

BETH A. STAUFFER

Assistant Professor
Department of Biology
University of Louisiana at Lafayette

337.482.5232 (phone)
stauffer@louisiana.edu
www.staufferlab.com

EDUCATION

- 2012 Ph.D. Marine Environmental Biology, University of Southern California
2000 B.S. Marine Science, B.S. Biology, University of Miami

PROFESSIONAL APPOINTMENTS

- 2015-present Assistant Professor, Department of Biology, University of Louisiana at Lafayette
2018-present Early Career Research Fellow, National Academies of Science, Engineering, and Medicine Gulf Research Program
2016-present LaDIA Fellow, Louisiana Sea Grant College Program
2015-present Fellow, Institute for Coastal and Water Research (ICaWR), UL Lafayette
2015-present Graduate Faculty, UL Lafayette
2013-2014 AAAS Science & Technology Policy Fellow, U.S. Environmental Protection Agency, Office of Research and Development Innovation Team
2012-2013 Postdoctoral Research Scientist, Lamont-Doherty Earth Observatory of Columbia University (LDEO)

HONORS & AWARDS

- 2019, 2020 Nominated for Blavatnik Award for Young Scientists
2018-2020 Early Career Research Fellowship, National Academies of Science, Engineering, and Medicine Gulf Research Program
2017 Rising Star Award, UL Lafayette Research Office, Ray P. Authement College of Sciences
2016-2017 Louisiana Discovery, Innovation, and Application Program (LA DIA) Fellow, Louisiana Sea Grant College Program
2016, 2017 UL Lafayette Faculty Travel Award
2016 Certificate of Achievement in Sponsored Research, UL Lafayette
2016 Early Career Travel Award, ASLO Summer Meeting
2015 UL Lafayette Faculty Travel Award
2013 AAAS Science & Technology Policy Fellowship

SCHOLARLY PUBLICATIONS (*indicates grad, **undergrad mentee coauthor)

- Hogan, JA, RA Faegin, G Starr, M Ross, T-C Lin, C O'Connell, T Huff, BA Stauffer, KL Robinson, MC Lara, J Xue, B Kiel Reese, SJ Geist, ER Whitman, S Douglas, VM Congdon, JW Reustle, RS Smith, D Lagomasino, BA Strickland, SS Wilson, CE Proffitt, JD Hogan, BL Branoff, AR Armitage, SA Rush, RO Santos, M Campos-Cerqueira, PA Montagna, B Erisman, L Walker, WL Silver, TA Crawl, M Wetz, N Hall, X Zou, SC Pennings, L-J Wang, C-T Chang, M Leon, WH McDowell, JS Kominoski, CJ Patrick. A research framework to integrate cross-ecosystem responses to tropical cyclones. *In review*, BioScience
- Stauffer, BA, GS Sukhatme, DA Caron. Physical and biogeochemical factors driving spatially heterogeneous phytoplankton blooms in nearshore waters of Santa Monica Bay, USA. *Accepted with minor revisions*, Estuaries and Coasts
- Stauffer, BA, HA Bowers, E Buckley, TW Davis, TH Johengen, R Kudela, MA Mcmanus, H Purcell, GJ Smith, A Vander Woude, MN Tamburri. 2019 Considerations in Harmful Algal Bloom Research and Monitoring: Perspectives From a Consensus-Building Workshop and Technology Testing. *Frontiers in Marine Science* 6.

4. Stauffer, BA, AG Gellene, D Rico**, C. Sur**, DA Caron. 2017 Grazing of the heterotrophic dinoflagellate *Noctiluca scintillans* on dinoflagellate and raphidophyte prey. *Aquatic Microbial Ecology* 80:193-207
5. Pellerin, BA, BA Stauffer, DA Young, DJ Sullivan, SB Bricker, MR Walbridge, GA Clyde, DM Shaw. (2016) Emerging Tools for Continuous Nutrient Monitoring Networks: Sensors Advancing Science and Water Resources Protection. *Journal of the American Water Resources Association*, 1–16. DOI: 10.1111/1752-1688.12386
6. Stauffer, BA, J Miksis-Olds, JI Goes. 2015. Cold regime interannual variability of primary and secondary producer community composition in the southeastern Bering Sea. *PLoS ONE* 10(6): e0131246.
7. Stauffer, BA, CJ Patrick, KL Robinson, H Peter. 2014. Temporal scales of drivers of community dynamics: from microbes to macrofauna across the salinity gradient. In: PF Kemp (Ed.) *Eco-DAS X Symposium Proceedings*, Waco, TX: Association for the Sciences of Limnology and Oceanography, 14-24
8. Stauffer, BA, JI Goes, HR Gomes, PJ Stabeno. 2014. Interannual variability of spring-time phytoplankton community composition in the western Gulf of Alaska and southeastern Bering Sea. *Deep Sea Research II* 109: 57-70.
9. Stauffer, BA, A Schnetzer, AG Gellene, C Oberg, GS Sukhatme, DA Caron. 2013. Effects of an acute hypoxic event on microplankton community structure in a coastal harbor of Southern California. *Estuaries and Coasts* 36: 135-148.
10. Stauffer, BA, AG Gellene, A Schnetzer, EL Seubert, C Oberg, GS Sukhatme, DA Caron. 2012. An oceanographic, meteorological and biological 'perfect storm' yields a massive fish kill. *Marine Ecology Progress Series* 468: 231-243.
11. Golubchik, L, D Caron, A Das, A Dhariwal, R Govindan, D Kempe, C Oberg, A Sharma, B Stauffer, G Sukhatme, B Zhang. 2011. AMBROSia: An Overview and Recent Results. *Journal of Algorithms & Computational Technology* 5 (4): 583-600.
12. Smith, RN, J Das, H Heidarsson, A A. de Menezes Pereira, F Arrichiello, I Cetinic, L Darjany, ME Garneau, MD Howard, C Oberg, M Ragan, E Seubert, B Stauffer, A Schnetzer, G Toro-Farmer, DA Caron, BH. Jones, GS Sukhatme. 2010. USC CINAPS Builds Bridges: Observing and Monitoring the Southern California Bight. *IEEE Robotics and Automation Magazine* 17 (1): 20-30.
13. Ishikawa, F. N., BA Stauffer, DA Caron, C Zhou. 2009. Rapid and Label-Free Cell Detection by Metal-Cluster-Decorated Carbon Nanotube Biosensors. *Biosensors and Bioelectronics*. 24 (10): 2967-2972.
14. Stauffer, BA, RA Schaffner, C Wazniak, DA Caron. 2008. An immunofluorescent flow cytometric technique for counting the brown tide alga, *Aureococcus anophagefferens*. *Applied & Environmental Microbiology* 74(22):6931-40.
15. Caron, DA, BA Stauffer, SD Moorthi, A Singh, M Batalin, E Graham, M Hansen, WJ Kaiser, J Das, A Pereira, A Dhariwal, B Zhang, C Oberg, GS Sukhatme. 2008. Macro- to fine-scale spatial and temporal distributions and dynamics of phytoplankton and their environmental driving forces in a small subalpine lake in southern California, USA. *Limnology and Oceanography* 53: 2333-2349.
16. Stauffer, BA, GS Sukhatme, C Oberg, B Zhang, A Dhariwal, A Requicha, DA Caron. 2008. Use of embedded networked sensors for the study of cyanobacterial bloom dynamics. In: *Cyanobacterial Harmful Algal Blooms: State of the Science and Research Needs*, HK Hudnell (ed.). *Advances in Experimental Medicine and Biology* 619: 176-177.

17. Singh, A, M Batalin, MJ Stealey, B Zhang, A Dhariwal, B Stauffer, S Moorthi, C Oberg, A Pereira, V Chen, Y Lam, D Caron, M Hansen, WJ Kaiser, G Sukhatme. 2007. Human Assisted Robotic Team Campaigns for Aquatic Monitoring. *Journal of Field Robotics* 24 (11-12): 969-989.
18. Sukhatme, GS, A Dhariwal, B Zhang, C Oberg, BA Stauffer, DA Caron. 2007. Design and Development of a Wireless Robotic Networked Aquatic Microbial Observing System. *Environmental Engineering Science* 24 (2): 205-215.
19. Schnetzer, A, PE Miller, RA Schaffner, BA Stauffer, BH Jones, SB Weisberg, PM DiGiacomo, WM Berelson, DA Caron. 2007. Blooms of *Pseudo-nitzschia* and domoic acid in the San Pedro Channel and Los Angeles harbor areas of the Southern California Bight, 2003–2004. *Harmful Algae* 6 (3): 372-387.
20. D Caron, A Das, A Dhariwal, L Golubchik, R Govindan, D Kempe, C Oberg, A Sharma, B Stauffer, G Sukhatme, B Zhang. 2007. AMBROSia: An Autonomous Model-Based Reactive Observing System. *Lecture Notes in Computer Science* 4487: 995-1001.
21. Moorthi, SD, PD Countway, BA Stauffer, DA Caron. 2006. Use of quantitative real-time PCR to investigate the dynamics of the red tide dinoflagellate *Lingulodinium polyedrum*. *Microbial Ecology* 52 (1): 136-150.
22. Golubchik, L, D Caron, A Das, A Dhariwal, R Govindan, D Kempe, C Oberg, A Sharma, B Stauffer, G Sukhatme, B Zhang. 2006. A generic multi-scale modeling framework for reactive observing systems: An overview. *Computational Science – ICCS, Part 3, Proceedings Lecture Notes in Computer Science* 3993: 514-521.
23. Lee, AS, M Mahapatro, DA Caron, AAG Requicha, BA Stauffer, ME Thompson, CW Zhou. 2006. Whole-cell sensing for a harmful bloom-forming microscopic alga by measuring antibody-antigen forces. *IEEE Transactions on Nanobioscience* 5 (3): 149-156.

MANUSCRIPTS IN PREPARATION (*indicates grad, **undergrad student coauthor)

24. Babitch, JW*, JA Nelson, LA Deegan, H Sullivan, BA Stauffer. Resolving estuarine nitrogen use by phytoplankton communities in Plum Island estuary using a whole ecosystem tracer approach. For submission to *Estuaries and Coasts*.

OTHER PUBLICATIONS

25. Barbero, L, C Kelble, D Perrot, R Wanninkhof (Technical contributors: A Schnetzer, B Stauffer). 2019. Southeast Atlantic and Gulf of Mexico Region Ocean Acidification Research Plan. National Oceanic and Atmospheric Administration.
26. Barbero, L, D Pierrot, R Wanninkhof, M Baringer, J Hooper, JZ Zhang, R Smith, R Byrne, C Langdon, M Hernández-Ayón, A Schnetzer, B Stauffer, S Herzka, J Cano-Compairé, F Hernández, D Pech, C Hu, D English, M Ondrusek, J Olascoaga, G Derr. 2019. Third Gulf of Mexico Ecosystems and Carbon Cycle (GOMECC-3) Cruise, <https://doi.org/10.25923/y6m9-fy08>.
27. Stauffer, BA. 2014. Technical Considerations in the Design and Execution of Sensor Journalism Campaigns. In F. Pitt (Ed.) *Sensors and Journalism*. New York, NY: Columbia Journalism School.
28. Hansen, GA, S Sadro, M Baustian, BA Stauffer. 2014. Shifting career pathways of ecologists: Is it time to redefine the "alternative" career? *ASLO Bulletin* 23 (1): 2-5.
29. Loveland, J, DA Caron, A Schnetzer, I Cetinić, RA Schaffner, BA Stauffer, E Means, P Lauri, P Shoenberger, G Oelker, B Jones. 2007. Occurrence and Removal of Marine Biotoxins for the Seawater Reverse Osmosis Treatment Process: Phytoplankton and Domoic Acid Correlations at the West Basin MWD Seawater Desalination Pilot Plant in El Segundo, CA. *AMTA Solutions*, Spring 2007: 14-17.

TEACHING EXPERIENCEUL Lafayette

Scientific Grant Preparation

Plankton Ecology

Principles of Ecology (BIOL 360)

Estuarine Ecology & Coastal Marine Biology (BIOL 440G)

LUMCON Marine Field/Ecosystem Ecology (Summer 2016, 2018)

Individual Project (BIOL 410), 5 students total

Other

2017 Guest Lecturer, "Plankton," Intro to Coastal Ecology (BIOL 312), Dept. of Biology, UL Lafayette

2015 Guest Lecturer, "Coastal Water Quality Issues: How Environmental Technologies and Policy are Helping Us Deal," invited presentation to students in Technology and Environmental Issues (ITEC 415), UL Lafayette

ADVISING EXPERIENCECommittee Chair or Co-Chair (1 M.S. graduated, 2 M.S. and 2 Ph.D. in progress)

Jaylyn Babitch, M.S. Biology, UL Lafayette, 2018

Mrunmayee Pathare, M.S. Biology, UL Lafayette, 2019

Andrea Jaegge, Ph.D. Biology, UL Lafayette, expected 2021

Gulce Kurtay, Ph.D. Biology, UL Lafayette, expected 2022

Christin Selle, M.S., Biology, UL Lafayette, expected 2021 (co-chair)

Julia Sweet, Ph.D. Biology, UL Lafayette, expected 2024

Committee Member (1 M.S. graduated, 3 M.S. in progress, 8 Ph.D. in progress)

Marco Franco, M.S. Biology, UL Lafayette, 2017

Max Bernt, Ph.D. Biology, UL Lafayette, 2019

Jack Craig, Ph.D. Biology, UL Lafayette, 2019

Lesley Kim, Ph.D. Biology, UL Lafayette, 2019

Aubree Szczepanski, M.S. Marine Science, NCSU, 2019

Saraya Saadat, M.S. Architecture, UL Lafayette, 2018

Sabrina Tabassum-Tackett, M.S. Biology, UL Lafayette, expected 2018

Sanjana Banerjee, Ph.D. Biology, UL Lafayette, expected 2020

Ryan James, Ph.D. Biology, UL Lafayette, expected 2021

Justin Lesser, Ph.D. Biology, UL Lafayette, expected 2021

Zachary Topor, Ph.D. Biology, UL Lafayette, expected 2022

Juita Martinez, Ph.D. Biology, UL Lafayette, expected 2022

Undergraduate Researchers

UL Lafayette: Jenny Rhee

Quinnetta Humphries

Alexander Adams

Hans Prevost

Lauren Broussard

Gina Woods

Amber Lauchner

April Pruitt

Dalton Laroux

Vivian Mire

Bryce Laverne

Teri Lynn Lewis

Eric Austin

UL Lafayette REU Participants: Tallie Foster
(Fitchburg State Univ.)

Rachel Humes (Indiana Univ. Northwest)

Eliot Pell (Ball State Univ.)

LDEO: Heidi Keller (Barnard)

Andrea Jaegge (REU participant)

USC: Dustin Coit
Christine Sur

Diane Rico

Undergraduate Students

UL Lafayette: 15 undergraduate advisees

RESEARCH AWARDS (\$1,741,238 awarded since 2012, \$ \$1,616,578 at UL Lafayette)

Active:

Louisiana Sea Grant College Program, 2020-2022, \$137,722. Understanding the effects of varying prey assemblages on oyster feeding in restoration- and climate-impacted estuaries. PI with J. LaPeyre (LSU AgCenter)

Louisiana Sea Grant College Program, 2019-2020, \$24,863. Documenting Estuarine Freshening and Changing Plankton Communities as a Result of the 2019 Floods. PI (with contributions to proposal writing from PhD student Andrea Jaegge)

Louisiana Water Resources Research Institute (USGS 104b), 2019-2020, \$9,168. Assessing present and potential effects of cyanotoxins in south Louisiana estuaries. PI

Gulf of Mexico Coastal Ocean Observing System (GCOOS), 2018-2019, \$25,000. Testing Operational Status of Nutrient Sensors in the Gulf of Mexico. PI

National Academies of Science, Engineering, and Medicine Gulf Research Program Early Career Research Fellow, 2018-2020, \$75,000. PI

NSF Major Research Instrumentation (MRI), 2018-2020, \$456,593. Acquisition of an integrated AUV system for observations of physical and biogeochemical interactions in the Northern Gulf of Mexico ecosystem across spatiotemporal scales. Primary CoPI with PI N. Sidorovskaia, K. Robinson, E. Theriot (UL Lafayette), C. McClain (LUMCON)

NOAA, National Ocean Service. 2016-2020, \$351,000. The Alliance for Coastal Technologies: National-Scale Efforts Toward Verification and Validation of Observing Technologies. CoPI with PI M. Tamburri (UMCES) and nine others.

NSF Research Experience for Undergraduates (REU), 2017-2020, \$287,985. REU Site: Healthy Streams, Healthy Coasts: An Interdisciplinary Approach to Watershed Science and Education. PI (2019-2020), CoPI (2017-2019) with PI K. Costigan (UL Lafayette).

NSF RAPID, 2017-2019, \$94,446. Collaborative Research: RAPID: Response of plankton assemblages and trophodynamics to a historic, hurricane-induced floodwater plume in a subtropical, pelagic environment. CoPI with PI K. Robinson (UL Lafayette), A. Schnetzer (NCSU), S. Geist (TAMUCC)

Past:

UL Lafayette Student Technology Enhancement Program (STEP), 2017-2018, \$20,122.71. Building a modern technology lab for aquatic ecology courses. PI

ICaWR Pilot Project Funding, 2017-2018, \$4,846. Oyster feeding and selectivity with hydrologic restoration-induced changes in phytoplankton prey communities. PI with M. LaPeyre (LSU AgCenter)

ICaWR Pilot Project Funding, 2017-2018, \$4,986. Terrebone Bay plankton communities. CoPI with K. Robinson and J. Nelson (UL Lafayette)

UL Lafayette Summer Research Award, 2016, \$4,000. PI

Louisiana Sea Grant College Program, 2016-2018, \$70,000. Investigating the potential impacts of restoration activities on phytoplankton communities in the Atchafalaya-Vermilion Bay system - Graduate Assistantship. PI

NOAA, National Ocean Service, 2015-2016, \$50,000. The Alliance for Coastal Technologies: National-Scale Efforts Toward Verification and Validation of Observing Technologies. CoPI to PI M. Tamburri (UMCES).

The Earth Institute, Columbia University, 2013. \$1,800. Undergraduate Research Assistant (Spring 2013) to work on Climate Center *Noctiluca miliaris* project. PI, with H. Gomes and J. Goes (LDEO).

The Climate Center, LDEO. 2012-2013, \$7,860, The Role of Climate Change and Hypoxia in the Sudden Emergence of Blooms of the Dinoflagellate *Noctiluca miliaris* in the Arabian Sea. CoPI with H. Gomes and J. Goes (LDEO)

LDEO Postdoctoral Fellowship Award, 2012-2014, \$115,000 (stipend & research budget). Effects of predicted ocean acidification on the growth and physiology of red-tide dinoflagellates. Postdoctoral Research Fellow. PI

INVITED PRESENTATIONS (ALL)

1. Ocean acidification, hypoxia, and hurricanes: Plankton food webs in the Gulf of Mexico across multiple stressors. NOAA OA Community Meeting and Mini-Symposium, Miami, FL, Jan 2020.
2. Death (and taxes): Variability in grazing-related losses and effects on protistan communities across environments in the northern Gulf of Mexico. University of Southern Mississippi, Division of Marine Science, Stennis Space Center, Nov 2019.
3. Beyond Biomass: The Variety of Roles and Controls Shaping Phytoplankton Communities. Southeastern Louisiana University, April 2019.
4. Beyond biomass: The variety of roles and controls shaping phytoplankton communities. Louisiana State University, College of the Coast & Environment, Baton Rouge, LA, Feb 2019.
5. (*cancelled due to weather*) Beyond Chlorophyll: The Variety of Roles and Controls Shaping Phytoplankton Communities. NC State University, Marine, Earth and Atmospheric Sciences, Raleigh, NC, Dec 2018.
6. Living in, with, & on water: Louisiana's connection with the Gulf. H2O/LA: An Examination of Louisiana's Relationship with Water, Center for Louisiana Studies, Lafayette, LA, Aug 2017.
7. Climate change and the ocean: an intimate relationship. Conversations on Climate Teach-In, UL Lafayette History Dept., Apr 2017
8. Charismatic megamicro(fauna): tiny organisms that make a difference. UL Lafayette Biology Society, Mar 2017.
9. One phrase, two meanings: phytoplankton blooms in the coastal ocean. Sciences Interdisciplinary Monthly Meeting, Ray P. Authement College of Sciences, UL Lafayette, Nov 2016.
10. Facilitating Innovations in Environmental Monitoring Technologies. National Water Monitoring Conference, Tampa, FL. May 2016
11. Phytoplankton dynamics in the coastal ocean: a tale of two blooms. University of West Florida, Department of Biology, Pensacola, FL. April 2016.
12. Phytoplankton blooms: thoughts on an evolving definition. Louisiana State University Museum of Natural Science, Baton Rouge, LA. October 2015.
13. Plankton and hypoxia: complex feedbacks on physiology and community structure. Public Workshop on Hypoxia in the Gulf of Mexico, Lafayette, LA. October 2015.

14. Not your Mother's Bloom: Thoughts on an Evolving Definition. Southeast Louisiana University, Biology Department, Hammond, LA. September 2015.
15. Nutrient Sensor Challenge Summit: Overview and Objectives. Nutrient Sensor Challenge Summit, Carriage House, Washington DC. August 2015.
16. Advanced water quality monitoring: the state of the technology and what's next. J.B. and Maurice C. Shapiro Environmental Law Symposium, George Washington University, Washington, DC. March 2015
17. Results from User Surveys: Needs for the next generation of nutrient sensors. Alliance for Coastal Technologies Nutrient Sensor Challenge Workshop, Washington, DC. September 2014
18. Finding meaning in the noise: High resolution plankton dynamics in the coastal ocean. University of Louisiana at Lafayette, Department of Biology, Lafayette, LA. April 2014.
19. Ecological Issues in the Coastal Zone: (Challenges to studying) Eutrophication, algal blooms, and hypoxia. Ecological Dissertations in the Aquatic Sciences (EcoDAS X) symposium, Honolulu, HI. Oct 2012.
20. Plankton dynamics in a near-shore Southern California coastal environment: responses to short-term environmental fluctuations and top-down control. Biology & Paleo-Environment Seminar Series. LDEO of Columbia University, Palisades, NY. March 2012. (*oral, invited*)
21. Coastal Sensor Networks in Southern Californian Coastal Water in Support of Harmful Algal Bloom Research. Conference on Coastal Environmental Sensor Networks, Univ. Mass. Boston. July 2009. (*oral, invited*)
22. Sensor network technology in support of aquatic microbiology. CENS Research Review, UCLA. October 2009. (*oral, invited*)
23. Characterization of phytoplankton dynamics in Lake Fulmor, CA using ENS approaches. CENS Research Review, UCLA. Oct 2006.

CONTRIBUTED PRESENTATIONS (ALL, *indicates grad, **undergrad student coauthor)

24. Lewis, TL**, A Jaegge*, J Raabe, BA Stauffer. Effects of the 2019 Floods on Water Quality and Phytoplankton in South Louisiana Estuaries. Presentation at Fall 2019 McNair Scholars Symposium, UL Lafayette, Lafayette, LA, Dec 2019. (*oral*)
25. Kurtay, G*, BA Stauffer. GSS Distributions of pico- and nanoplankton in the northwestern Gulf of Mexico following Hurricane Harvey. Graduate Student Symposium, UL Lafayette, Lafayette, LA, Nov 2019. (*oral*)
26. Lewis, TL**, A Jaegge*, J Raabe, BA Stauffer. Effects of the 2019 Floods on Water Quality and Phytoplankton Communities in South Louisiana Estuaries. 3rd Annual Symposium for Undergraduate Research Exploration (SURE), University of Texas at Austin, Austin, TX, Nov 2019.
27. Jaegge, A*, S Casas, J La Peyre, M La Peyre, B Stauffer. Restoration-induced changes to phytoplankton communities: do cyanobacteria affect oyster feeding and selectivity? Coastal and Estuarine Research Foundation Meeting, Mobile, AL, Nov 2019. (*oral*)
28. Grow it Like it's Hot: How Warming and Freshening Estuaries Support Growth of Cyanobacteria, Authors: Pell, E **, A Jaegge*, G Kurtay*, B Lavergne**, BA Stauffer. REU & Summer Undergraduate Research Symposium, UL Lafayette, Lafayette, LA, July 2019.
29. Stauffer, BA; G Kurtay*, M Pathare*, A Schnetzer. Enhanced microzooplankton grazing in surface waters of the northern Gulf of Mexico following Hurricane Harvey. ASLO Aquatic Sciences Meeting, San Juan, Puerto Rico, Feb 2019. (*oral*)

30. Topor, Z*, BA Stauffer, K Robinson. Near- to offshore zooplankton community structure of the northern Gulf of Mexico after Hurricane Harvey. ASLO Aquatic Sciences Meeting, San Juan, Puerto Rico, Feb 2019.
31. Kurtay, G*, M Pathare*, BA Stauffer. The impacts of Hurricane Harvey on phytoplankton functional groups in the northern Gulf of Mexico. ASLO Aquatic Sciences Meeting, San Juan, Puerto Rico, Feb 2019.
32. Foster, T**, BA Stauffer. The big problem of small plastics: optimizing staining methods to quantify microplastics in Louisiana estuaries. ASLO Aquatic Sciences Meeting, San Juan, Puerto Rico, Feb 2019.
33. Pathare, MG*, HJ Prevost**, BA Stauffer. Exploring the microbial loop: Trophic interactions between microzooplankton and phytoplankton in eutrophic and oligotrophic waters of the northern Gulf of Mexico. Gulf Estuarine Research Society (GERS) Meeting, Galveston, TX, Nov 2018.
34. Kurtay, G*, BA Stauffer. Responses of phytoplankton communities to Hurricane Harvey in the northwestern Gulf of Mexico. Gulf Estuarine Research Society (GERS) Meeting, Galveston, TX, Nov 2018.
35. Prevost, HJ**, M Pathare*, BA Stauffer. Comparison of seasonal abundances of pico- and nanoplankton in a South Louisiana estuary. Gulf Estuarine Research Society (GERS) Meeting, Galveston, TX, Nov 2018.
36. Pathare, MG, HJ Prevost, BA Stauffer. Exploring trophic interactions between microzooplankton and phytoplankton in eutrophic and oligotrophic waters of the northern Gulf of Mexico. Graduate Student Symposium, Dept. of Biology, UL Lafayette. Oct 2018.
37. Humes, R**, BA Stauffer, RL Miller, M ElSaadani, E Ancelet. Investigating the Effects of Land Use and Land Cover on Water Quality Along the Vermilion River. REU and Summer Undergraduate Research Symposium, UL Lafayette, July 2018.
38. Foster, TA**, BA Stauffer. The big problem of microplastics: using staining methods to quantify small microplastics in Louisiana estuaries. REU and Summer Undergraduate Research Symposium, UL Lafayette, July 2018.
39. Prevost, HJ**, M Pathare*, BA Stauffer. Changes in Seasonal Abundances and Phytoplankton Community Composition at Vermilion Bay, Louisiana. REU and Summer Undergraduate Research Symposium, UL Lafayette, July 2018.
40. Jaegge, AC*, BA Stauffer. Quantifying Environmental Controls on Phytoplankton Community Dynamics in Louisiana Coastal Estuaries. State of the Coast Meeting, New Orleans, LA, May 2018.
41. Pathare, M*, HJ Prevost**, BA Stauffer. Trophic interactions between microzooplankton and phytoplankton in the Atchafalaya Vermilion Bay. State of the Coast Meeting, New Orleans, LA, May 2018.
42. Babitch, JW*, JA Nelson, BA Stauffer. The planktonic piece of the PIE: resolving nitrogen use by phytoplankton in a mesotidal salt marsh of Plum Island Estuary. Meeting of the New England Estuarine Research Society (NEERS), Portsmouth, NH, April 2018.
43. Tabassum-Tackett, S*, BA Stauffer, PL Klerks. Bioaccumulation and effects of cadmium in three phytoplankton species: *Akashiwo sanguinea*, *Heterosigma akashiwo*, and *Coscinodiscus* sp. 12th International Symposium on Biogeochemistry of Wetlands, Fort Lauderdale, FL, April 2018.
44. Stauffer, BA, G Woods**. Tolerance to Changing Salinity in an Estuarine Dinoflagellate Species Creates Opportunities for Algal Blooms in Dynamic Coastal Ecosystems. Ocean Sciences Meeting, Portland, OR. Feb 2018. (oral)

45. Jaegge, AC*, BA Stauffer. Quantifying Environmental Controls on Phytoplankton Community Dynamics in Louisiana Coastal Estuaries. Ocean Sciences Meeting, Portland, OR. Feb 2018.
46. Babitch, JW*, JA Nelson, BA Stauffer. Size composition, nitrogen cycling, and food web roles of tidal marsh phytoplankton. Coastal and Estuarine Research Foundation Meeting, Providence, RI. Nov 2017.
47. Pathare, M*, BA Stauffer. Impact of microzooplankton grazing on phytoplankton growth and community structure in a subtropical estuary. Coastal and Estuarine Research Foundation Meeting, Providence, RI. Nov 2017.
48. Jaegge, AC*, BA Stauffer. Phytoplankton dynamics in Louisiana's Atchafalaya-Vermilion Bay System. Graduate Student Symposium, Dept. of Biology, UL Lafayette. Sept 2017.
49. Pathare, M*, BA Stauffer. Trophic interactions between microzooplankton and phytoplankton in a sub-tropical Louisiana estuary. Graduate Student Symposium, Dept. of Biology, UL Lafayette. Sept 2017.
50. Babitch, JW*, JA Nelson, BA Stauffer. Size-specific growth, nitrogen cycling, and food web roles of tidal marsh phytoplankton. Graduate Student Symposium, Dept. of Biology, UL Lafayette. Sept 2017.
51. Broussard, LC**, A Pruitt**, BA Stauffer. The effect of salinity on growth and photosynthetic pigments of estuarine dinoflagellate, *Akashiwo sanguinea*. Biology Undergraduate Research Symposium, UL Lafayette April 2017.
52. Sub-mesoscale variability in phytoplankton assemblages in productive bays of south Louisiana. ASLO Aquatic Sciences Meeting, Honolulu, HI. March 2017. (*oral*)
53. Lauchner, A**, BA Stauffer, M Pathare. Microzooplankton Grazing of Phytoplankton within Vermilion Bay. Undergraduate Research Conference, UL Lafayette. Nov 2016.
54. Jaegge, A*, BA Stauffer. Phytoplankton variability in the Hudson River and future application in Louisiana's coastal bays. Graduate Student Symposium, Dept. of Biology, UL Lafayette. Nov 2016.
55. Building a base for nutrient sensing across applications: Lessons from the Nutrient Sensor Challenge. ASLO Summer Meeting, Santa Fe, NM. June 2016. (*oral*)
56. Advancing Sensor Technology for Priority Water Programs. Short Course at National Water Monitoring Conference, Tampa, FL. May 2016.
57. Broussard, LC**, BA Stauffer. The effect of salinity on growth and photosynthetic pigments of the estuarine dinoflagellate *Akashiwo sanguinea*. Biology Undergraduate Research Symposium, UL Lafayette. April 2016.
58. De-coupling of Environmental Conditions, Primary, and Secondary Producers within Cold Regimes in the Southeastern Bering Sea: Insights from a Mooring Time-series and Ship-based Studies. Ocean Sciences Meeting, New Orleans, LA. Feb 2016
59. Growth of heterotrophic protists on red tide-forming phytoplankton species: effects of toxin production and interspecific prey interactions. Speedtalk and poster presentation, Eighth Symposium on Harmful Algae in the US, Long Beach, CA. Nov 2015
60. Miksis-Olds, J, BA Stauffer. Unraveling the mystery of cold regime ecosystem variability in the Bering Sea through acoustics. Acoustical Society of America 170th Annual Meeting, Jacksonville, FL. Nov 2015. (*invited*)
61. Coastal sensor networks allow elucidation of causative mechanisms underlying algal bloom and fish kill events. ASLO Aquatic Sciences Meeting, New Orleans, LA. Feb 2013. (*oral*)

62. Seubert, EL, L Chilton, AG Gellene, A Jones, B Seegers, BA Stauffer, J Thomas, DA Caron. Construction of a community based harmful algal bloom monitoring program: Bridging university research with informal science centers. ASLO Aquatic Sciences Meeting, New Orleans, LA. Feb 2013. (*oral*)
63. Tidally-mediated bloom initiation in a nearshore embayment resolved from a high resolution time-series. Europole Mer Timeseries Analysis in Marine Science and Applications for Industry conference, Brittany, France. Sept 2012. (*poster*)
64. Tidal cycling and microalgal bloom dynamics in a nearshore Southern California coastal environment. Postdoctoral Symposium, LDEO of Columbia University, Palisades, NY. April 2012. (*oral*)
65. The YSI-Iver EcoMapper Platform: An AUV for the Masses. Monterey Bay Aquarium Research Institute, Moss Landing, CA. April 2011. (*oral*)
66. Timeseries analysis of coastal marine ecosystem reveals strong physical forcing of phytoplankton biomass and diversity. ASLO Aquatic Sciences Meeting, San Juan, Puerto Rico. Feb 2011. (*oral*)
67. Temporal variations in underlying physical forces driving phytoplankton biomass in King Harbor, Redondo Beach, CA. University of Oldenburg, Institute for Chemistry and Biology of the Marine Environment, Oldenburg, Germany. July 2010. (*oral*)
68. Networked Sensing of Small-Scale Water Column Dynamics in a Near-Shore Urban Embayment. ASLO Ocean Sciences Meeting, Portland, OR. Feb 2010. (*poster*)
69. RN Smith, B Stauffer, J Das, H Heidarsson, AA Pereira, Y Chao, L Darjany, I Cetinic, D Estrin, C Oberg, M Ragan, BH Jones, GS Sukhatme, DA Caron. Design and Implementation of Sensor Networks for the Observation and Research of Harmful Algal Blooms in Southern California Coastal Waters. 2009. Conference on Coastal Environmental Sensor Networks, Univ. Mass. Boston. July 2009.
70. Physical, chemical, and biological factors shaping phytoplankton community structure in King Harbor, Redondo Beach, California. CENS Site Visit, UCLA. May 2009.
71. A Pereira, J Das, H Heidarsson, RN Smith, B Stauffer, E Seubert, M-E Garneau, M Howard, L Darjany, C Oberg, I Cetinic, M Ragan, EC Smith, G Toro-Farmer, F Arrichiello, D Caron, A Schnetzer, B Jones, G Sukhatme. Networked Robotic Sensor Platform Deployments for use in Coastal Environmental Assessment in Southern California. CENS Site Visit, UCLA. May 2009.
72. A Pereira, J Das, H Heidarsson, RN Smith, B Stauffer, E Seubert, ME Garneau, M Howard, L Darjany, C Oberg, I Cetinic, M Ragan, EC Smith, G Toro-Farmer, F Arrichiello, D Caron, A Schnetzer, B Jones, G Sukhatme. Networked robotic sensor platform deployments for use in coastal environmental assessment in southern California. CENS Site Visit, UCLA. May 2009.
73. E Graham, V Chen, S Villamizar, A Rat'ko, H Pai, B Stauffer, T Harmon. Pan-American Sensors for Environmental Observations (PASEO): An Interdisciplinary Pan-American Advanced Studies Institute (PASI). CENS Site Visit, UCLA. May 2009.
74. D Caron, B Stauffer, L Darjany, C Oberg, A Pereira, J Das, H Heidarsson, R Smith, E Smith, E Seubert, ME Garneau, M Howard, B Jones, I Cetinic, G Sukhatme. Networked Aquatic Microbial Observing Systems: An Overview. CENS Site Visit, UCLA. May 2009.
75. B Aswin, C Butler, D Caron, T Harmon, CM Ho, J Judy, D Kim, M Liu, A Ratáko, L Sabet, A Schnetzer, B Stauffer, YC Tai. New Wireless Miniature Sensor Technologies for CENS. CENS Site Visit, UCLA. May 2009.

76. M Liu, L Sabet, A Schnetzer, B Stauffer, D Caron, CM Ho, YC Tai. Field Operational Sensor and Lab-on-a-Chip System for Marine Environmental Monitoring and Analysis. CENS Site Visit, UCLA. May 2009.
77. Protistan dynamics in the near-shore marine environment. Biology Interdepartmental Graduate Symposium USC. May 2009. (*oral*)
78. Studying algal bloom dynamics in King Harbor, CA, using coordinated ENS approaches and human-mediated systems. CENS NSF Site Visit, UCLA. May 2008. (*poster*)
79. Dynamics of Microalgal Blooms in Redondo Beach, California. Biology Interdepartmental Graduate Symposium, USC. May 2008. (*oral*)
80. Small Scale Bloom Dynamics of Raphidophyte and Dinoflagellate Populations in King Harbor, Redondo Beach, California. 4th Symposium on Harmful Algae in the US, Woods Hole, MA. Oct 2007. (*poster*)
81. Investigations of fine-scale diel migration of phytoplankton populations in King Harbor, Redondo Beach. CENS Research Review, UCLA. Oct 2007. (*poster*)
82. X Bai, B Stauffer, L Darjany, D Caron, B Zhang, A Dhariwal, A Pereira, J Das, C Oberg, G Sukhatme. Monitoring and detecting harmful algal blooms in king harbor, city of Redondo Beach, CA, using a wireless sensor network. CENS Research Review, UCLA. Oct 2007.
83. M Liu, S Zheng, B Stauffer, A Schnetzer, L Sabet, DA Caron, CM Ho, YC Tai. Lab-on-a-Chip Aquatic Microorganism Analysis System. CENS Research Review, UCLA. Oct 2007.
84. C Oberg, B Stauffer, A Dhariwal, B Zhang, A Pereira, J Das, X Bai, L Darjany, GS Sukhatme, DA Caron. Networked Aquatic Microbial Observing System. CENS Research Review, UCLA. Oct 2007.
85. B Zhang, A Dhariwal, A Pereira, J Das, C Oberg, B Stauffer, L Darjany, X Bai, D Caron, GS Sukhatme. Adaptive Sampling by Using Mobile Robots and a Sensor Network. CENS Research Review, UCLA. Oct 2007.
86. A Dhariwal, G Sukhatme, D Caron, X Bai, L Darjany, J Das, C Oberg, A Pereira, B Stauffer, B Zhang. Automated Mapping and Exploration. CENS Research Review, UCLA. Oct 2007.
87. Observation of Phytoplankton Bloom Dynamics in a Small Lake Using a Wireless Sensor Network. ASLO Summer Meeting, Victoria, BC, Canada. June 2006. (*poster*)
88. Characterization of the Phytoplankton Community in Lake Fulmor, CA, Using Embedded Sensor Networks. CENS Event. 2006. (*poster*)
89. A Dhariwal, B Zhang, A Pereira, C Oberg, B Stauffer, S Moorthi, D Caron, G Sukhatme. NAMOS: Networked Aquatic Microbial Observing System. CENS Event. 2006.
90. G Sukhatme, D Caron, C Oberg, B Zhang, A Dhariwal, B Stauffer, S Moorthi, A Pereira. ENS Approaches for Observing and Sensing of Microbial Communities in Aquatic Ecosystems An Overview. CENS Event 2006
91. S Moorthi, B Stauffer, C Oberg, G Sukhatme, D Caron. Investigating Vertical Migration and Bloom Dynamics of a Red Tide Dinoflagellate: Laboratory Observations and a Novel Sensing Approach. CENS Event 2006.
92. A Benahmed, N Rechner, R Lam, M Bendikov, A Ratko, C Butler, I Goldberg, D Kim, M Glickman, D Zhang, M Liu, S Zheng, M Mahapatro, P Gross, B Stauffer, A Lee, M Thomspson, Ch Zhou, D Caron, A Requicha, T Harmon, J Judy, Y-C Tai, C-M Ho. Wireless Miniature Sensors for CENS Overview. CENS Event. 2006

93. Use of Embedded Networked Sensing for the Study of Cyanobacterial Bloom Dynamics. International Symposium on Cyanobacterial Harmful Algal Blooms (ISOC-HAB), Research Triangle Park, NC. Sept 2005.

PROFESSIONAL SERVICE & OUTREACH ACTIVITIES

- Ongoing Manuscript Review: Limnology & Oceanography, Journal of Marine Systems, Estuaries & Coasts, Journal of Coastal Research, Science of the Total Environment, Aquatic Ecology, New Zealand Journal of Marine and Freshwater Research
- Ongoing Proposal Review: NSF OCE, CAREER, and REU; NOAA ECOHAB and Sea Grant; US EPA Pathfinder Innovation Projects
- Ongoing Member: Association for the Sciences of Limnology & Oceanography (ASLO), Coastal and Estuarine Research Foundation (CERF), American Association for the Advancement of Science (AAAS)
- 2019-present Member-at-large (elected), ASLO Board
- 2019-present Member, Ad Hoc Committee on Campus Experience Survey, Graduate School, UL Lafayette
- 2016-present Founder & Organizer, Science on the Bayou series for informal science communication (www.facebook.com/scienceonthebayou)
- 2016-present Member, LUMCON Advisory Committee
- 2016-present Member, Partnership for Undergraduate Life Science Education (PULSE) Team, UL Lafayette, Department of Biology
- 2016-present Co-admin (with P. Griffard lead) for UL Lafayette Dept. of Biology Facebook page
- 2018-2019 Member, R/V Pelican Replacement Committee, LUMCON
- 2018-2019 Member, Graduate Curriculum Committee, Graduate Council, UL Lafayette
- 2016-2019 Member, Ruth Patrick Award Committee, ASLO
- 2015-2017 Advisory Council Member, Tulane Nutrient Reduction Challenge
- 2015-2017 Reader, AAAS Science & Technology Policy Fellowship
- 2019-present Faculty Search Committee Member, UL Lafayette Dept. of Biology
- 2019 NSF REU Proposal Review Panelist
- 2019 UL Lafayette Organizer, Coastal Connections competition at UL Lafayette in collaboration with Louisiana Sea Grant, April 2019
- 2018 Faculty Search Committee Member, UL Lafayette Dept. of Biology
- 2018 Session organizer, "Effects of Storm Events on Aquatic, Coastal, and Oceanic Environments and Ecosystems," ASLO Aquatic Sciences Meeting, San Juan, Puerto Rico, Feb 2019
- 2017 NOAA ECOHAB Proposal Review Panelist
- 2017 Session co-organizer, "Scales of variability in aquatic environments: are some more important than others?," ASLO Aquatic Sciences Meeting, Honolulu, HI, Feb 2017
- 2016 Faculty Search Committee Member, UL Lafayette Dept. of Biology
- 2016 UL Lafayette Organizer, Coastal Connections competition at UL Lafayette in collaboration with Louisiana Sea Grant, March 2017
- 2016 Special issue co-organizer, "Continuous nutrient sensing in research and management: applications and lessons learned across aquatic environments and watersheds," Journal of Water Resources Research, expected publication in 2017
- 2016 Session co-organizer, "Continuous nutrient sensing in research and management: applications, methods, and lessons learned across aquatic environments and watersheds," ASLO Summer Meeting, Santa Fe, NM, June 2016
- 2016 Founder & Organizer, Science on the Bayou series for informal science communication (23 events since 2016)
- 2016 Faculty Search Committee Member, UL Lafayette Dept. of Biology
- 2015 Volunteer, Vermilionville Earth Day, Lafayette, LA

- 2015 Advisory Council Member, Tulane Nutrient Reduction Challenge
- 2015 Technical Advisory Committee Member, ACT Performance Verification of Variable Fluorescence
- 2012 LDEO Open House – Interactive Plankton Exhibit
- 2012 Field Scientist, Hudson River Snapshot Day.
- 2012 Facilitator, American Museum of Natural History Educators’ Night: “Bioluminescence”
- 2012 Blog Author, “Sea Ice Blooms in the Far North,” during Bering Sea cruise aboard the R/V Oscar Dyson (<http://www.ldeo.columbia.edu/research/blogs/sea-ice-blooms-far-north>)
- 2011 Phytoplankton Identification Trainer, SoCal Community HABwatch Network (<http://www.usc.edu/org/cosee-west/habwatch.html>)
- 2011 Invited Student Presenter, COSEE West Workshop on Harmful Algal Blooms for Informal Science Educators, "Research and monitoring of harmful algal blooms: Improving observations using autonomous vehicles and sensor networks."
- 2009-2010 Student Representative to the Faculty, USC Marine Environmental Biology
- 2007-2010 Vice President, Graduate Women in Biology, USC
- 2008 Co-organizer, Communicating Marine Science for USC Graduate Students
- 2006-2007 Co-developer of Plankton Exhibit with the Aquarium of the Pacific, Long Beach, CA

OCEANOGRAPHIC CRUISES, FIELD EXPERIENCE, & CREDENTIALS

- 2019 Completed Leadership Principles I Training, UL Lafayette (20 hours)
- 2019 Completed Allies Training, UL Lafayette
- 2016-2018 Participated in several teaching and mentoring workshops, including Courageous Conversations, Mentoring Underrepresented & Minority Students, and Engaged Student Learning
- 2018 BoatUS Foundation Online Boating Safety Course (NASBLA-approved, USCG-recognized)
- 2017-2018 Three, week-long research cruises aboard R/V Point Sur and R/V Pelican in support of NSF RAPID research project, Chief Scientist on Jan 2018 cruise.
- 2016-present Multiple day cruises aboard R/V Acadiana (LUMCON) for research and teaching
- 2012-2013 Water Quality monitoring cruises aboard Riverkeeper boat, Hudson River, NY (PI: Juhl)
- 2012 Oceanographic cruise aboard RV Oscar Dyson in the Gulf of Alaska and Bering Sea to study spatial patterns of plankton community structure relative to sea ice extent (NASA, PI: Goes)
- 2011 YSI EcoMapper AUV deployment in Monterey Bay as part of Monterey Bay Aquarium Research Institute CANON program (PI: Chavez)
- 2011 YSI Ecomapper AUV Training, St. Petersburg, FL
- 2005-2011 Extensive shore-side *in situ* sensing and sampling of phytoplankton in Santa Monica Bay, CA
- 2003-2010 Webb Slocum Glider deployment and piloting, numerous day cruises in waters off Southern California in support of ECOHAB and Bight projects studying environmental triggers of toxic *Pseudonitzschia* blooms in the San Pedro Bay (PI: Caron)
- 2008 Webb Slocum Glider Training, Falmouth, MA
- 2008 Oceanographic cruise aboard RVIB Nathaniel B. Palmer in Ross Sea, Antarctica studying trophic cascades of plankton assemblages in coastal and polynya systems (NSF OPP, PI: Caron)
- 2005-2006 Multi-day seasonal sampling of sub-alpine Lake Fulmor in San Jacinto mountains, CA (NSF CENS, PI: Estrin)
- 2004 Scientific Dive Training (AAUS), USC Wrigley Institute
- 2002 Oceanographic cruise aboard RV Endeavor to assist in recovery of deep-sea sediment traps in the North Atlantic (PI's: Capone, Michaels)

2001 Numerous oceanographic cruises (total 6 months at sea) aboard RV Seward Johnson in the Caribbean, North Atlantic, Sargasso Sea, and Gulf of Mexico in support of diverse NSF-funded research projects

MEDIA COVERAGE

[“Getting a Handle on Nitrates”](#) 2019. GCOOS Newsletter, October 2019.

[“Science on the Bayou’ comes to Jefferson Street”](#) 2018. KADN.

[“UL students study plankton after Hurricane Harvey for effects to commercial fish.”](#) Aaron Gonsoulin. 2018. The Vermilion.

[“Coastal research dead under Trump budget”](#) KATC report, March 2017

[“Improving Nutrient Management and Reducing Pollution through Open Innovation Prizes.”](#) Bruce Rodan, 2016, White House Office of Science & Technology Policy Blog.

[“IMPACT REPORT: 100 Examples of President Obama’s Leadership in Science, Technology, and Innovation.”](#) The White House Office of the Press Secretary, 2016.

[“Paving the Way for the Nutrient Sensor Boom.”](#) Jeff Gillies. 2016. Fondriest Environmental Monitor

[“The Challenge: Track Nutrients in Water to Protect Health.”](#) Kat Song. 2015. AAAS Science & Technology Policy Fellowship News.

[“Innovating to Protect our Waterways.”](#) Tamara Dickinson. 2014. White House Office of Science & Technology Policy Blog.

[“Nutrient Sensor Challenge aims to coax market for next generation instruments.”](#) Jeff Gillies. 2014. Fondriest Environmental Monitor

[“Monitoring network offers rare insight into King Harbor fish kill.”](#) Jeff Gillies. 2013. Fondriest Environmental Monitor.

[“Dead Redondo Beach fish are a scientist's treasure.”](#) Melissa Pamer. 2011. Daily Breeze.

[“A Little Urban Harbor Reveals Big Mysteries.”](#) Charlotte Stevenson. 2011. USC SeaGrant Urban Mariner.