KM, Rosenheim B, **Roberts BJ**, Allison M, Kolker AS, Duncan D, Nittrouer JA, Butcher K, Nyman A, Adamic J. An investigation of the Mississippi-Atchafalaya River System as a source or a sink of organic carbon. 2010 American Association of Petroleum Geologists Meeting.
36. **Roberts BJ**, Semmler CM, Doty SM, Rabalais NN, Turner RE. Biogeochemical processing in the Atchafalaya River/Bay System: implications for nutrient and organic matter export to the Gulf of Mexico hypoxic zone. 2009 CERF Biennial Conference.
35. **Roberts BJ**, Semmler CM, Rabalais NN, Turner RE. Biogeochemical processing along the continuum from the lower Atchafalaya River to the northern Gulf of Mexico. 2009 NABS Annual Meeting.
34. **Roberts BJ**, Semmler CM, Rabalais NN, Turner RE. Biogeochemical Processing in the Atchafalaya River/Bay System. Gulf of Mexico Alliance's Nutrient Criteria Research Framework Workshop, New Orleans, LA, 10-12 March 2009
33. **Roberts BJ**, Dagg MJ, Semmler CM, Powell RT. Marsh and coastal ocean influences on the relative contribution of bacteria and phytoplankton to ecosystem respiration in Terrebonne Bay, Louisiana. 2009 ASLO Aquatic Sciences Meeting.
32. Lutz BD, Bernhardt ES, **Roberts BJ**, Mulholland PJ. Biogeochemical controls on the export of dissolved organic nitrogen from forested watersheds. 2009 ASLO Aquatic Sciences Meeting.

31. Dagg MJ, Semmler CM, **Roberts BJ**, Powell RT. Time scales of DOC inputs from Louisiana Marshes to the coastal ocean in the northern Gulf of Mexico. 2008 ASLO Summer Meeting.
30. **Roberts BJ**, Hill WR, Mulholland PJ. Influence of grazing snails on stream ecosystem processes: seasonal patterns in growth, respiration, and nutrient excretion. 2008 NABS Meeting.
29. Hill WR, **Roberts BJ**, Fanta, SE. Simultaneous manipulations of light and phosphorus: Consequences for periphyton productivity and composition. 2008 NABS Annual Meeting.
28. Follstad Shah J, Bernhardt ES, Hall RO, Huryn A, Mulholland PJ, **Roberts BJ**, Sinsabaugh, Valett HM. Challenges and opportunities presented by stream ecosystems for testing and refining metabolic theory. 2008 NABS Annual Meeting.
27. Bernhardt ES, **Roberts BJ**, Mulholland PJ, Brookshire ENJ. Dissolved Organic Nitrogen Losses from Forested Watersheds across the Southern Appalachians. 2007 ESA Meeting.
26. **Roberts BJ**, Mulholland PJ. Influence of catchment bedrock geology on hydrology, chemistry, and ecosystem metabolism in forested headwater streams. 2007 NABS Annual Meeting.
25. Follstad-Shah J, Bernhardt ES, Hall RO, Huryn A, Mulholland PJ, **Roberts BJ**, Valett HM. The metabolic theory of ecology: Insights from stream ecosystems. 2007 NABS Annual Meeting.
24. **Roberts BJ**, Mulholland PJ. In-stream biotic control on nutrient biogeochemistry in a forested headwater stream, West Fork of Walker Branch. 2007 ASLO Aquatic Sciences Meeting.
23. Hill WR, Fanta SE, Smith TB, **Roberts BJ**. Carbon stable isotope dynamics and stoichiometry in autotrophic biofilms. 2007 ASLO Aquatic Sciences Meeting.
22. Mulholland PJ, Feminella J, Lockaby BG, Houser J, **Roberts BJ**, Jolley R, Maloney K, Mitchell R, Heck L, Holon G. Effects of restoration of riparian and stream ecosystems at Fort Benning, Georgia. Presented at the SERDP/ESTCP Partners in Environmental Technology Symposium, Washington, DC, November 28 – 30 2006.
21. **Roberts BJ**, Mulholland PJ, Houser JN. Effects of in-stream restorations on stream hydrodynamics, nutrient uptake, and ecosystem metabolism at Fort Benning, GA. 2006 ESA Annual Meeting.
20. **Roberts BJ**, Mulholland PJ, Hill WR. Multiple scales of temporal variability in ecosystem metabolism rates: results from two years of continuous monitoring in a forested headwater stream. 2006 NABS Annual Meeting.
19. Mulholland PJ, Feminella J, Lockaby BG, Houser J, **Roberts BJ**, Jolley R, Maloney K, Miller S, Mitchell R, Holon G. Effects of restoration of stream and riparian ecosystems at Fort Benning, Georgia. Presented at the SERDP/ESTCP Partners in Environmental Technology Symposium, Washington, DC, November 29 – December 1, 2005.

18. Mulholland PJ, **Roberts BJ**. The role of in-stream processes in regulating outputs of N and P from forested catchments: Evidence from studies in Walker Branch Watershed. American Geophysical Union December Meeting.
17. **Roberts BJ**, Mulholland PJ, Hill WR. Ecosystem metabolism in a forested stream: an annual analysis of patterns in the west fork of Walker Branch. 2005 Gordon Conference on Catchment Science: Interactions of hydrology, biology, and geochemistry.
16. **Roberts BJ**, Mulholland PJ. Effects of in-stream restorations on stream hydrodynamics, nutrient uptake, and ecosystem metabolism at Fort Benning, GA. 2005 NABS-AGU Joint Assembly Meeting.
15. **Roberts BJ**, Hill WR, Mulholland PJ. Controls on ecosystem metabolism in a forested stream: an annual analysis of patterns in the west fork of Walker Branch. 2005 ASLO Aquatic Sciences Meeting.
14. Mulholland PJ, Feminella J, Lockaby BG, Houser J, **Roberts BJ**, Cavalcanti G, Maloney K, Miller S, Mitchell R, Holon G. Riparian ecosystems at Fort Benning, Georgia: Impact assessment and restoration. Presented at the SERDP/ESTCP Partners in Environmental Technology Symposium, Washington, DC, November 30 – December 2, 2004.
13. **Roberts BJ**, Owens TG, Howarth RW. Gross carbon and oxygen cycling in aquatic ecosystems: insights gained from oxygen stable isotope studies. 2004 ESA Annual Meeting.
12. Mulholland PJ, Feminella J, Lockaby BG, Houser J, **Roberts BJ**, Cavalcanti G, Maloney K, Miller S, Mitchell R, Holon G. Riparian ecosystems at Fort Benning, Georgia: Impact assessment and restoration. 2004 ESA Annual Meeting.
11. **Roberts BJ**, Cole JJ, Pace ML, Bade DL, van de Bogert MC. Diel respiration measured using oxygen stable isotopes in fertilized, clear, and colored lakes. 2003 ESA Annual Meeting.
10. **Roberts BJ**, Cole JJ, Pace ML, Bade DL, van de Bogert MC. Diel respiration measured using oxygen stable isotopes in fertilized, clear, and colored lakes. 2003 ASLO Aquatic Sciences Meeting.
9. **Roberts BJ**, Howarth RW. Interaction of light and nutrient availability as regulators of diel patterns in respiration in freshwater pelagic ecosystems: an examination using oxygen stable isotopes. 2002 ASLO Aquatic Sciences Meeting.
8. **Roberts BJ**, Howarth RW. Interaction of light and nutrient availability as regulators of diel patterns in respiration in freshwater pelagic ecosystems: a preliminary examination. 2001 ASLO Aquatic Sciences Meeting.
7. **Roberts BJ**, Ostrom NE, Howarth RW, Bergsma T. Are respiration rates constant over diel cycles in aquatic ecosystems: a new method and application using natural abundance oxygen isotopes. 1999 ASLO Aquatic Sciences Meeting.
6. Howarth RW, Butler TJ, Kolberg KA, **Roberts BJ**. Climate warming may exacerbate eutrophication in partially mixed estuaries: The Hudson River Estuary example. 1999 ASLO Aquatic Sciences Meeting.

5. **Roberts BJ**, Foreman K, Valiela I. Water column nutrient and chlorophyll dynamics in shallow estuaries of Waquoit Bay, MA subject to different nitrogen loading rates. 14<sup>th</sup> Biennial Estuarine Research Federation International Conference, 1997.
4. Heberlig L, Valiela I, **Roberts BJ**. A field verification of the Waquoit Bay Nitrogen Loading Model. 1997 Marine Biological Laboratory General Scientific Meetings.
3. Lee RY, Joye SB, **Roberts BJ**, Valiela I. Release of N<sub>2</sub> and N<sub>2</sub>O from salt marsh sediments subject to different land-derived nitrogen loads. 1997 Marine Biological Lab General Scientific Meetings.
2. **Roberts BJ**, Tucker J, Giblin AE. Effect of MnO<sub>2</sub> on denitrification in marine sediments. 1997 Marine Biological Laboratory General Scientific Meetings.
1. **Roberts BJ**, McClelland J, Valiela I. Assessment of macrobenthic community variables at six taxonomic levels as indicators of eutrophication in shallow estuaries. 25<sup>th</sup> Benthic Ecology Meeting, 1996

**Postdoctoral Research Advisor:**

Patrick Mulholland (deceased), Environmental Sciences Division, Oak Ridge National Laboratory

**Graduate Advisors:**

Ph.D.: Robert W. Howarth, Department of Ecology & Evolutionary Biology, Cornell University  
M.A.: Ivan Valiela, Boston University Marine Program, Marine Biological Laboratory