

## **BRIAN JOSEPH ROBERTS**

Executive Director and Chief Scientist Associate Director of Science | Ecosystem Ecology and Biogeochemistry Lab REU Program Director Louisiana Universities Marine Consortium DeFelice Center, 8124 Highway 56, Chauvin, LA 70344 Phone: 985-851-2801, -2821. FAX: 985-851-2874. Email: <u>broberts@lumcon.edu</u> https://robertsresearchlab.weebly.com

#### **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:**

2023-present	Executive Director & Chief Scientist, Louisiana Universities Marine Consortium
2022—2023	Interim Executive Director, Louisiana Universities Marine Consortium
2017-present	Associate Director of Science, Louisiana Universities Marine Consortium
2015-present	Associate professor, Louisiana Universities Marine Consortium
2007 - 2015	Assistant professor, Louisiana Universities Marine Consortium
2021-present	Adjunct Faculty, Department of Biological Sciences, Louisiana State University
	Shreveport
2019—present	Adjunct Faculty, Department of Biology, University of Louisiana-Lafayette
2018 - present	Adjunct Faculty, School of Renewable Natural Resources, Louisiana State
	University
2008 – present	Adjunct Faculty, Department of Oceanography & Coastal Science, Louisiana
	State University
2008 – present	Adjunct Faculty, Department of Biology, Nicholls State University
2010 – present	Adjunct Faculty, Department of Ecology & Evolutionary Biology, Tulane
	University
2003 - 2007	Postdoctoral Research Associate, Environmental Sciences Division, Oak Ridge
	National Laboratory, supervisor: Patrick Mulholland.
1997 - 2004	Ph. D. Candidate, Cornell University, advisor: Robert Howarth
1997	Research intern, Ecosystems Center, Marine Biological Laboratory, supervisor:
	Anne Giblin
1996 – 1997	Research assistant, Marine Biological Laboratory, supervisor: Ivan Valiela
1995 – 1996	Masters student, Boston University Marine Program, advisor: Ivan Valiela
1994 - 1995	Undergraduate Research Assistant, William & Mary, advisor: Gregory Capelli

Roberts, Brian J. Interim Executive Director, LUMCON

## LUMCON Associate Director of Science (2017 – present)

Head of Research Faculty; Oversee all scientific programs, research facilities and usage; Serve as interim director whenever Executive Director unavailable; Coordinate consortium member institutions to facilitate/coordinate research activities; Work with Associate Director of Education & Outreach to integrate two programs

## **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 (ASLO's Dissertations Initiative for the Advancement of Limnology and OceanoGraphy) VI Symposium, 2004 NSF Research Training Grant 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) Gulf Estuarine Research Society (GERS)—Member at large on GERS board, 2019-2021 Ecological Society of America (ESA) Society for Freshwater Science (SFS) Society of Wetland Scientists (SWS)

# **TEACHING:**

# Director of LUMCON National Science Foundation (NSF) Research Experiences for Undergraduates (REU) Site Program (2011 – present)

PI/PD on original proposal that brought a NSF OCE REU Site program to LUMCON (completed 12<sup>th</sup> year in 2022; third grant as PI/PD). Oversee recruitment and matching mentors and mentees. Run workshops and field trips and have been mentor/co-mentor to multiple interns per year out of 83 REUs that have completed the program.

# LUMCON Courses:

Changing Coastal Oceans (LUMCON team taught course each spring; 2008 – present; lead instructor 2017 – present) Marine Ecosystem Ecology (2018) Marine Field Ecology (LUMCON summer course; taught even years 2008—2016)

# **Previous Teaching Experience:**

## Cornell University Courses:

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 Researcher and/or Research Scientist Advisees:

*Current (4):* Currently recruiting four postdocs

Former (8): John M. Marton, PhD Indiana University, 2012 – 2014; Troy Hill, PhD Yale University, 2015; Ariella Chelsky, PhD Griffiths University, 2015 -2018; Anthony Rietl, PhD Louisiana State University, 2016- 2018; Scott Jones, PhD University of Louisiana at Lafayette, 2018, Charles Schutte, PhD University of Georgia, 2017 – 2019; Ryann Rossi, PhD North Carolina State University, 2018 – 2020; Lauren Brown, PhD University of California Los Angeles (UCLA), 2020–2022

## Graduate Advisees:

*Chair of Committee: Current (4)*: Alex Douwes, MS student in Biology, ULL (2021-present); Skylar Liner, MS student in RNR, LSU (2021-present); Emilie Foster, MS student in Biology, ULL (co-advisor; 2020-present); Ronald Scheuermann, MS student in DOCS, LSU (2017 – present).

*Completed (5):* Jordan Logarbo, MS student in RNR, LSU (2021); Sarah Catherine LeBlanc, MS student in RNR, LSU (co-advisor; 2021); Natalie Ceresnak, MS student in DOCS, LSU (2017); 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), Olivia Floyd, MS student in Biology, ULL (2020)

Committee Member (6): Current (3): Wissam Jiwad, PhD student in Biology, LSU (2021-present); Samuel Bickley, PhD student in Biology, Auburn University (2019-present); Herbert Leavitt, PhD student in Biology, ULL (2022-present); Completed (4): Daniel Alt, PhD, Dept. of CEE, LSU (2019); Jonathan West, PhD, Dept. of Renewable Natural Resources, LSU-Baton Rouge, 2013; Tiffany Pasco, MS, LSU, 2010; Skyler Flaska, PhD student in Biology, ULL (co-advisor; 2018 – 2021)

# Undergraduate Senior or Honors Theses (5):

- 2013: Shanina Halbert (Haverford College)
- 2015: Brian Donnelly (Villanova University)
- 2016: Samantha Fortin (Eckerd College)
- 2017: David Klinges (Dartmouth College)
- 2020: Adrianna Grow (Smith College)

## Summer Undergraduate Research Advisees (47 mentees):

- 1997 (2): REU Interns: Rosalyn Lee, Laura Heberlig (co-advised)
- 2009 (2): Lindsey Marcantel (McNeese State University), Nicholas Treusch (Northwestern State University)
- 2010 (1): Brendan Young (Dickinson College)
- 2011 (2): REU Interns: Julia Luthringer (Boston University); Tiffany Warner (University of

New Orleans)

- 2012 (3): REU Interns: Shanina Halbert (Haverford College); Aaron Marti (University of Wisconsin-Stevens Point); Matthew Rich (University of Arkansas)
- 2013 (3): REU Interns: Sara Mack (University of Maryland); Tierra Moore (Rice University); Regina Bledsoe (Nicholls State University)
- 2014 (3): REU Interns: Mia Dawson (Oberlin College); Brian Donnelly (Villanova University); Regina Bledsoe (Nicholls State University)
- 2015 (3): REU Interns: Kristen Chatelain (Louisiana Tech); Samantha Fortin (Eckerd College); Katie Baudoin (University of Louisiana-Lafayette)
- 2016 (3): REU Interns: Nicole Farley (Wayne State University), David Klinges (Dartmouth College), Madelyn Sorrentino (University of Vermont)
- 2017 (3): REU Interns: Ashley MacDonald (Eckerd College), Katie Ebinger (University of Colorado); co-mentor: Robynn Hadley (Grambling State University)
- 2018 (3): REU Interns: Karyolyn Agosto Shaw (Universidad Metropolitana), Adrianna Grow (Smith College), Herbert Leavitt (Eckerd College)
- 2019 (4): REU interns: Alizia Barnes (Louisiana Tech University), Harrison Coker (Texas A&M University); LA Tech/LUMCON interns (fall 2019): Richard "David" Johnson, Adam Broussard
- 2020 (2): REU interns: ran virtual professional development program instead of in person program so no direct advisees (12 total mentees); LA Tech / LUMCON interns (fall 2020): Katelyn Mall, Tanna Dartlon
- 2021 (3): REU interns: Olivia Aguiar (University of Massachusetts-Dartmouth); Thomas Phillips (University of California Davis); co-mentor: Alexa Labossiere (State University of New York-College of Environmental Science and Forestry (SUNY-ESF)
- 2022 (4): REU interns: Kelli Davis (Grambling State University); Collin Seringue (Tufts University); STEM-Prep students: Catherine Paille (Southeastern Louisiana University); April Peralez (River Parishes Community College)

# **RESEARCH SUPPORT:**

## • 38 total awards at LUMCON totaling ~\$52.1M (LUMCON portion ~\$22.2M) Current Grants (16 awards totaling ~\$13M (LUMCON portion ~\$8.5M)

- **Roberts BJ (Lead PI)**, LePeyre ML (LSU). "Can ribbed mussels augment coastal restoration projects in a world of rising seas?", Louisiana Sea Grant/LA Coastal Protection and Restoration Authority CSAP Program, \$75,000, 2021-2024.
- Roberts BJ (Lead PI), Conover J. "REU Site: Interdisciplinary Research Experiences in Louisiana's Changing Coastal Environments"; NSF OCE; \$529,225; 04/01/2022-03/30/2025.
- Polito MJ (LSU), Hooper-Bui L (LSU), Swenson E (LSU), Roberts BJ (LUMCON lead), Rabalais NN (LUMCON/LSU), Engel A (University of Tennessee), Jenson O (Rutgers University), Lopez-Duarte P (University of North Carolina-Charlotte (UNCC)), Martin CW (University of Florida (UF)), Olin JA (Michigan Technological University); "RESTORE: Linking Community and Food-Web Approaches to Restoration: An Ecological Assessment of Created and Natural Marshes Influenced by River Diversions"; NOAA RESTORE Act Science Program; \$2,040,845 (\$429,510 = LUMCON portion); 06/01/17 11/30/23

- Nelson JA (University of Louisiana-Lafayette, lead PI), Roberts BJ (LUMCON lead PI), Rieucau G (LUMCON co-PI), Xu K (LSU), Johnson D (Virginia Institute of Marine Science (VIMS)). "Responses of Ecological Function of the Ship Shoal Biological Communities Subjected to Dredging", Bureau of Ocean Energy Management Funding Opportunity M19AS00006, \$1,999,850 (\$861,343 = LUMCON portion), 11/2019 10/2023.
- Holmquist J (Smithsonian Environmental Research Center: SERC), Crooks S (Silvestrum, Inc.), McLachlan J (University of Notre Dame), Megonigal J (SERC), Oikawa P (California State University-Hayward), Roberts BJ (LUMCON), Schile-Beers L (Silvestrum, Inc.), Windham-Myers L (United States Geological Survey (USGS)).
   "Data-Model Integration for Monitoring and Forecasting Coastal Wetland Carbon Exchanges: Serving Local to National Greenhouse Gas Inventories", NASA CMS, \$1,123,976 (\$209,690 = LUMCON portion), 11/2019 10/2023.
- McClain CM, Malbrough J, **Roberts BJ**. "Collaborative Proposal: Proposal for the Operation of Regional Class Research Vessel #3 in the Gulf of Mexico, Caribbean Sea, and Southwestern Atlantic Ocean", NSF, \$3,729,243 (LUMCON portion: \$3,173,061), 2019-2024.
- **Roberts BJ,** Isch M, McClain CM. "Expanding LUMCON's incubation capabilities", Arthur M Blank Foundation, \$10,000, 2021-2022.
- Polito MJ (LSU), Swenson E (LSU), Lopez-Duarte P (UNCC), Roberts BJ (LUMCON lead), Rabalais NN (LUMCON), Martin C (UF). "Planning for a fresher future: Implications of river management practices on saltmarsh restoration projects in coastal Louisiana". USGS South Central Climate Adaptation Science Center, \$299,998 (\$66,014 = LUMCON portion), 08/01/2021 07/31/2023.
- Lewis J (PI, Tulane Bywater Institute), **Roberts BJ (co-PI)**, Ferris MT (co-PI, University of New Orleans (UNO)), Meselhe E (co-PI, Tulane University), van Bael S (co-PI, Tulane University)." SRS-RN: Hybrid Water Infrastructure and Regional Sustainability Planning a Convergence Science Approach in Greater New Orleans" NSF Sustainable Regional Systems Research Networks Program Track 2 Planning Grant, \$149,343, 02/01/2022-1/31/2023.
- **Roberts BJ**, Archer SK, "RAPID: Securing the LUMCON natural history collection, a vital Gulf Coast resource"; NSF BIO; \$199,102; 7/01/2022 6/30/2023.
- Bowles MW (PI), **Roberts BJ (co-PI)**, Meille C (University of Georgia, co-PI). "Collaborative Research: Methane efflux from river influenced coastal marine sediments". NSF Chemical Oceanography, \$1,237,449 (\$1,038,171 = LUMCON portion), 10/2022-09/2025.
- Engel AS (Lead PI, University of Tennessee), Roberts BJ (LUMCON PI), Bowles MW (co-PI), Justic D (LSU), Huang H (LSU), Mariotti G (LSU), Schutte CA (Rowan University), Yeager K (University of Kentucky). "Collaborative Research: Methane Dynamics Across Microbe-to-Landscape Scales in Coastal Wetlands". NSF Frontier Research in Earth Science (FRES), \$2,999,333 (\$994,634 = LUMCON portion), 10/2022-09/2027.
- Nelson JA (ULL, lead PI), **Roberts BJ (LUMCON lead PI)**, Rieucau G (LUMCON co-PI), Xu K (LSU), Johnson D (VIMS). Supplement to: "Responses of Ecological Function

of the Ship Shoal Biological Communities Subjected to Dredging", Bureau of Ocean Energy Management Funding Opportunity M19AS00006, 04/2022 – 10/2023. \$350,000 (\$124,452 = LUMCON portion).

- Polito MJ (LSU), Hooper-Bui L (LSU), Swenson E (LSU), Roberts BJ (LUMCON lead), Jenson O (University of Wisconsin), Martin CW (University of Florida). "Linking Community and Food-Web Approaches to Restoration: An Ecological Assessment of Created and Natural Marshes Influenced by River Diversions"; Northern Gulf Institute (NGI); \$124,838 (\$39,082 = LUMCON portion); 8/01/22—7/30/23.
- **Roberts BJ**. "Building a network of nutrient sensing in the northern Gulf of Mexico", Subaward from GCOOS grant awarded to Stauffer B (ULL); 2022-2023; \$50,000.
- Nelson JA (ULL, lead PI), Roberts BJ (LUMCON lead PI), Rieucau G (LUMCON co-PI), Xu K (LSU), Johnson D (VIMS). 3-year extension request to: "Responses of Ecological Function of the Ship Shoal Biological Communities Subjected to Dredging", Bureau of Ocean Energy Management Funding Opportunity M19AS00006, 04/2024 03/2027. \$1,798,596 (\$702,922 = LUMCON portion).

# Grants pending (n=2)

- Du Clos K, **Roberts BJ**, Bowles M, Archer S, Conover J, Morrison W. "Enhancement of biological imaging capacities for research, education, and harmful algal bloom monitoring at Louisiana Universities Marine Consortium's DeFelice Marine Center and Houma Maritime campus"; LA Board of Regents Support Fund Departmental Enhancement Program; 2023-2024; \$119,422.
- Baustian MM (USGS), La Peyre ML (USGS/LSU), Liu B (Water Institute), Hemmerling S (Water Institute), Stauffer B (ULL), Roberts BJ, Callam B (LA Sea Grant).
  "Monitoring Louisiana's coastal waters, sediments, and local and traditional knowledge to provide early harmful algal bloom warnings to the shellfish industry"; NOAA NOS MERHAB; 2023-2028; \$1,500,000.

# **Previous Grants**

Past LUMCON Funding (23 awards totaling ~\$39.1M (LUMCON portion ~\$13.7M)

- Rossi R, **Roberts BJ**. "Exploring the role of biological factors in widespread mangrove die-off: A citizen science based approach", National Geographic, 2019-2022; \$28,900
- Roberts BJ (PI/PD), McClain CR; "REU Site: Interdisciplinary Research Experiences in Changing Coastal Environments"; NSF OCE; \$238,102; 04/01/18-03/30/22
- **Roberts BJ (PI/PD)**. "Supplement to: REU Site: Interdisciplinary Research Experiences in Changing Coastal Environments", NSF OCE; \$50,241, 04/01/2021-03/30/2022.
- Roberts BJ (PI/PD); "Core Research Project-Incorporating life into Living Shorelines: Can Gulf Ribbed Mussels reduce shoreline erosion and enhance restoration practices?" LA Sea Grant; \$144,000; 02/01/18 – 01/31/22
- **Roberts BJ (PI/PD)**. "Soil Biogeochemistry of Pacific Coastal Wetlands", cooperative agreement G19AC00447 with USGS, \$15,000, 9/2019-12/2021.
- Rabalais NN, **Roberts BJ** (one of 3 executive committee members overseeing consortium), Turner RE, Justic D, Huang H, Mariotti G, Overton E, Polito M, Stouffer P, Taylor S, Bernhard AE (Connecticut College), Bonisoli Alquati A (California State Polytechnic University, Pomona), Fodrie FJ (University of North Carolina), Giblin AE

(Marine Biological Laboratory), Jenson O (Rutgers University), Kearney M (University of Maryland), Lopez-Duarte P (Rutgers University), Martin C (University of Florida), Olin J (Michigan Technological University), Parson M (Florida Gulf Coast University), Walker AH (Sea Consulting, Inc.), Woltmann S (Austin Peay State University)); "Coastal Waters Consortium III: Oil spills as stressors in coastal marshes: The legacy and the future"; Gulf of Mexico Research Initiative (GoMRI); \$4,800,000 (\$1,800,000 = LUMCON portion); 01/01/18-06/30/20

- Roberts BJ (LUMCON PI), Cai W-J (University of Delaware), Lehrter J (Dauphin Island Sea Lab), Maiti K (LSU), Lohrenz S (University of Massachusetts-Dartmouth); "Collaborative Research: A RAPID response to Hurricane Harvey's impacts on coastal carbon cycle, metabolic balance, and ocean acidification"; NSF CHEM OCE; \$199,999 (\$42,686 = LUMCON portion); 11/01/17-10/31/19
- Rabalais NN (PI/PD), Roberts BJ (one of 3 executive committee members overseeing consortium) + 26 other PIs; "Coastal Waters Consortium II: a collaborative approach to evaluate the effects of the Macondo oil spill on coastal ecosystems"; BP/GoMRI; \$16.1M (LUMCON total = \$4.5 M; Roberts Lab portion ~ \$2M); 01/01/15—12/31/18.
- **Roberts BJ (PI/PD),** Chesney EJ, Rabalais NN, Kolker AS, Sammarco P; "Enhancement of Capabilities to Analyze Environmental Changes in Louisiana's Coastal Ecosystems"; LA Board of Regents Support Fund Departmental Enhancement Program; \$44,350; 6/1/16—7/31/17.
- **Roberts BJ (PI)**; "Influence of river diversions on carbon and nitrogen cycling in Louisiana freshwater, brackish and salt marshes"; \$75,000; Coastal Protection and Restoration Authority (CPRA) Coastal Science Assistantship Program (CSAP)—graduate student assistantship; 6/1/12—12/31/16.
- Rabalais NN (PI/PD), Roberts BJ (one of 3 executive members overseeing the consortium) + 24 other PIs (14 total institutions); "Coastal Waters Consortium: The Effects of Macondo Oil Spill on Coastal Ecosystems"; Gulf of Mexico Research Initiative (GRI) Consortia; \$12.1M (LUMCON portion = \$3M; Roberts Lab portion = \$1.05M); 9/1/11—12/31/15.
- Roberts BJ (PI/PD), Rabalais NN; "REU Site: Interdisciplinary Research Experiences in Changing Coastal Environments"; NSF Ocean Sciences; \$ 222,591; 4/1/11—3/31/15.
- Rabalais NN (PI/PD), Roberts BJ, Sinclair GA, Turner RE (LSU), Fry B (LSU), Justić D (LSU), Li C (LSU); Scavia D (University of Michigan); "NGOMEX09: Integrated Ecosystem Modelling of the Causes of Hypoxia"; LUMCON: NOAA; \$4M (LUMCON portion = \$2.5M); 9/1/09-8/31/15.
- **Roberts BJ (PI)**; "2014 Visiting Scientist Award from the Belle W. Baruch Institute for Marine and Coastal Sciences"; \$3000 plus use of facilities and housing; 4/14 12/14 (only award given in 2014); collaborated with Erik Smith on project in North Inlet, SC.
- Kolker AS, **Roberts BJ (co-lead PIs)**; "Sediment dynamics and biogeochemical cycling in a developing deltaic system: understanding land building and habitat quality in a river diversion"; LA Sea Grant; \$179,000; 2/1/12—5/31/14.
- Roberts BJ (PI/PD), Kolker AS, Rabalais NN, Rosenheim BE (Tulane University); "Collaborative Research: RAPID: The 2011 Atchafalaya River Flood and a possible altered system state for the Atchafalaya River Delta Estuary"; NSF Ecosystems Studies /

Biological Oceanography (DEB-1141354); \$129,991 (LUMCON portion: \$92,595); 7/1/11—1/31/14.

- Kolker AS, Rabalais NN, **Roberts BJ**, Sammarco PW, Sinclair GA. "FSML: Acquisition of environmental chambers to examine the impacts of climate change and anthropogenic disturbance on coastal ecosystems"; NSF Division of Biological Infrastructure FSML program; \$131,076 (equipment only); 9/1/10—8/31/13.
- **Roberts BJ (PI/PD),** Middleton B (United States Geological Survey), "Effects of oiling and hydrologic remediation on baldcypress swamp elevation and ecosystem processes: RAPID proposal for the Deepwater Horizon Incident"; NSF Division of Environmental Biology (DEB- 1049838); \$163,395; 9/1/10-8/31/12.
- **Roberts BJ (PI/PD).** "REU Supplement to Effects of oiling and hydrologic remediation on baldcypress swamp elevation and ecosystem processes: RAPID proposal for the Deepwater Horizon Incident"; NSF Division of Environmental Biology (DEB- 1049838); \$7,500; 5/1/11-4/30/12.
- Sinclair GA, **Roberts BJ**, Chesney E, Rabalais NN, Sammarco P; "Enhancement of capabilities to analyze impacts of environmental change on ecosystem processes in coastal Louisiana"; LA BoR Support Fund Traditional Enhancement Program; \$78,697 (equipment only); 6/1/10—8/31/11.
- Roberts BJ (PI/PD); "Critical Biogeochemical Processes in the Atchafalaya River Delta"; LA BoR Support Fund Contract # LEQSF(2008-11)-RD-A-22, \$137,457, 6/1/08—6/30/11.
- Kolker AS, **Roberts BJ**, Sinclair GA, Rabalais NN; "Enhancing LUMCON's Ability to Measure Rates of Environmental Change Using Naturally Occurring and Anthropogenic Radionuclides"; LA BoR Support Fund Traditional Enhancement Program; \$67,047 (equipment only); 6/1/10—6/30/11.
- Sinclair GA, Rabalais NN, **Roberts BJ**, Sammarco P, Dagg M; "Enhancement of Phytoplankton Surveys in Louisiana Waters"; LA BoR Support Fund Traditional Enhancement Program; \$126,000 (equipment only); 6/1/09—8/31/10.

# 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:

70. <u>Klinges D</u>, Martin CW, **Roberts BJ**. In review. Habitat preferences of the periwinkle snail, *Littoraria irrorata*, in Louisiana salt marshes. *PeerJ*.

69. <u>McDonald AE</u>, <u>Ebinger K</u>, <u>Logarbo J</u>, Chelsky A\*, Rietl A\*, **Roberts BJ**. In review. *Geukensia granosissima* enhances Spartina alterniflora biomass and nitrogen retention in a Louisiana salt marsh. *Ecology and Evolution*.

68. <u>Logarbo JL</u>, Rossi RE\*, LaPeyre MK, **Roberts BJ**. In review. Spatial distribution and habitat association of Gulf ribbed mussels in southeast Louisiana saltmarshes. *Journal of Shellfish Research*.

67. <u>Noble A</u>, <u>Davis KM</u>, Martin CW, **Roberts BJ**. In review. Trap priority effects create biases in assessments of marsh fish assemblages. PeerJ.

66. Chelsky A\*, <u>Setta SP</u>, Bernhard AE, Giblin AE, **Roberts BJ**. In review. Spatial sampling of Louisiana salt marshes reveals distinct regional patterns in biogeochemical processes. *Estuarine, Coastal and Shelf Science*.

65. <u>Raabe JM</u>, Kurtay G, Fontenot A, Greene S, Martignette AJ, Mibrandt E, **Roberts BJ**, Stauffer BA. In review. Operation and integration of a commercially available nitrate sensor in Gulf of Mexico estuarine monitoring programs. *Frontiers in Marine Science*.

64. <u>Logarbo JL</u>, Rossi RE\*, LaPeyre MK, **Roberts BJ**. In review. Survivorship of Gulf ribbed mussels following transplantation in a Louisiana salt marsh. *Environmental Results*.

# In revision:

63. Oken KL\*, Able KW, de Mutsert K, Fodrie FJ, López-Duarte PC, Martin CW, McCann MJ\*, Olin JA, Polito MJ, Roberts BJ, Jensen OP. 2023. Fishery closures, more than predator release, increased persistence of nearshore fishes and invertebrates to the Deepwater Horizon oil spill. *Estuaries and Coasts*. Accepted pending minor revisions.

## In press:

62. Keppeler FW\*, Junker JR\*, <u>Shaw MJ, Alford SB</u>, Engel AS, Hooper-Bui LM, Jensen OP, <u>Lamb K</u>, Lopez-Duarte PC, Martin CW, <u>McDonald AM</u>, Olin JA, Paterson AT, Polito MJ, Rabalais NN, **Roberts BJ**, Rossi RE\*, Swenson EM. 2023. Can created saltmarshes match biodiversity of pre-existing ones across scales? An assessment from microbes to predators. *Ecosphere*.

61. Martin CW, McDonald AM\*, Valentine J, **Roberts BJ**. 2023. Towards relevant ecological experiments and assessments of coastal oil spill effects: insights from the 2010 Deepwater Horizon oil spill. *Frontiers in Environmental Science* 10:1092097. DOI: 10.3389/fenvs.2022.1092097.

## Published:

60. Rossi RE\*, Bourgeois C, <u>Logarbo J</u>, Schutte CA\*, **Roberts BJ**. 2022. Gulf ribbed mussels increase plant growth, primary production and soil nitrogen cycling potential in salt marshes. *Marine Ecology Progress Series*. 689: 33-46. DOI: https://doi.org/10.3354/meps14032.

59. La Peyre MK, <u>Leblanc Buie SC</u>, Rossi RE\*, **Roberts BJ**. 2022. Long term assessments are critical to determining persistence and shoreline protection from oyster reef nature-based coastal defenses. *Environmental Engineering* 178:106603. DOI: https://doi.org/10.1016/j.ecoleng.2022.106603.

58. <u>Sweet JA</u>, Bargu S, Morrison W, Parsons M, <u>Pathare MG</u>, **Roberts BJ**, Soniat TM, Stauffer BA. 2022. Trends in phytoplankton dynamics in Louisiana estuaries: building a baseline to understand current and future change. *Marine Pollution Bulletin* 175: 113344. DOI: https://doi.org/10.1016/j.marpolbul.2022.113344.

57. <u>Grow A</u>, Schutte CA\*, **Roberts BJ**. 2022. Fiddler crab burrowing increases salt marsh greenhouse gas emissions. *Biogeochemistry* 158: 73–90. DOI: https://doi.org/10.1007/s10533-021-00886-5.

56. McDonald AM\*, Martin CW, Rieucau G, **Roberts BJ**. 2022. Prior exposure to weathered oil influences foraging of an ecologically important saltmarsh resident fish. *PeerJ* 9:e12593 DOI: 10.7717/peerj.12593.

55. Jones SF\*, Schutte CA\*, **Roberts BJ**, Thorne KM. 2022. Seasonal impoundment reduces nutrient cycling but not resilience to surface fire in a tidal wetland. *Journal of Environmental Management* 303: 114153. DOI: 10.1016/j.jenvman.2021.114153.

54. Zengel S, Weaver J, Mendelssohn I, Graham S, Lin Q, Hester M, Willis J, Silliman B, Fleeger J, McClenachan G, Rabalais N, Turner RE, Hughes R, Cebrian J, Deis DR, Rutherford N, **Roberts BJ**. 2022. Meta-analysis of salt marsh vegetation impacts and recovery: a synthesis following the Deepwater Horizon oil spill. *Ecological Applications* 32(1):e02489. DOI: 10.1002/eap.2489.

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\*Editor's Choice Paper for May 2022 Issue \*\*Highlighted in Febuary 2022 Issue of Coastal & Estuarine News (CESN)

52. <u>Bickley S</u>, Helms BS, Isenberg D, Feminella JW, Roberts BJ, Griffiths NA. 2021. Lack of long-term effect of coarse woody debris dam restoration on ecosystem functioning and water quality in coastal plain streams. *Freshwater Science* 40(4): 593-607. DOI: 10.1086/717325.

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50. **Roberts BJ**, Griffiths NA, Houser JN, Mulholland PJ. 2022. Response of ecosystem metabolism to coarse woody debris additions along a catchment disturbance gradient. *Ecosystems* 25: 828-842. DOI: 10.1007/s10021-021-00687-9.

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43. Schutte CA\*, Marton JM\*, Bernhard AE, Giblin AE, Roberts BJ. 2020. No evidence for long-term impacts of oil spill contamination on salt marsh soil nitrogen cycling processes. *Estuaries and Coasts* 43: 865-879. DOI: 10.1007/s12237-020-00699-z.
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42. Kolker AS, McClure UE, Pahl J, **Roberts BJ**. 2019. Marine Science at High Tide: The impacts of rising waters on the people and places that study the sea. *ECO magazine* Sep/Oct 2019: 36-39 (article, not peer-reviewed).

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37. Kolker AS, Bargu S, Brenner J, Chu P, Conover J, De Mutsert K, Fitzpatrick C, Greenhow DR, Justic D, Lohrenz SE, Montangna PA, Snider NP, Proville J, Renfro A, Rhode R, **Roberts BJ**, Taylor CM, Walker ND, Wallace DJ. 2018. The Impacts of the Mississippi River and its Delta on the Oceanography, Ecology and Economy of the Gulf of Mexico Large Marine Ecosystem. Report available on line at:

http://mississippiriverdelta.org/files/2018/09/Known-Impacts-of-the-Mississippi-River-1.pdf

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33. Bernhardt ES, Heffernan JB, Grimm NB, Stanley EH, Harvey JW, Arroita M, Appling AP, Cohen MJ, McDowell WH, Hall Jr RO, Read JS, **Roberts BJ**, Stets EG, Yackulic CB. 2018. The Metabolic Regimes of Flowing Waters. *Limnology and Oceanography* 63(S1):S99-S118. DOI: 10.1002/lno.10726.

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19. Hooper-Bui, LM, Rabalais NN, Engel AS, Turner RE, <u>McClenachan G</u>, **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: 10.7901/2169-3358-2014.1.604.

18. Marton JM\*, **Roberts BJ**. 2014. Spatial variability of phosphorus sorption dynamics in Louisiana salt marshes. *Journal of Geophysical Research-Biogeosciences*, 119: 451–465, DOI: 10.1002/2013JG002486.

17. Rosenheim BE, <u>Roe KE</u>, **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.

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15. <u>Lutz BD</u>, 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. DOI: 10.1890/10-0899.1.

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. DOI:10.1111/j.1365-2427.2009.02309.

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.

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10. Stewart GS, Cáceres C, Beisner B, (Houser) LaFeir L, **Roberts B**, Stedmon C. 2008. Update from the ASLO Early Career Committee. *Limnology and Oceanography Bulletin* 17(2): 52-53. (Report, not peer-reviewed).

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. DOI: 10.4319/lo.2008.53.4.1217.

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. DOI: 10.1899/0887-3593(2007)26[38:EOUDAI]2.0.CO;2.

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4. **Roberts BJ**, Russ ME, Ostrom NE. 2000. Rapid and precise determination of  $\delta^{18}$ O of dissolved and gaseous di-oxygen via gas chromatography-isotope ratio mass spectrometry. *Environmental Science and Technology* 34:2337-2341. DOI: 10.1021/es991109d.

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.

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#### PROFESSIONAL AND INSTITUTIONAL SERVICE: Institutional Service

- Interim Executive Director (2022 present)
- Associate Director of Science (2017 present)
- LUMCON Management Team (2016 present)
- LUMCON REU Site Program Director (2011 present)
- LUMCON Safety Committee (2016 present)
- LUMCON Radiation Safety Officer (2009 present)
- R/V *Pelican* Radiation Safety Officer (2009 present)
- R/V *Pelican* Science Advisory Committee (2014 present)
- R/V *Pelican* Replacement Design Committee (2020 present)
- RCRV Gilbert R. Mason Leadership Committee (2019 present
- LUMCON Environmental Monitoring Committee (2007 present)
- LUMCON Diving Safety Committee, Member and Chair (2019 2020)
- LUMCON Open House Planning Committee (2008, 2010, 2012, 2014, 2018)

## **Professional Service**

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- Co-editor, Special Topic "Gulf of Mexico Estuaries: Ecology of the Nearshore and Coastal Ecosystems Impacted by the Deepwater Horizon Oil Spill" in *Frontiers in Environmental Science*, 2022-2023
- Co-Chair, Louisiana Board of Regents Maritime Task Force, 2022-present
- Member, ULM-LUMCON Institutional Animal Care and Use Committee (IACUC), 2022-present
- Member Institution Representative, Gulf of Mexico University Research Collaborative (GOMURC), 2022 present
- Member Institution Representative, National Association of Marine Laboratories (NAML), 2022 present
- Member Institution Representative, Southern Association of Marine Laboratories (SAML), 2022 present
- Lead, Proposal Team for Atchafalaya Basin to be selected as Louisiana nomination as a National Estuarine Research Reserve (NERR), 2020-2022
- Member at Large, Gulf Estuarine Research Society (GERS) executive board (regional affiliate of Coastal and Estuarine Research Federation, CERF), 2019-2021
  - Editorial Board, Coastal & Estuarine Science News (CESN), 2019 present
    - Member, CESN Redesign Subcommittee, 2020 present
- Chair, GoMRI Core Area 3 (Ecological / Ecosystem Impacts): Wetland Synthesis Working Group
- Member, Barataria-Terrebonne National Estuary Program (BTNEP) Water Quality Action Plan Team (2015 present)
- Member, Fletcher Technical Community College Coastal Advisory Board (2018 present).

- Member, Louisiana National Estuarine Research Reserve (NERR) site selection committee (2020-present)
  - Lead, Atchafalaya Basin NERR Proposal Team
- Topic Editor, Special Research Topic "Gulf of Mexico Estuaries: Ecology of the Nearshore and Coastal Ecosystems Impacted by the Deepwater Horizon Oil Spill", Frontiers in Environmental Science, 2021-2022
- Executive Steering Committee Member of Coastal Waters Consortium (BP/GoMRI consortium project studying 2010 Gulf Oil Spill), 2012-2020
- Association for the Sciences of Limnology and Oceanography (ASLO) Early Career Committee Member (2007 2013)
- Member, NEON Reaeration and Metabolism Technical Working Group, 2010-2016
- Local Organizing Committee, 2013 ASLO Aquatic Sciences Meeting in New Orleans
- 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
- Reviewer: *Journals* Biogeochemistry, Ecology, Limnology & Oceanography, L&O Methods, Ecosystems, Frontiers in Marine Science, Geochimica et Cosmochimica Acta, Estuaries and Coasts, Marine and Freshwater Research, Restoration Ecology, Aquatic Botany, Aquatic Sciences, Estuarine and Coastal Shelf Science, Journal of North American Benthological Society / Freshwater Science, Fundamental and Applied Limnology, Marine Ecology Progress Series, Deep Sea Research, Journal of Geophysical Research-Oceans, JGR-Biogeosciences, Journal of Environmental Quality, Ecosystems, Forest Ecology & Management, Aquatic Sciences, Canadian Journal of Fisheries and Aquatic Sciences, Freshwater Biology. *Proposals*—NSF Biological Oceanography, NSF DEB Ecosystem Science, NSF Hydrologic Science, NSF OCE Education, Maryland Sea Grant, Illinois Water Resources Center, DOE SBIR Hydro-biogeochemistry sensors for coastal systems program. *Panels*—Grand Canyon Research and Monitoring Center, NSF GRFP Proposal Review Panel (Ecology panel, 4 times).

# **INVITED PARTICIPANT:**

- Participant, Mississippi River Delta Transition Initiative (MRDeltaT) Meeting of Experts and end users, NAS GRP workshop, New Orleans, LA, September 2022.
- Participant and presenter, Gulf Coast Terrestrial Aquatic Interfaces: Climate Change and Disturbance Impacts Workshop, ORNL (DOE), virtual, September 2021.
- Organizer, GoMRI Synthesis Workshop: Impacts of DWH oil spill on wetland ecosystems, LUMCON, Cocodrie, LA, April 2020 (switched to virtual due to COVID)
- Co-organizer and presenter, Gulf of Mexico Regional Class Research Vessel Science Workshop, Gulfport, MS, January 2019.
- Participant and presenter, Gulf of Mexico Research Initiative (GoMRI) Synthesis Core 1 Workshop: Plume & Circulation Observations & Modeling, Tallahassee, FL, January 2019.
- Participant, Gulf of Mexico Research Initiative (GoMRI), Oil Spill Preparedness and Response Workshop, New Orleans, LA, February 2019.

- Participant, NOAA RESTORE project on the central role of the Mississippi River and its Delta on the oceanography, ecology and economy of the Gulf of Mexico working group meeting held at Tulane ByWater Institute; January 2018.
- Partipant, CWC-funded workshop on modeling marsh food webs held at Rutgers University Marine Field Station; January 2018.
- Participant and presenter, "Path towards a coastal observatory"; community-driven workshop to scope a scientific design for a large-scale, integrated coastal observatory network sponsored by NEON, Inc, Baruch Institute of Coastal Ecology and Forest Science and the Baruch Institute for Marine and Coastal Sciences; Hobcaw Barony, Georgetown, SC; May 2018.
- Participant and presenter, "Bayou Micreuxbio" Catalysis Meeting; LUMCON DeFelice Marine Center; May 2018.
- NSF GEO REU Site Program Director Workshop, Boulder CO, September 2018
- NSF GEO REU Site Program Director Workshop, Boulder CO, September 2016
- NSF GEO REU Site Program Director Workshop, 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.

# INVITED SEMINAR / PLENARY / KEYNOTE SPEAKER:

- Roberts BJ. "Ship Shoal benthic primary production responses to dredging depend on dredging depth and time since dredging completion", BOEM Biology Working Group seminar, 25 January 2023.
- Roberts BJ. "LUMCON: The Heart of Louisiana Marine Science", Barataria-Terrebonne National Estuarine Program (BTNEP) Management Conference, invited speaker, 10 November 2022.
- Roberts BJ. "Coastal ecosystem complexity and connectivity: What have we learned from the Deepwater Horizon oil spill?" LUMCON summer seminar series, 10 June 2022.
- Roberts BJ. "Coastal ecosystem complexity and connectivity: What have we learned from the Deepwater Horizon oil spill?" Old Dominion University Department of Biological Sciences seminar, 25 February 2022.

- Roberts BJ. "Coastal ecosystem complexity and connectivity: What have we learned from the Deepwater Horizon oil spill?" University of Louisiana-Lafayette Department of Biology seminar, 27 January 2022.
- Roberts BJ. "What is LUMCON?" and "Coastal ecosystem complexity and connectivity: What have we learned from the Deepwater Horizon Oil Spill?" Northwestern State University (NSULA) Biology seminar, 5 November 2021.
- Roberts BJ. "Climate and disturbance controls on biogeochemistry and microbial ecology at the terrestrial-aquatic interface in Louisiana coastal wetlands", Gulf Coast Terrestrial Aquatic Interfaces Workshop: Climate Change and Disturbance Impacts, ORNL sponsored workshop, 2-3 September 2021.
- Roberts BJ "Coastal ecosystem complexity and connectivity: What have we learned from the Deepwater Horizon Oil Spill?" LUMCON REU Program Science Talk, 11 June 2021.
- Roberts BJ "Coastal ecosystem complexity and connectivity: What have we learned from the Deepwater Horizon Oil Spill?" LUMCON Science Talk, 1 October 2020.
- Roberts BJ. "Carbon, Oxygen, and Nutrient Cycling in the Atchafalaya River Delta Estuary and the Louisiana-Texas Shelf: Lessons learned from studying Hypoxia, Ocean Acidification, and Hurricanes"; Seminar to the Division of Marine Science at the Stennis Space Center campus of the University of Southern Mississippi; October 2018.
- Roberts BJ. "So you think I am a biogeochemist?"; LUMCON Seminar Series; July 2018
- Roberts BJ. "An integrative approach to transform our collective understanding in a coastal observatory network"; Path Towards a Coastal Observatory Workshop; Hobcaw Barony, Georgetown, SC; May 2018.
- Roberts BJ. "Why Microbial Ecologists should play with Biogeochemists (and vice versa)"; LUMCON Bayou Micreaubio Catalysis Meeting; May 2018
- Roberts BJ. "Louisiana salt marsh biogeochemistry and microbial community dynamics following the Deepwater Horizon oil spill"; Water Institute of the Gulf Invited Seminar; April 2018
- Roberts BJ. "Incorporating Life Into Living Shorelines: Can Gulf Ribbed Mussels Reduce Shoreline Erosion and Enhance Restoration Practices?"; 185th Louisiana Sea Grant Marine Extension Project Quarterly Meeting; Baton Rouge, LA; April 2018.
- Roberts BJ. "Louisiana salt marsh biogeochemistry and microbial community dynamics following the Deepwater Horizon oil spill"; University of Louisiana at Lafayette Department of Biology Seminar Series; March 2018.
- Roberts BJ. "Louisiana salt marshes and the Deepwater Horizon oil spill"; LUMCON Summer Seminar Series; June 2016
- Roberts BJ. "Louisiana salt marsh biogeochemistry and microbial community dynamics following the Deepwater Horizon oil spill"; Marine Biological Laboratory Ecosystem Center Seminar Series; October 2016
- Roberts BJ "Louisiana salt marsh biogeochemistry and microbial community dynamics following the Deepwater Horizon oil spill"; Seminar to the Division of Marine Science at the Stennis Space Center campus of the University of Southern Mississippi; November 2015.
- Roberts BJ "Louisiana salt marsh biogeochemistry and microbial community dynamics following the Deepwater Horizon oil spill"; "Impacts of DWH on Wetlands in the Gulf of

Mexico" workshop presentation, sponsored by Gulf of Mexico Research Initiative and Gulf of Mexico Sea Grant, Slidell, LA.

- Roberts BJ. "Louisiana salt marsh biogeochemistry and microbial community dynamics following the Deepwater Horizon oil spill"; Baruch Marine Field Laboratory and University of South Carolina (via video connection); invited speaker, October 2014
- Roberts BJ. "The Effects of the Macondo Oil Spill on wetland biogeochemistry and microbial ecology"; 2014 LUMCON Summer Seminar Series; July 2014
- Roberts BJ. "Gulf of Mexico Hypoxia, A.K.A. "The Dead Zone""; The Wetlands Initiative, Annual Meeting Keynote speaker, Chicago, IL, October 2013
- Roberts BJ. "Carbon, Oxygen, and Nutrient Cycling in the Atchafalaya River Delta Estuary and the northern Gulf of Mexico hypoxic zone"; 2013 LUMCON Summer Seminar Series; July 2013
- Roberts BJ. "Spatial and Temporal Patterns in Carbon, Oxygen, and Nutrient Cycling in the Atchafalaya River Delta Estuary and the northern Gulf of Mexico hypoxic zone"; Connecticut College, Biology Department Seminar, 28 February 2013
- Roberts BJ. "What is hypoxia and why should we care about it?" Connecticut College "Ripple Effect" Panel Presentation, 28 February 2013.
- Roberts BJ. "Spatial and Temporal Patterns in Carbon, Oxygen, and Nutrient Cycling in the northern Gulf of Mexico hypoxic zone"; Invited speaker; 3rd Annual Hypoxia Coordination Workshop, Bay St. Louis, MS, 27 March 2012
- Roberts BJ (invited speaker). MIND Alliance Career Fair, Southern University and A&M College, 24 February 2012
- Roberts BJ. (keynote address). "Human activities in the Mississippi-Atchafalaya Rivers Watershed: impacts on the Atchafalaya River Delta Estuary and the northern Gulf of Mexico "Dead Zone", MIND Alliance in Science, Technology, Engineering, and Mathematics (STEM) Annual Conference, "Broadening the Pathways to STEM Careers for Minority Students with Disabilities", Baton Rouge, LA, 30 October 2009
- Roberts BJ. "Ecosystem metabolism and nutrient cycling along the aquatic continuum from headwater streams to the ocean", Tulane University, Department of Ecology & Evolutionary Biology, 13 Nov 2009
- Roberts BJ. "Ecosystem metabolism and nutrient cycling along the aquatic continuum from headwater streams to the ocean", Tulane University, Department of Earth & Environmental Sciences, 10 October 2008
- Roberts BJ. "Ecosystem metabolism and nutrient cycling along the aquatic continuum from headwater streams to the ocean", Nicholls State University, Department of Biological Sciences, 22 September 2008
- Roberts BJ. "Ecosystem metabolism and nutrient cycling along the aquatic continuum from headwater streams to the ocean", Louisiana State University-Baton Rouge, 15 February 2008
- Roberts BJ. "Ecosystem metabolism in diverse aquatic ecosystems: case studies from streams, lakes, and the Caribbean Sea", Louisiana Universities Marine Consortium, 16 March 2007.

- Roberts BJ. "Nutrient cycling and ecosystem metabolism in headwater streams: the importance of catchment influences and in-stream controls", Illinois Natural History Survey, 9 March 2007.
- Roberts BJ. "Multiple scales of temporal variability in ecosystem metabolism rates: results from multiple years of continuous monitoring in a forested headwater stream", Franklin and Marshall College, Department of Biological Sciences, 17 January 2007
- Roberts, BJ. "Nutrient cycling and ecosystem metabolism in headwater streams: the importance of catchment influences and in-stream controls", Texas State University, Department of Biological Sciences, 14 November 2006.
- Roberts BJ. "Controls on respiration rates in diverse aquatic ecosystems", University of Georgia, Department of Marine Sciences, November 2004
- Roberts BJ. "Gross carbon and oxygen cycling in aquatic ecosystems: Insights gained from oxygen stable isotope studies", Virginia Tech University, Department of Biological Sciences, October 2004.
- Roberts BJ. "Assessing diel respiration in pelagic ecosystems using oxygen stable isotopes: When do the highest rates occur and who is respiring under different light and nutrient regimes?", Princeton University, Department of Geosciences, 14 November 2002.

# CONTRIBUTED TALKS AND POSTERS AT SCIENTIFIC MEETINGS:

235. <u>Chapman ST</u>, LeBlanc C, Nelson J, **Roberts BJ**, Polito MJ. 2022. Application of unmanned aerial systems and imagery analysis in classifying coastal marsh vegetation and habitat, 2022 Restore America's Estuaries (RAE) Coastal & Estuarine Summit, New Orleans, LA (poster)

234. <u>Davis K</u>, <u>Noble A</u>, Martin CW, **Roberts BJ**. 2022. Trap priority effects create biases in assessments of marsh fish assemblages, 2022 Gulf Estuarine Research Society (GERS) Meeting, Ocean Springs, MS (poster)

233. <u>Heines RC</u>, Junker JR\*, Lopez-Duarte PC, Polito MJ, Martin CW, **Roberts BJ**, Olin JA. 2022. Resource partitioning among sympatric species across saltmarsh ponds of coastal Louisiana, 2022 Gulf Estuarine Research Society (GERS) Meeting, Ocean Springs, MS (poster)

232. <u>Chapman ST</u>, LeBlanc C, Nelson J, **Roberts BJ**, Polito MJ. 2022. Application of unmanned aerial systems and imagery analysis in classifying coastal marsh vegetation and habitat, 2022 Gulf Estuarine Research Society (GERS) Meeting, Ocean Springs, MS (oral)

231. <u>Douwes AA</u>, Nelson JA, **Roberts BJ**. 2022. Assessment of the impacts of dredging activities on sand shoal benthic primary production, 2022 Gulf Estuarine Research Society (GERS) Meeting, Ocean Springs, MS (oral)

230. <u>Foster EM</u>, **Roberts BJ**, Nelson JA. 2022. Assessing the impacts of sand dredging for coastal restoration on sand shoal food webs, 2022 Gulf Estuarine Research Society (GERS) Meeting, Ocean Springs, MS (oral)

229. Junker J\*, Lopez-Duarte P, Martin CW, **Roberts BJ**, Jensen O, Polito M, Swenson E, Olin J. 2022. Species- and community-level drivers of spatiotemporal variation in nekton biomass of saltmarsh ponds, 2022 Gulf Estuarine Research Society (GERS) Meeting, Ocean Springs, MS (oral)

228. <u>Liner SR</u>, **Roberts BJ**, Lavaud R\*, La Peyre J, La Peyre M. 2022. Tolerance of the Gulf ribbed mussel (G. granosissimma) to acclimated and acute thermal stress, 2022 Gulf Estuarine Research Society (GERS) Meeting, Ocean Springs, MS (oral) *(Won outstanding undergraduate student presentation award)*.

227. <u>Chapman SC</u>, LeBlanc C, Nelson J, **Roberts BJ**, Polito MJ. 2022. Potential use of unmanned aerial systems and imagery analysis to classify coastal marsh vegetation and habitat, 2022 Gulf of Mexico Conference (GoMCoN), New Orleans, LA (poster)

226. Junker JR\*, López-Duarte PC, Keppeler FW\*, Martin CW, Jensen OP, Fodrie FJ, **Roberts BJ**, Able K, Polito MJ, Turner RE, Olin JA. 2022. Energy channel specificity and trophic complementarity in a saltmarsh meta-food web, 2022 Gulf of Mexico Conference (GoMCoN), New Orleans, LA (oral)

225. Keppeler FW\*, Olin JA, López-Duarte PC, Polito MJ, Hooper-Bui LM, Taylor SS, Rabalais NN, Fodrie FJ, **Roberts BJ**, Turner RE, Martin CW, Jensen OP. 2022. Body size, trophic position, and the coupling of different energy pathways across a saltmarsh landscape, 2022 Gulf of Mexico Conference (GoMCoN), New Orleans, LA (oral)

224. Keppeler FW\*, Junker JR\*, <u>Shaw MJ</u>, Engel AS, Martin CW, **Roberts BJ**, Rabalais NN, Hooper-Bui LM, López-Duarte PC, Polito MJ, Olin JA, Jensen OP. 2022. Created coastal marshes have equivalent diversity to natural coastal marshes: A case study from Louisiana, 2022 Gulf of Mexico Conference (GoMCoN), New Orleans, LA (poster)

223. López-Duarte PC, Polito MJ, Swenson EM, **Roberts BJ**. 2022. Can Restored Marshes Support Similar Macroinvertebrate Communities to Natural References?, 2022 Gulf of Mexico Conference (GoMCoN), New Orleans, LA (poster)

222. Martin CW, McDonald A\*, Rieucau G, **Roberts BJ**. 2022. Sublethal effects of oil exposure on animal behavior: experiments highlight alterations to marsh fish ecology, 2022 Gulf of Mexico Conference (GoMCoN), New Orleans, LA (poster)

221. Moyo S\*, <u>Bennadji H</u>, Johnson J, López-Duarte PC, Olin JA, Martin CW, Hooper-Bui LM, Jensen OP, **Roberts BJ**, Polito MJ. 2022. Salinity changes shape the relative importance of different organic matter sources in saltmarsh food webs, 2022 Gulf of Mexico Conference (GoMCoN), New Orleans, LA (oral)

220. <u>O'Nuanain A, Benelli A, Winston J</u>, Swenson E, López-Duarte P, **Roberts BJ**, Polito MJ. 2022. Decomposition Rates of Spartina alterniflora in Coastal Louisiana Natural and Created Brackish Marshes Influenced by a Freshwater Siphon, 2022 Gulf of Mexico Conference (GoMCoN), New Orleans, LA (poster)

219. Polito MJ, <u>Brahana P</u>, <u>Lamb K</u>, López-Duarte PC, Olin JA, **Roberts BJ**, Moyo S\*. 2022. Ontogeny and marsh restoration status influence the trophic ecology of Gulf Killifish (Fundulus grandis) in coastal Louisiana, 2022 Gulf of Mexico Conference (GoMCoN), New Orleans, LA (oral)

218. **Roberts BJ**. 2022. A holistic overview of the direct, indirect, and interactive impacts of the Deepwater Horizon oil spill on coastal wetlands, 2022 Gulf of Mexico Conference (GoMCoN), New Orleans, LA (oral)

217. <u>Labossiere A</u>, Bowles MW, **Roberts BJ**. 2022. The influence of a warming Arctic on the relationship between terrestrial and marine productivity. 2022 Association of Limnologists and Oceanographers Ocean Sciences Meeting, virtual (oral).

216. Holmquist JR, <u>Koontz E</u>, Megonigal JP, Noyce G, **Roberts BJ**, Oikawa P, <u>Vahsen M</u>, Windham-Myers L. 2021. Spatial Variability in Coastal Wetland Porewater Methane Concentration and Associated Environmental Covariates. 2021 American Geophysical Union Annual Meeting, New Orleans, LA (oral)

215. Engel AS, Paterson AT, **Roberts BJ**. 2021. Belowground microbial ecosystems and aboveground vegetation associations at recently created tidal marshes differ from nearby natural marshes in Plaquemines Parish, Louisiana. 2021 American Geophysical Union Annual Meeting, New Orleans, LA (poster).

214. <u>Gartelman A</u>, Xu K, Nelson J, **Roberts BJ**, Moran K. 2021. Morphologic Evolution and Sediment Transport of Offshore Sandy Dredge Pits. 2021 American Geophysical Union Annual Meeting, New Orleans, LA (poster).

213. Jones SF\*, Casazza ML, Janousek CN, **Roberts BJ**, Schutte C, Takekawa JY, Thorne KM. 2021. Seasonal impoundment of brackish tidal wetlands in a Mediterranean-type climate: implications for ecosystem function. 2021 Coastal and Estuarine Research Federation Bi-Annual Meeting.

212. Brown LN\*, Rossi R\*, Hill TD\*, Jones SF\*, **Roberts BJ**. 2021. Oiling Intensity Affects Spartina alterniflora Aboveground Biomass in a Mesocosm Setting. 2021 Coastal and Estuarine Research Federation Bi-Annual Meeting.

211. <u>Sweet JA</u>, Bargu S, Morrison WL, Parsons M, <u>Pathare MG</u>, **Roberts BJ**, Soniat TM, Stauffer BA. 2021. Phytoplankton dynamics in Louisiana estuaries: building a baseline to understand current and future change. 2021 Coastal and Estuarine Research Federation Bi-Annual Meeting.

210. Kolker AS, Emery-McClure U, Pahl J, **Roberts BJ**, McClain C. 2021. Grappling With Sea Level Rise At LUMCON's Defelice Marine Center. 2021 Coastal and Estuarine Research Federation Bi-Annual Meeting.

209. **Roberts BJ**, Rossi R\*, Schutte C\*, Bernhard A, Giblin A, Overton E, Basirico L, Goetterrt D, Rabalais N. 2021. Oiling impacts on salt marsh ecosystem processes: Insights from a large-scale marsh mesocosm experiment; 2021 State of the Coast Conference; June 2021; virtual recorded presentation with live panel discussion

208. Jones SF\*, Schutte C\*, **Roberts BJ**, Thorne KM. Coastal wetland soil nitrogen concentrations and process rates respond to management history and fire disturbance. 2020 American Geophysical Union (AGU) Fall Meeting, virtual poster presentation and discussion.

207. <u>LeBlanc SC</u>, Rossi RE\*, **Roberts BJ**, La Peyre MK. 2020. Development and Sustainability of Ecosystem Services for Restored Oyster Reefs in Louisiana; Gulf Estuarine Research Society (GERS) Virtual Meeting; Nov 2020; recorded oral presentation

206. <u>Logarbo J</u>, Rossi RE\*, La Peyre MK, **Roberts BJ**. 2020. Examining Potential Drivers of Gulf Ribbed Mussel Distribution in Southeast Louisiana; Gulf Estuarine Research Society (GERS) Virtual Meeting; Nov 2020; recorded oral presentation

205. <u>Benelli AO</u>, <u>Lamb KJ</u>, Swenson EM, Lopez-Duarte P, **Roberts BJ**, Polito MJ. 2020. Decomposition Rates of Spartina alterniflora in Coastal Louisiana Natural and Created Marshes; Gulf Estuarine Research Society (GERS) Virtual Meeting; Nov 2020; recorded oral presentation *(Won outstanding undergraduate student presentation award)*.

204. <u>Barnes A</u>, Rossi R\*, Schutte CA\*, **Roberts BJ**. 2020. The impact of oil contamination on denitrification rates in salt marsh soils; Ocean Sciences Meeting; San Diego, CA; Feb 2020; poster presentation

203. Lehrter J, Devereux R, **Roberts BJ**, Cai W-J. 2020. Temporal and spatial variability of carbon, oxygen, and nutrient sediment fluxes on a river dominated shelf; Ocean Sciences Meeting; San Diego, CA; Feb 2020; poster presentation

202. Cai W-J, Jiang Z-P, Wang H, Li Q, Scaboo EM, Hussain N, Chen B, Fennel K, Laurent A, Lehter J, **Roberts B**, Maiti K, Rabalais N. 2020. Physical and biogeochemical controls on O2, CO2 and pH in the northern Gulf of Mexico: A synthesis of field research between 2006 and 2018; Ocean Sciences Meeting; San Diego, CA; Feb 2020; oral presentation

201. **Roberts BJ**, Schutte CA\*, Rossi R\*, Bernhard AE, Giblin AE, Overton E, Basirico L, Goettert D, Rabalais NN. 2020. Oiling impacts on salt marsh ecosystem processes: Insights from a large-scale salt marsh mesocosm experiment; Gulf of Mexico Oil Spill and Ecosystem Science Conference; Tampa, FL; Feb 2020; poster presentation

200. Rabalais NN, **Roberts BJ**, Justić D, Turner RE, Morrison W. 2020. [(26+23+(22+6)]PIs[(7+15+8)PDoc] + [20+10+10)PhD] + [(14+8+5)MS] + [(26+50+13)UG] + [(8+10+7)REU)] =CWC-I+CWC-II+CWC-III = A LOT.; invited presentation in Special Session "Taking Stock: Capacity building and the successes of advanced academic scholarship, professional training, and interdisciplinary mentoring through the Gulf of Mexico Research Initiative"; Gulf of Mexico Oil Spill and Ecosystem Science Conference; Tampa, FL; Feb 2020; poster presentation

199. **Roberts BJ**, Schutte CA\*, Rossi RE\*, Bernhard AE, Giblin AE. 2019. Oiling Impacts on Salt Marsh Nitrogen Cycling Rates: Insights From a Large-Scale Marsh Mesocosm Experiment. American Geophysical Union Annual Meeting, San Francisco, CA, Dec 2019 (oral).

198. Schutte CA\*, Rossi RE\*, Jones SF\*, **Roberts BJ**. 2019. Salt Marsh Primary Production and Greenhouse Gas Fluxes Along an Experimental Oil-Exposure Gradient. American Geophysical Union Annual Meeting, San Francisco, CA, Dec 2019 (poster).

197. <u>Logarbo JR</u>, <u>LeBlanc SC</u>, Rossi RE\*, La Peyre M, **Roberts BJ**. 2019. Enhancing Living Shoreline Restoration Practices Using Native Ecosystem Engineers: *Geukensia granisossima* and *Spartina alterniflora*. Coastal Estuarine Research Federation Conference, Mobile, AL Nov 2019 (poster).

196. <u>Lamb K</u>, Lopez-Duarte P, Olin JA, Martin CW, **Roberts BJ**, Swenson E, Polito MJ. 2019. Evaluating Trophic Structure and Carbon Dynamics of Created Coastal Marsh Ecosystems with Stable Isotopes. Coastal Estuarine Research Federation Conference, Mobile, AL Nov 2019 (poster).

195. Rossi RE\*, Bourgeois C, Logarbo JR, Schutte CA\*, **Roberts BJ**. 2019. Gulf Ribbed Mussels Increase Saltmarsh Cordgrass Growth and Primary Production by Increasing N Availability. Coastal Estuarine Research Federation Conference, Mobile, AL Nov 2019 (oral). 194. Lehrter JC, Cai W-J, Maiti K, **Roberts BJ**, Hussain N\*, Chen B\*, <u>Qian L</u>, <u>Fung M</u>, Chelsky A\*, <u>Bam W</u>. 2019. Hurricane Harvey and Nate Impacts on Coastal Carbon and Oxygen Cycling. Coastal Estuarine Research Federation Conference, Mobile, AL Nov 2019 (oral).

193. Hooper-Bui LM, Strecker RM, Smith C, Gordon H, Polito MJ, Martin CW, Engel A, Swenson E, Lopez-Duarte P, Jenson OP, Rabalais NN, **Roberts BJ**. 2019. Insect and Spider Diversity in Restored and Natural Saltwater Marshes. Coastal Estuarine Research Federation Conference, Mobile, AL Nov 2019 (oral).

192. Martin CW, Able KW, Christian RR, Fodrie J, Jensen OP, Lewis KA, Lopez-Duarte P, McDonald A, Oken K, Olin JA, **Roberts BJ**, Valentine JF. 2019. Nine Years After Deepwater Horizon, What Have We Learned About Nearshore Fishes? Coastal Estuarine Research Federation Conference, Mobile, AL Nov 2019 (oral).

191. **Roberts BJ**, Schutte CA\*, Rossi RE\*, Bernhard AE, Giblin AE. 2019. Oiling Impacts on Salt Marsh Nitrogen Cycling Rates: Insights From a Large-Scale Marsh Mesocosm Experiment." Coastal Estuarine Research Federation Conference, Mobile, AL Nov 2019 (oral).

190. Schutte CA\*, Rossi RE\*, Jones SF\*, **Roberts BJ**. 2019. Salt Marsh Primary Production and Greenhouse Gas Fluxes Along an Experimental Oil-Exposure Gradient. Coastal Estuarine Research Federation Conference, Mobile, AL Nov 2019 (oral).

189. Bernhard AE, Giblin AE, **Roberts BJ**. 2019. Comammox Bacteria May Explain Regional Variation in Salt Marsh Nitrification Rates. ASM Annual Meeting, June 2019 (oral).

188. Jones SF\*, Schutte CA\*, **Roberts BJ**, Thorne K. 2019. Initial responses of Suisun Marsh brackish wetlands to fire disturbance. SWS Annual Meeting, May 2019. (oral)

187. <u>Agosto Shaw KL</u>, Rossi RE\*, **Roberts BJ**. 2019. Fungal Pathogen Presence and Diversity of Four Salt Marsh Plants in Louisiana. Association of Limnologists and Oceanographers (ASLO) Conference, San Juan, Puerto Rico, February 2019. (poster)

186. **Roberts BJ**, Schutte CA\*, Rossi RE\*, Jones SF\*, Bernhard AE, Giblin AE, Overton E, Rabalais NN. 2019. A Large-Scale Salt Marsh Mesocosm Facility to Test the Effects of Disturbances on Wetland Ecosystem Processes. Gulf of Mexico Oil Spill and Ecosystem Sciences (GoMOSES) Conference, New Orleans, LA, February 2019. (poster)

185. Engel AS, Paterson AT, **Roberts BJ**, Martin CW, Jensen O, López-Duarte P, Olin J, Hooper-Bui L, Rabalais NN, Swenson E, Polito MJ. 2019. Addition of Microbial Community Composition in the Evaluation of Habitat Suitability for Tidal Marsh Restoration Projects: A Case Study from the Lake Hermitage Marsh Creation Project, Plaquemines Parish, Louisiana. Gulf of Mexico Oil Spill and Ecosystem Sciences (GoMOSES) Conference, New Orleans, LA, February 2019. (poster)

184. <u>Grow AK</u>, Schutte CA\*, Jones SF\*, **Roberts BJ**. 2019. Fiddler Crab Burrowing and Oil Pollution Alter Greenhouse Gas Fluxes From Salt Marsh Soil. Gulf of Mexico Oil Spill and Ecosystem Sciences (GoMOSES) Conference, New Orleans, LA, February 2019. (poster)

183. Rossi RE\*, Hill TD, **Roberts BJ**. 2019. Seasonal and Annual Variation in Allometry and Primary Production in *Spartina alterniflora*. Gulf of Mexico Oil Spill and Ecosystem Sciences (GoMOSES) Conference, New Orleans, LA, February 2019. (oral)

182. Jensen O, Oken K\*, DeMutsert K, Fodrie J, López-Duarte P, Martin C, McCann M\*, Olin J, Polito M, **Roberts BJ**. 2019. Why Were Saltmarsh Fish and Invertebrates so Resilient to the Deepwater Horizon Oil Spill? Gulf of Mexico Oil Spill and Ecosystem Sciences (GoMOSES) Conference, New Orleans, LA, February 2019. (oral)

181. <u>Agosto Shaw KL</u>, Rossi RE\*, **Roberts BJ**. 2019. Fungal Pathogen Presence and Diversity of Four Salt Marsh Plants in Louisiana. Gulf of Mexico Oil Spill and Ecosystem Sciences (GoMOSES) Conference, New Orleans, LA, February 2019. (poster)

180. <u>Leavett H</u>, Jones SF\*, Rossi RE\*, Schutte CA\*, **Roberts BJ**. 2019. Diel Variation in Carbon Fluxes and Photosynthetic Efficiency in Salt Marsh Ecosystems. Gulf of Mexico Oil Spill and Ecosystem Sciences (GoMOSES) Conference, New Orleans, LA, February 2019. (poster)

179. Martin CW, Engel A, Hooper-Bui L, Jensen O, López-Duarte P, Olin J, Polito M, Rabalais NN, **Roberts BJ**, Swenson E. 2019. Effects of River Diversions, Restoration, and Salinity on Nekton Community Structure in Southeast Louisiana Marshes. Gulf of Mexico Oil Spill and Ecosystem Sciences (GoMOSES) Conference, New Orleans, LA, February 2019. (poster)

178. Olin J, López-Duarte P\*, Able K, Fodrie J, Jensen O, Martin C, Polito M, **Roberts BJ**. 2019. Characterizing Energy Sources to the Saltmarsh Food Web Along the Salinity Gradient. Gulf of Mexico Oil Spill and Ecosystem Sciences (GoMOSES) Conference, New Orleans, LA, February 2019. (poster)

177. Schutte CA\*, Rich M, Sullivan H, <u>Bledsoe R</u>, <u>Dawson M</u>, <u>Donnelly B</u>, Marton JM\*, **Roberts BJ**. 2019. Spatial Patterns in Soil Biogeochemical Process Rates Along a Wetland Salinity Gradient. Gulf of Mexico Oil Spill and Ecosystem Sciences (GoMOSES) Conference, New Orleans, LA, February 2019. (poster)

176. <u>Winston J</u>, <u>Boardman E</u>, **Roberts BJ**, Polito MJ. 2019. Invertebrate Community Composition and Organic Matter Decomposition in Created and Natural Brackish Marshes in Coastal Louisiana. Gulf of Mexico Oil Spill and Ecosystem Sciences (GoMOSES) Conference, New Orleans, LA, February 2019. (poster)

175. <u>Scheuermann RP</u>, Nunnally CC, **Roberts BJ**. 2019. Temporal and Spatial Abundance and Distribution of Epibenthic Macroinvertebrates in *Spartina alterniflora* Salt Marshes. Gulf of Mexico Oil Spill and Ecosystem Sciences (GoMOSES) Conference, New Orleans, LA, February 2019. (poster)

174. <u>Agosto Shaw KL</u>, Rossi RE\*, **Roberts BJ**. 2019. Fungal Pathogen Presence and Diversity of Four Salt Marsh Plants in Louisiana. Association of Limnologists and Oceanographers (ASLO) Conference, San Juan, Puerto Rico, February 2019. (poster)

173. **Roberts BJ**, Schutte CA\*, Rossi R\*, Jones S\*, Bernhard AE, Giblin AE, Overton EB, Rabalais NN. 2018. A Large-Scale Salt Marsh Mesocosm Facility to Test the Effects of Disturbances on Wetland Ecosystem Processes (poster); American Geophysical Union (AGU) Conference; Washington, D.C.; Dec 2018.

172. Li Q\*, Cai W-J, **Roberts BJ**, <u>Hussain N</u>, <u>Xu Y</u>, <u>Scaboo M</u>, Kelly B. 2018. Enhanced Oxygen Consumption and Carbonate Dynamics Induced by Subsurface Turbidity Currents after

Hurricane Nate (oral); American Geophysical Union (AGU) Conference; Washington, D.C.; Dec 2018.

171. Maiti K, <u>Bam W</u>, Lehrter JC, <u>Fung M</u>, Cai W-J, Li Q\*, Chen B\*, **Roberts BJ**, Lohrenz SE, Chakraborty S. 2018. Impact of Named Tropical Storms on Sediment Transport and Coastal Biogeochemistry Along the Louisiana-Texas Shelf in the Northern Gulf of Mexico (oral); American Geophysical Union (AGU) Conference; Washington, D.C.; Dec 2018.

170. Schutte C\*, Rich MW, Marton J\*, Sullivan HL, <u>Bledsoe R, Dawson M, Donnelly B</u>, **Roberts BJ**. 2018. Spatial Patterns in Soil Biogeochemical Process Rates Along a Wetland Salinity Gradient (oral); American Geophysical Union (AGU) Conference; Washington, D.C.; Dec 2018.

169. **Roberts BJ**, Jones S\*, <u>Leavett H</u>, Rossi R\*, Schutte C\*. 2018. Diel variation in carbon fluxes and photosynthetic efficiency in salt marsh ecosystems (oral); Gulf Estuarine Research Society (GERS) Conference; Galveston, TX; Nov 2018.

168. Rossi RE\*, <u>Agosto Shaw KL</u>, **Roberts BJ**. 2018. Fungal pathogen presence and diversity of four salt marsh plants in Louisiana (oral); Gulf Estuarine Research Society (GERS) Conference; Galveston, TX; Nov 2018.

167. Schutte CA\*, <u>Grow A</u>, Jones S\*, **Roberts BJ**. 2018. Fiddler crab burrowing and oil pollution alter greenhouse gas fluxes from salt marsh soil (oral); Gulf Estuarine Research Society (GERS) Conference; Galveston, TX; Nov 2018.

166. Bernhard AE, Giblin AE, **Roberts BJ**. 2018. Multiple Factors Drive Patterns of Ammonia-Oxidizing Communities in Louisiana Salt Marshes (oral); American Society of Microbiology (ASM) Conference; June 2018.

165. Chelsky A\*, Bernhard AE, Giblin AE, **Roberts BJ**. 2018. High spatial variability in biogeochemical rates and microbial communities across Louisiana salt marsh landscapes (oral). State of the Coast Conference; New Orleans, LA; May 2018

164. <u>Logarbo J</u>, <u>McDonald A</u>, <u>Ebinger K</u>, Chelsky A\*, Rietl A\*, **Roberts BJ**. 2018. Incorporating *Geukensia granosissima* into living shoreline restoration in *Spartina alterniflora* dominated Louisiana salt marshes (poster); State of the Coast Conference; New Orleans, LA; May 2018.

163. <u>Scheuermann RP</u>, Nunnally CC, **Roberts BJ**. 2018. Epifaunal abundance and diversity in *Spartina alterniflora* marshes (poster); State of the Coast Conference; New Orleans, LA; May 2018.

162. Schutte CA\*, Marton JM\*, Chelsky A\*, Bernhard AE, Giblin AE, **Roberts BJ**. 2018. Long-term impact of oiling on salt marsh nitrogen cycling processes (oral); State of the Coast Conference; New Orleans, LA; May 2018.

161. Chelsky A\*, Bernhard AE, Giblin AE, **Roberts BJ**. 2018. Spatial variability in rates of nutrient cycling across Louisiana salt marsh landscapes (oral); Virginia Association of Wetland Professionals Spring Meeting; Norfolk, VA; May 2018.

160. Chelsky A\*, **Roberts BJ**. 2018. Nitrogen cycling in salt marsh landscapes (oral); San Francisco Estuary Institute; San Francisco, CA; May 2018.

159. **Roberts BJ**. 2018. Controls on Louisiana wetland soil greenhouse gas fluxes (oral); Gulf of Mexico Oil Spill and Ecosystem Science (GoMOSES) Conference; New Orleans, LA; February 2018.

158. Bernhard AE, Giblin AE, **Roberts BJ**. 2018. Biogeography of Salt Marsh Ammonia Oxidizers: Comparisons between Gulf of Mexico and New England Marshes (oral); Gulf of Mexico Oil Spill and Ecosystem Science (GoMOSES) Conference; New Orleans, LA; February 2018.

157. Chelsky A\*, Bernhard AE, Giblin AE, **Roberts BJ**. 2018. High spatial variability in biogeochemical rates and microbial communities across Louisiana salt marsh landscapes (oral); Gulf of Mexico Oil Spill and Ecosystem Science (GoMOSES) Conference; New Orleans, LA; February 2018.

156. Kelly B, Chelsky A\*, Bulygina E, **Roberts BJ**. 2018. [DOC] dynamics and using CDOM to predict [DOC] in the northern Gulf of Mexico before and during the 2018 hurricane season (poster); Gulf of Mexico Oil Spill and Ecosystem Science (GoMOSES) Conference; New Orleans, LA; February 2018.

155. Lopez-Duarte PC, Able KW, Fodrie FJ, Hooper-Bui LM, Jensen OP, Olin JA, Martin CM, Polito MJ, **Roberts BJ**, Stouffer PC. 2018. Evaluating Trophic Relationships in a Saltmarsh Food Web using Stable Isotopes (oral); Gulf of Mexico Oil Spill and Ecosystem Science (GoMOSES) Conference; New Orleans, LA; February 2018.

154. <u>McDonald A</u>, <u>Ebinger K</u>, <u>Logarbo J</u>, Chelsky A\*, Rietl A\*, **Roberts BJ**. 2018. The effects of *Geukensia granosissima* on *Spartina alterniflora* and nitrogen cycling in a Louisiana salt marsh (poster); Gulf of Mexico Oil Spill and Ecosystem Science (GoMOSES) Conference; New Orleans, LA; February 2018.

153. Olin JA, Able KW, Fodrie FJ, Hooper-Bui LM, Jensen OP, Lopez-Duarte PC, Martin CM, Polito MJ, **Roberts BJ**, Taylor SS. 2018. Evaluating Trophic Relationships in a Saltmarsh Food Web using Fatty Acids (oral); Gulf of Mexico Oil Spill and Ecosystem Science (GoMOSES) Conference; New Orleans, LA; February 2018.

153. Oken K\*, Jensen O, DeMutsert K, Fodrie J, López-Duarte P, Martin C, McCann M\*, Olin J, Polito M, **Roberts BJ**. 2018. Why were saltmarsh species assemblages so resilient to the Deepwater Horizon oil spill? (oral); Gulf of Mexico Oil Spill and Ecosystem Science (GoMOSES) Conference; New Orleans, LA; February 2018.

152. Rietl A\*, Hill TD\*, Chelsky A\*, **Roberts BJ**. 2018. A Three Year Record of Biomass and Primary Production of Four Dominant Salt Marsh Plant Species in Coastal Louisiana (oral); Gulf of Mexico Oil Spill and Ecosystem Science (GoMOSES) Conference; New Orleans, LA; February 2018.

151. Lehrter J, Cai W-J, Chen B\*, Jiang Z-P\*, **Roberts BJ**, Chelsky A\*, Maiti K, <u>Bam W</u>, Chakraborty S, Lohrenz S. 2018. Hurricane Impacts on Coastal Carbon and Oxygen Cycling (oral); 2018 Ocean Sciences Meeting; Portland, OR; February 2018.

150. **Roberts BJ**, Chelsky A\*, Bernhard AE, Giblin AE. 2017. High spatial variability in biogeochemical rates and microbial communities across Louisiana salt marsh communities. 2017 AGU Fall Meeting, December 2017, New Orleans, LA (oral)

149. Kelly B, Chelsky A\*, Bulygina E, **Roberts BJ**. 2017. Predicting [DOC] from CDOM absorption coefficients in the northern Gulf of Mexico. 2017 AGU Fall Meeting, December 2017, New Orleans, LA (poster)

148. Kolker A, Chu P, Taylor C, **Roberts BJ**, Renfro AA; Peyronnin N, <u>Fitzpatrick C</u>. 2017. The Central Role of the Mississippi River and its Delta in the Oceanography, Economy and Ecology of the Gulf of Mexico: A Synthesis. 2017 AGU Fall Meeting, December 2017, New Orleans, LA (poster)

147. Polito MJ, Lopez-Duarte PC, Olin JA, Johnson J, Able K, Martin CW, Fodrie FJ, Hooper-Bui L, Taylor S, Stouffer P, **Roberts BJ**, Rabalais NN, Jensen O. 2017. Quantifying Trophic Interactions and Carbon Flow in Louisiana Salt Marshes Using Multiple Biomarkers. 2017 AGU Fall Meeting, December 2017, New Orleans, LA (oral)

146. **Roberts BJ**, Chelsky A\*, Bernhard AE, Giblin AE. 2017. High spatial variability in biogeochemical rates and microbial communities across Louisiana salt marsh communities. 2017 Coastal and Estuarine Research Federation Conference, November 2017, Providence, RI (oral)

145. Polito MJ, Lopez-Duarte PC, Olin JA, Johnson J, Able K, Martin CW, Fodrie FJ, Hooper-Bui L, **Roberts BJ**, Jensen O. 2017. Quantifying Trophic Interactions in Louisiana Salt Marshes Using Multiple Biomarkers. 2017 Coastal and Estuarine Research Federation Conference, November 2017, Providence, RI (oral)

144. Bernhard AE, Giblin AE, **Roberts BJ**. 2017. Biogeography of salt marsh ammonia oxidizers: Comparisons between Gulf of Mexico and New England marshes. 2017 Coastal and Estuarine Research Federation Conference, November 2017, Providence, RI (oral)

143. Chelsky A\*, <u>Farley N</u>, **Roberts BJ**. 2017. The significance of vegetation type for nitrogen transformation, removal and retention in Louisiana salt marshes. 2017 Coastal and Estuarine Research Federation Conference, November 2017, Providence, RI (oral)

142. Rietl A\*, Hill T\*, Chelsky A\*, **Roberts BJ**. 2017. A multi-year record of plant biomass, allometry, and primary production in Louisiana salt marshes. 2017 Coastal and Estuarine Research Federation Conference, November 2017, Providence, RI (oral)

141. <u>MacDonald A</u>, Rietl A\*, **Roberts BJ**. 2017. The Effects of *Geukensia granosissima* on *Spartina alterniflora* in a Louisiana Salt Marsh. 2017 LUMCON Summer Student Research Symposium, August 2017, Cocodrie, LA (oral)

140. <u>Ebinger K</u>, Chelsky A\*, **Roberts BJ**. 2017. Impacts of *Geukensia granosissima* on nitrogen cycling in salt marsh soils. 2017 LUMCON Summer Student Research Symposium, August 2017, Cocodrie, LA (oral)

139. <u>Cilek C</u>, **Roberts BJ**, Rieucau G. 2017. The Effect of Water Flow on Collective Reactions in Gulf Menhaden (*Brevoortia patronus*): A Simulated Predator Encounter Experiment. 2017 LUMCON Summer Student Research Symposium, August 2017, Cocodrie, LA (oral)

138. <u>Rosenthal I</u>, **Roberts BJ**, Bockus A. 2017. How salinity stress affects aerobic performance of Gulf brown shrimp. 2017 LUMCON Summer Student Research Symposium, August 2017, Cocodrie, LA (oral)

137. <u>Hadley R</u>, **Roberts BJ**, Bowles M. 2017. Sulfide controls on nutrient cycling in marine environments: Denitrification vs. Dissimilatory Nitrate Reduction to Ammonia. 2017 LUMCON Summer Student Research Symposium, August 2017, Cocodrie, LA (oral)

136. **Roberts BJ**. 2017. Sustained Impacts on Louisiana Salt Marsh Soil Greenhouse Gas Fluxes Following the Deepwater Horizon Oil Spill. 2017 Gulf of Mexico Oil Spill and Ecosystem Science Conference, February 2017, New Orleans, LA (oral)

135. Chelsky A\*, Marton J\*, Bernhard A, Giblin A, **Roberts BJ**. 2017. Long-term patterns in nitrification rates and ammonia oxidizer abundances in Louisiana salt marshes following the Deepwater Horizon oil spill. 2017 Gulf of Mexico Oil Spill and Ecosystem Science Conference, February 2017, New Orleans, LA (oral)

134. Rietl A\*, Hill T\*, Chelsky A\*, **Roberts BJ**. 2017. A multi-year record of biomass, primary production, and allometry of 4 dominant vegetation types in coastal Louisiana salt marshes. 2017 Gulf of Mexico Oil Spill and Ecosystem Science Conference, February 2017, New Orleans, LA (oral)

133. <u>Ceresnak NA</u>, Chelsky A\*, Hill T\*, **Roberts BJ**. 2017. Differential Responses of Soil Greenhouse Gas Production and Denitrification to Salinity Alterations along a Wetland Salinity Gradient in Barataria Bay. 2017 Gulf of Mexico Oil Spill and Ecosystem Science Conference, February 2017, New Orleans, LA (oral)

132. Bernhard AE, Giblin AE, **Roberts BJ**. 2017. Multi-year Patterns in Community Composition of Ammonia-Oxidizers in Louisiana Salt Marshes Following the Deepwater Horizon Oil Spill. 2017 Gulf of Mexico Oil Spill and Ecosystem Science Conference, February 2017, New Orleans, LA (oral)

131. Engel AS, Paterson AT, <u>Boling K</u>, **Roberts BJ**. 2017. Specificity of bacterial communities to dominant standing vegetation in coastal salt marshes, Bay Sansbois and Bay Batiste, Louisiana. 2017 Gulf of Mexico Oil Spill and Ecosystem Science Conference, February 2017, New Orleans, LA (oral)

130. Lopez-Duarte P, Able K, Fodrie J, Martin CM, <u>Noji C</u>, Olin J, <u>Pincin J</u>, Polito M, **Roberts BJ**, Jensen O. 2016. Quantifying Trophic Interactions in Louisiana Salt Marshes by Combining Stomach Content, Stable Isotope, and Fatty Acid Approaches. 2017 Gulf of Mexico Oil Spill and Ecosystem Science Conference, February 2017, New Orleans, LA (oral)

129. <u>Vastano AR</u>, Able KW, Jensen OP, Lopez-Duarte PC\*, Martin CW\*, **Roberts BJ**. 2016. Age and Growth of a Subtropical Marsh Fish: The Gulf Killifish, *Fundulus grandis*. 2017 Gulf of Mexico Oil Spill and Ecosystem Science Conference, February 2017, New Orleans, LA (poster)

128. **Roberts BJ**, <u>Chatelain K</u>, <u>Fortin S</u>, Chelsky A\*, Setta S, Sullivan H, <u>Ceresnak N</u>, <u>Baudoin K</u>, Scheuermann R, Bernhard A, Paterson A, Engel A, Giblin A. 2016. Highly variable biogeochemical process rates across salt marsh soil subhabitats: implications for scaling-up plot level measurements. 2016 Gulf of Mexico Oil Spill and Ecosystem Science Conference; Feb 2016. (Poster)

127. Bernhard A, Sheffer R, Marton J\*, **Roberts BJ**, Giblin A. 2016. Impacts of Oil on Population Dynamics and Community Composition of Ammonia Oxidizers and Relationships

with Nitrification Rates in Louisiana Salt Marshes; 2016 Gulf of Mexico Oil Spill and Ecosystem Science Conference; Feb 2016 (Oral)

126. Giblin AE, Tucker J, Bernhard AE, Marton JM\*, Rich MW, Sullivan HL, **Roberts BJ**. 2016. Potential and in-situ denitrification rates in oiled and unoiled Louisiana salt marsh sediments following the Deepwater Horizon spill; 2016 Gulf of Mexico Oil Spill and Ecosystem Science Conference; Feb 2016 (Poster)

125. Chelsky A\*, Marton J\*, Bernhard A, Giblin A, Setta S, Hill T\*, **Roberts BJ**. 2016. Nitrification, denitrification, and greenhouse gas production during peak growing season in oiled and unoiled Louisiana salt marshes; 2016 Gulf of Mexico Oil Spill and Ecosystem Science Conference; Feb 2016 (Oral)

124. Hill T\*, Sullivan H, Setta S, Chelsky A\*, Rich M, Hopple A, **Roberts BJ**. 2016. A three year record of Spartina alterniflora biomass, primary production, and allometry in coastal Louisiana; 2016 Gulf of Mexico Oil Spill and Ecosystem Science Conference; Feb 2016 (Oral)

123. <u>Ceresnak N</u>, Hill T\*, Chelsky A\*, **Roberts BJ**. 2016. Effects of salinity alterations on soil greenhouse gas production and denitrification along a wetland salinity gradient in Barataria Bay, Louisiana; 2016 Gulf of Mexico Oil Spill and Ecosystem Science Conference; Feb 2016 (Poster)

122. McCann M\*, Jensen O, Able K, Christian R, Fodrie FJ, Johnson J, Lopez-Duarte P\*, Martin C\*, Olin J\*, Polito M, **Roberts BJ**, <u>Ziegler S</u>. 2016. Using a Food Web Network Model to Understand Vulnerability of Gulf of Mexico Salt Marsh Food Webs to Oiling; 2016 Gulf of Mexico Oil Spill and Ecosystem Science Conference; Feb 2016 (Oral)

121. Polito MJ, Johnson J, Mauney MT, Davis B, Baustian M, Olin J\*, Jensen O, Lopez-Duarte P\*, McCann M\*, Able K, Fodrie J, Martin C\*, **Roberts BJ**. 2016. Tracking Carbon Flow through Marsh Food Webs Using Compound Specific-Stable Isotope Analysis; 2016 Gulf of Mexico Oil Spill and Ecosystem Science Conference; Feb 2016 (Oral)

120. Lopez-Duarte P\*, Able K, Fodrie J, Martin C\*, McCann M\*, <u>Melara S</u>, <u>Noji C</u>, Olin J\*, <u>Pincin J</u>, <u>Planks K</u>, Polito M, **Roberts BJ**, Jensen O. 2016. Estimating predator-prey relationships in Louisiana salt marshes: a combination of stomach content, stable isotope, and fatty acid analysis; 2016 Gulf of Mexico Oil Spill and Ecosystem Science Conference; Feb 2016 (Oral)

119. <u>Rogener M</u>, **Roberts BJ**, Rabalais N, Stewart F, Joye S. 2016. Reactive Nitrogen and Methane Sinks in the Water Column of a Large Coastal Hypoxic area, the Gulf of Mexico "Dead Zone"; 2016 Gulf of Mexico Oil Spill and Ecosystem Science Conference; Feb 2016 (Poster)

118. Walker B\*, Druffel E, Kolasinski J\*, **Roberts BJ**, Xu X, Rosenheim B. 2016. Bacterial Production of Ancient DOM from Deepwater Horizon Oil: Insights from Carbon Isotopes 4 yr after the Spill; 2016 Gulf of Mexico Oil Spill and Ecosystem Science Conference; Feb 2016 (Oral)

117. Chelsky A\*, Marton J\*, Bernhard A, Giblin A, Setta S, Hill T\*, **Roberts BJ**. 2016. Spatial Patterns in Biogeochemical Processes During Peak Growing Season in Oiled and Unoiled Louisiana Salt Marshes: A Multi-Year Analysis; 2016 Ocean Sciences Meeting; Feb 2016 (Poster)

116. Walker B\*, Druffel E, Griffin S, Kolasinski J\*, **Roberts BJ**, Xu X, Muller-Karger F, Rosenheim B. 2016. Sources and Cycling of Dissolved Organic Carbon in the Gulf of Mexico: Insights from Stable ( $\delta$ 13C) and Radiocarbon ( $\Delta$ 14C) Signatures; 2016 Ocean Sciences Meeting; Feb 2016 (Oral)

115. <u>Rogener M</u>, **Roberts BJ**, Rabalais N, Stewart F, Joye S. 2016. Microbial nitrogen sinks in the water column of a large coastal hypoxic area, the Gulf of Mexico "Dead Zone"; 2016 Ocean Sciences Meeting; Feb 2016 (Oral)

114. **Roberts BJ**, Chelsky A\*, Rich M, <u>Rogener M</u>, Joye S, Rabalais N. 2016. Spatial patterns in water column respiration rates in the northern Gulf of Mexico hypoxic zone: results from four years of July shelfwide cruises; 2016 Ocean Sciences Meeting; Feb 2016 (Poster)

113. Lopez-Duarte P\*, Able K, Fodrie J, Martin C\*, McCann M\*, <u>Melara S</u>, <u>Noji C</u>, Olin J\*, <u>Pincin J</u>, <u>Planks K</u>, Polito M, **Roberts B**, Jensen O. 2016. Trophic Interactions in Louisiana Salt Marshes: Combining Stomach Content, Stable Isotope, and Fatty Acid Approaches; 2016 Ocean Sciences Meeting; Feb 2016 (Poster)

112. Bernhard AE, Giblin AE, **Roberts BJ**. 2016. Patterns in Community Composition of Ammonia-Oxidizers in Louisiana Salt Marshes Following the Deepwater Horizon Oil Spill; 2016 ISME Conference (Oral)

111. Chelsky A\*, Marton J\*, Bernhard AE, Giblin AE, Setta SP, **Roberts BJ**. 2016. Biogeochemical processes in oiled and unoiled Louisiana salt marshes: a multiyear analysis; State of the Coast 2016; June 2016 (Oral)

110. **Roberts BJ.** 2016. Sustained impacts on Louisiana salt marsh soil greenhouse gas fluxes following the Deepwater Horizon oil spill; State of the Coast 2016; June 2016 (Oral)

109. <u>Farley N</u>, Chelsky A\*, **Roberts BJ.** 2016. Variable Rates of Soil Denitrification within Louisiana Salt Marshes: The Significance of Vegetation Type; LUMCON Summer Student Research Symposium; Aug 2016 (Oral)

108. <u>Klinges D</u>, Martin CW\*, **Roberts BJ.** 2016. Plant identity and decay influence marsh periwinkle, *Littoraria irrorata*, herbivory; LUMCON Summer Student Research Symposium; Aug 2016 (Oral)

107. <u>Sorrentino M</u>, Rietl A\*, **Roberts BJ.** 2016. Distribution and morphology of the marsh periwinkle, Littoraria irrorata, across Louisiana salt marshes; LUMCON Summer Student Research Symposium; Aug 2016 (Oral)

106. <u>Vastano AR</u>, Able KW, Jensen OP, López-Duarte PC\*, Martin CW\*, **Roberts BJ**. 2016. Age and Growth of a Subtropical Marsh Fish: The Gulf Killifish, Fundulus grandis. Mid-Atlantic Chapter of American Fisheries Society (AFS); poster—*Anthony Vastano (Rutgers University MS student) won best student poster* 

105. **Roberts BJ.** 2016. Sustained impacts on Louisiana salt marsh soil greenhouse gas fluxes following the Deepwater Horizon oil spill; 2016 Gulf Estuarine Research Society-Society of Wetland Scientists (GERS-SWS) Conference; Nov 2016 (Oral)

104. Rietl A\*, <u>Sorrentino M</u>, **Roberts BJ**. 2016. Spatial distribution and morphology of the salt marsh periwinkle (*Littoraria irrorata*) in southeastern Louisiana; 2016 Gulf Estuarine Research Society-Society of Wetland Scientists (GERS-SWS) Conference; Nov 2016 (Oral)

103. Chelsky A\*, <u>Farley N</u>, **Roberts BJ**. 2016. Rates of soil nitrification and denitrification within Louisiana salt marshes: The significance of vegetation type; 2016 Gulf Estuarine Research Society-Society of Wetland Scientists (GERS-SWS) Conference; Nov 2016 (Oral)

102. **Roberts BJ**, Marton JM\*. 2015. 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, <u>Bledsoe R</u>, <u>Dawson M</u>, <u>Donnelly B</u>, Marton JM\*. 2015. 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)**. 2015. 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**. 2015. 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**. 2015. 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. <u>Weber SC</u>, <u>Battles JJ</u>, Peterson L, **Roberts BJ**, Özgökmen T, Peterson RN, Hollander DJ, Chanton JP, Joye SB, Montoya JP. 2015. 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. <u>Rogener MK</u>, **Roberts BJ**, Rabalais NN, Joye SB. 2015. 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, <u>Bledsoe R</u>, <u>Dawson M</u>, <u>Donnelly B</u>, Marton JM\*. 2014. Spatial patterns in soil biogeochemical process rates along a Louisiana wetland salinity gradient in the Barataria Bay estuarine system. 2014 AGU Fall Meeting, December 2014 (poster)

94. Rosenheim BE, **Roberts BJ**, <u>Williams E</u>. 2014. Ramped pyrolysis 14C age spectra of riverine particulate organic matter through a record hydrograph – the Great Atchafalaya Flood of 2011. 2014 AGU Fall Meeting, December 2014 (poster)

93. **Roberts BJ**, Marton JM\*, Bernhard AE, Giblin AE. 2014. 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**. 2014. 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, <u>Mack S</u>, <u>Moore T</u>. 2014. 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, <u>Pandya K</u>, Sheffer R, <u>Zazueta-Ramirez C</u>, Marton J, **Roberts BJ**, Giblin A. 2014. 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. <u>Zazueta-Ramirez C</u>, Marton J\*, **Roberts BJ**, Giblin A, Bernhard A. 2014. 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, <u>McClenachan G</u>, **Roberts B**, Overton EB, Justic D, <u>Strudivant K</u>, 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. <u>Chambers CR</u>, **Roberts BJ**, Kolker AS. 2014. 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. 2014. 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. 2014. 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, <u>Mack S</u>, <u>Moore T</u>. 2014. 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\*, <u>Marti AM</u>, <u>Moore TM</u>. 2014. 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. 2014. 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**, <u>Valenti J</u>, <u>O'Connor K</u>, <u>Halbert S</u>. 2014. 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**. 2104. 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. <u>Rogener MK</u>, **Roberts BJ**, Rabalais NN, Joye SB. 2014. 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. 2014. Challenges and Opportunities of Long-Term Continuous Metabolism Measurements at the National Ecological Observatory Network. 2014 AGU Annual Meeting (poster)

77. Kolker AS, <u>Ameen AD</u>, <u>Chambers C</u>, Georgiou IY, Miner MD, **Roberts BJ**, Rosenheim BE, Taylor C. 2013. Ecogeomorphology of Developing Deltas: Implications for Restoration. 2013 CERF Meeting.

76. Marton JM\*, **Roberts BJ**, Bernhard AE, Giblin AE. 2013. Location, Location! Spatial Heterogeneity of Salt Marsh Biogeochemical Processes. 2013 CERF Meeting.

75. Giblin AE, Bernhard AE, Marton JM\*, Tucker J, **Roberts BJ**. 2013. 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. 2013. Community Composition of Ammonia-Oxidizing Bacteria in Louisiana Marshes Impacted by the Deepwater Horizon oil spill. 2013 CERF Meeting.

73. **Roberts BJ**, Marton JM\*. 2013. Louisiana brackish and salt marsh soil greenhouse gas fluxes following the Deepwater Horizon oil spill and salinity manipulations. 2013 CERF Meeting.

72. Rosenheim BE, <u>Williams EK</u>, Schreiner K, Galy V, **Roberts BJ**, Allison MA, Bianchi TS. 2013. 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. 2013. 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. 2013. The Deepwater Horizon Oil Spill: Biogeochemical Impacts Two Years Post-Spill. 2013 SWS Annual Meeting.

69. Griffiths NA, **Roberts BJ**, Hill WR, Mulholland PJ. 2013. 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**, <u>Rich MW</u>. 2013. 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, <u>Williams EK</u>, **Roberts BJ**, Allison MA. 2013. 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. <u>Chambers CR</u>, Kolker AS, **Roberts BJ**. 2013. 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**. 2013. 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, <u>Williams EK</u>, **Roberts BJ**, Allison MA. 2013. High Discharge and Particulate Organic Carbon Transport on the Mississippi-Atchafalaya System. 2013 ASLO Aquatic Sciences Meeting.

63. <u>Rich MW</u>, **Roberts BJ**. 2013. 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. <u>Marti AM</u>, Marton JM\*, **Roberts BJ**. 2013. Effects of varying salinity on greenhouse gas production from oiled and unoiled coastal Louisiana salt marsh soils. 2013 ASLO Aquatic Sciences Meeting.

61. Marton JM\*, **Roberts BJ**. 2013. 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. 2013. 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, <u>Filosa C</u>, <u>Halbert S</u>, <u>O'Connor K</u>, **Roberts BJ**, Able K. 2013. 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**. 2013. 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\*, <u>Marti AM</u>. 2013. 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. 2012. 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. <u>Chambers C</u>, Kolker AS, **Roberts BJ**. 2012. Sediment Dynamics and Biogeochemical Cycling in a Developing Deltaic System. 2012 GERS Meeting.

54. <u>Rich MW</u>, **Roberts BJ**. 2012. 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. <u>Marti AM</u>, Marton JM\*, **Roberts BJ**. 2012. Effects of varying salinity on greenhouse gas production from oiled and unoiled 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**. 2012. Freshwater diversions provided pulsed hydrology to coastal swamps for remediation. 9<sup>th</sup> INTECOL International Wetlands Conference.

51. Primer SB, <u>Warner TR</u>, Marton JM\*, **Roberts BJ**. 2012. Greenhouse gas emissions and denitrification from US Gulf Coast Baldcypress swamps. 9<sup>th</sup> INTECOL International Wetlands Conference.

50. **Roberts BJ**, <u>Luthringer JE</u>, <u>Warner TR</u>, Semmler CM, Burgin AJ, Kolker AS, Rosenheim BE, Rabalais NN. 2012. 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. 2012. 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. <u>Warner TR</u>, **Roberts BJ**. 2012. Nitrogen fertilization effects on N2O fluxes and potential denitrification rates in Gulf Coast Baldcypress swamps. 2012 Ocean Sciences Meeting.

47. **Roberts BJ**, <u>Luthringer JE</u>, <u>Warner TR</u>, Semmler CM, Burgin AJ, Kolker AS, Rosenheim BE, Rabalais NN. 2012. 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. 2011. 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, <u>Doty SM</u>, Rabalais NN, Turner RE. 2011. 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**. 2011. 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. <u>Lutz BD</u>, Bernhardt ES, **Roberts BJ**, Mulholland PJ. 2011. 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. 2011. 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. 2011. 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. 2010. Light drives grazer stoichiometry in Walker Branch. 2010 ASLO/NABS Joint Meeting.

39. <u>Lutz BD</u>, Bernhardt ES, **Roberts BJ**, Mulholland PJ. 2010. 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. 2010. 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. <u>Roe KM</u>, Rosenheim B, **Roberts BJ**, Allison M, Kolker AS, Duncan D, Nittrouer JA, Butcher K, Nyman A, Adamic J. 2010. An investigation of the Mississippi-Atchafalaya River System as a source or a sink of organic carbon. 2010 American Association of Petroleum Geologists Meeting.

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