

BETH A. STAUFFER
CURRICULUM VITAE

Associate Professor
Department of Biology
University of Louisiana at Lafayette

213.324.8147
beth.stauffer@gmail.com
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

2021-present Associate Professor, Department of Biology, University of Louisiana at Lafayette
2015-2021 Assistant Professor, Department of Biology, University of Louisiana at Lafayette
2018-2020 Early Career Fellow, National Academies of Science, Engineering, & Medicine
Gulf Research Program
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

2020-present SLEMCO/LEQSF Regents Endowed Professor in Science II
2021 Outstanding Masters Mentoring Award, UL Lafayette Graduate School
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
2016-2017 Louisiana Discovery, Innovation, and Application Program (LaDIA) Fellow,
Louisiana Sea Grant College Program
2017 Rising Star Award, UL Lafayette Research Office, Ray P. Authement College of
Sciences
2016 Certificate of Achievement in Sponsored Research, UL Lafayette
2016 UL Lafayette Summer Faculty Research Award
2013 AAAS Science & Technology Policy Fellowship
2012 Invited Participant - Ecological Dissertations in the Aquatic Sciences (EcoDAS
X) Symposium, University of Hawaii at Manoa
2012 Invited participant - Time-series Analysis in Marine Science and Applications for
Industry Conference, Logonna-Daoulas, France
2012 Invited Participant - 2nd EU-U.S. Developing a New International Architecture for
Maritime Policy Conference, Columbia University, New York, NY
2012-2014 Lamont-Doherty Postdoctoral Fellowship, LDEO
2011 Anita Brown Wilson Scholarship for Environmental Studies, USC
2010 IEEE Distinguished Student Humanitarian Prize (2nd Place), Presidents' Change
the World Competition
2010 Outstanding Teaching Assistant Award, Introduction to Microbiology, USC
2009 Invited Participant - Pan-American Sensors for Environmental Observatories
(PASEO), an NSF Pan-American Advances Studies Institute (PASI), Argentina

2006-2011 College Doctoral Fellowship, USC
2000 General University Honors, University of Miami

PEER-REVIEWED PUBLICATIONS (*grad, **undergrad mentee coauthor)

Published, In-press, & Accepted

- 2021 Patrick, CJ, JS Kominoski, WH McDowell, B Branoff, D Lagomasino, M Leon, E Hensel, MJS Hensel, BA Strickland, TM Aide, A Armitage, M Campos-Cerqueira, VM Congdon, TA Crowl, DJ Devlin, S Douglas, BE Erisman, RA Feagin, SJ Geist, NS Hall, AK Hardison, MR Heithaus, JA Hogan, JD Hogan, S Kinard, JJ Kiszka, T-C Lin, K Lu, CJ Madden, PA Montagna, CS O'Connell, CE Proffitt, BK Reese, JW Reustle, KL Robinson, SA Rush, RO Santos, A Schnetzer, DL Smee, RS Smith, G Starr, BA Stauffer, LM Walker, CA Weaver, MS Wetz, ER Whitman, SS Wilson, J Xue, X Zou. *Accepted*. A universal pattern of trade-offs between ecosystem resistance and resilience to tropical cyclones. *Science Advances*.
- Kurtay, G*, HJ Prevost**, BA Stauffer. 2021. Pico- and nanoplankton communities on the continental shelf of the northwestern Gulf of Mexico in the aftermath of Hurricane Harvey. *Limnology & Oceanography* 66 (7):2779-2796
- Babitch, JW*, JA Nelson, LA Deegan, H Sullivan, BA Stauffer. 2021. Resolving estuarine nitrogen use by phytoplankton communities in Plum Island estuary using a whole ecosystem tracer approach. *Estuaries and Coasts* 44:1883–1898
- 2020 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 Crowl, M Wetz, N Hall, X Zou, SC Pennings, L-J Wang, C-T Chang, M Leon, WH McDowell, JS Kominoski, CJ Patrick. 2020. A research framework to integrate cross-ecosystem responses to tropical cyclones. *BioScience* 70 (6): 477-489. (citations: 2)
- Stauffer, BA, GS Sukhatme, DA Caron. 2020 Physical and biogeochemical factors driving spatially heterogeneous phytoplankton blooms in nearshore waters of Santa Monica Bay, USA. *Estuaries and Coasts* 43:909-926. (citations: 2)
- 2019 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. (citations: 7)
- 2017 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 (citations: 6)
- 2016 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 (citations: 77)

- 2015 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. (citations: 6)
- 2014 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. (citations: 2)
- 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. (citations: 9)
- 2013 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. (citations: 10)
- 2012 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. (citations: 31)
- 2011 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.
- 2010 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. (citations: 74)
- 2009 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. (citations: 42)
- 2008 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. (citations: 27)
- 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. (citations: 34)
- 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.
- 2007 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. (citations: 15)
- 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. (citations: 122)
- 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. (citations: 180)
- 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. (citations: 3)
- 2006 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. (citations: 66)
- 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. (citations: 5)
- 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. (citations: 7)

In revision and In review

- In revision Sweet, J*, S Bargu, M Parsons, MG Pathare*, B Roberts, T Sonniat, W Morrison, BA Stauffer. Trends in phytoplankton dynamics in Louisiana estuaries: building a baseline to understand current and future change. *Marine Pollution Bulletin Virtual Special Issue: Plankton in the Gulf of Mexico: Ecological Considerations and the Macondo Oil Spill*

OTHER SCHOLARLY PUBLICATIONS

- 2021 Lead author (with JM Raabe): Envisioning the Future of eDNA Sampling and Sample Processing. Alliance for Coastal Technologies (ACT) Workshop report, May 2021. https://www.act-us.info/Download/Workshops/2021/ACT_eDNA_Workshop_Series_Report_2021.pdf
- Rhode, R, N Snider, S Midway, J Nelson, R Wells, E Melancon, J Fleeger, D Johnson, B Stauffer, K Ringelman, M Kaller, C Glaspie, J Cowan, A Kolker. 2021. Sediment Diversion Operations Working Group: An Overview of Food Web Dynamics in a Louisiana Estuary. Report to Environmental Defense Fund and Restore the Mississippi River Delta coalition. <https://mississippiriverdelta.org/files/2021/01/FINAL-Bio-Ops-Working-Group-Report.pdf>

- 2020 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, <https://oceanacidification.noaa.gov/ResearchPlan2020.aspx>.
- 2019 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>.
- 2017 Contributing coauthor: Sensors for Monitoring of Harmful Algae, Cyanobacteria and Their Toxins. 2017. Alliance for Coastal Technologies (ACT) Workshop Proceedings, http://www.act-us.info/Download/Workshops/2017/MLML_Algae_Toxins/.
- 2016 Lead author: Judging Packets for Nutrient Sensor Challenge. 2016. Alliance for Coastal Technology and Nutrient Sensor Challenge.
- 2014 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, https://towcenter.gitbooks.io/sensors-and-journalism/content/the_third_section/technical_considerations_in.html.
- 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, <https://aslopubs.onlinelibrary.wiley.com/doi/pdf/10.1002/lob.20142312>. (citations: 6)
- 2007 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.

RESEARCH AWARDS (\$27,518,275 total, \$27,393,615 at UL Lafayette)

Funded Proposals (At UL Lafayette: \$25,758,655 as lead PI, \$1,634,960 as CoPI)

Active Awards:

- 2021-2024 LA Dept. of Wildlife & Fisheries and Coastal Protection and Restoration Authority, \$24,999,673 (first 3 years: \$14,065,204, \$6,572,057 to UL Lafayette). LO-SPAT: Leveraging Opportunities and Strategic Partnerships to Advance Tolerant Oysters for Restoration. **PI** with CoPIs D. Poudel, N. Sidorovskaia, G. Sinclair (UL Lafayette), M. La Peyre (LSU AgCenter) L. Plough (Univ. Maryland Horn Point Lab)
- 2021-2022 NOAA & LA Trustee Implementation Group, \$15,675. [Developing a Plan to Assess Lower Trophic Levels of the Barataria Estuary](#). **CoPI** with PI M. Baustian (The Water Institute of the Gulf), **CoPI** J. Nelson (UL Lafayette), and several others.
- 2021 Louisiana Sea Grant College Program Undergraduate Research Opportunities Program (UROP), \$3,000. [Effects of estuarine freshening on predator-prey](#)

- [interactions in plankton food webs](#). **PI** (with contributions to proposal writing from PhD student G. Kurtay and undergraduate student V. Mire)
- 2021-2022 Louisiana Water Resources Research Institute (LWRRI, funded through USGS 104b program), \$15,000. Cyanotoxins in south Louisiana estuaries: implications for water quality and oyster health. **PI**.
- 2021-2024 NOAA Ocean Acidification Program (OAP), \$210,000 (approx. \$60,000 to UL Lafayette). Evaluation of OA impacts to plankton and fish distributions in the Gulf of Mexico during GOMECC-4 with a focus on HAB-interactions (Bio-GOMECC-4). *Funded Collaborator* with PI L. Barbero (UM/CIMAS), F. Hernandez (USM), G. Zapfe (NOAA SEFSC), A. Schnetzer (NCSU)
- 2021-2024 NSF Research Coordination Networks (RCN), \$489,960 (\$58,589 to UL Lafayette). [RCN-HERS: Research Coordination Network for Hurricane Ecosystem Response Synthesis](#). *CoPI* with PI C. Patrick (VIMS), J. Kominoski (FIU), W. McDowell (UNH)
- 2020-2022 Louisiana Sea Grant College Program, \$137,722. [Understanding the effects of varying prey assemblages on oyster feeding in restoration- and climate-impacted estuaries](#). **PI** with J. La Peyre (LSU AgCenter)
- 2019-2021 Louisiana Sea Grant College Program, \$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 A. Jaegge)
- 2018-2021 NSF Major Research Instrumentation (MRI), \$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)
- 2016-2022 NOAA, National Ocean Service, \$5,000,000 (\$417,875 to UL Lafayette). [The Alliance for Coastal Technologies: National-Scale Efforts Toward Verification and Validation of Observing Technologies](#). *CoPI* with PI M. Tamburri (UMCES) and nine others.
- 2017-2022 NSF Research Experience for Undergraduates (REU), \$308,829. [REU Site: Healthy Streams, Healthy Coasts: An Interdisciplinary Approach to Watershed Science and Education](#). **PI** (2019-2022), *CoPI* (2017-2019) with K. Costigan (UL Lafayette, 2017-2019).

Pending Proposals:

- 2022-2025 NOAA OAP/NCCOS, Est. \$1.4M. Letter of intent: Assessing combined effects of OA, HABs, and freshwater inflows on oyster reef communities and health. **PI**, with N. D'Souza (CoPI), M. La Peyre (CoPI), and J Hill (LA Tech).
- NOAA OAP/NCCOS, Est. \$1.18M. Letter of intent: Combining modern and paleoceanographic observations to evaluate the synergistic effects of OA and Hypoxia on HABs on the West Florida Shelf. *CoPI* with PI D. Pierrot and CoPIs L. Barbero, C. Kelble, E. Osborne (NOAA AOML), A Schnetzer (NCSU), C Benitez-Nelson (USC)

NOAA OAP/NCCOS, Est. \$1.48M. Letter of intent: Data-driven interrogation of harmful algal bloom and ocean acidification interactions and impacts in the northern Gulf of Mexico. CoPI with PI B. Roberts (LUMCON), X. Hu (TAMU-CC), S. Zhang (TAMU)

Past Awards:

- 2020-2021 LA Board of Regents Support Fund, \$85,554. Enhancement of Biology Research and Teaching through Personal Flow Cytometry. PI with 9 colleagues (UL Lafayette)
- LA Board of Regents Support Fund, \$85,303. Acquisition of FTIR chemical bond imaging microscope for advancement in chemical, materials, and biological science research and education. Internal CoPI (PI Dilip Depan, UL Lafayette)
- 2019-2020 Louisiana Water Resources Research Institute (USGS 104b), \$9,168. Assessing present and potential effects of cyanotoxins in south Louisiana estuaries. PI
- 2018-2020 National Academies of Science, Engineering, and Medicine Gulf Research Program Early Career Research Fellow, \$76,000. PI
- 2017-2019 NSF RAPID, \$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)
- 2018-2019 Gulf of Mexico Coastal Ocean Observing System (GCOOS, NOAA), \$25,000. [Testing Operational Status of Nutrient Sensors in the Gulf of Mexico.](#) PI
- 2016-2018 Louisiana Sea Grant College Program, \$70,000. Investigating the potential impacts of restoration activities on phytoplankton communities in the Atchafalaya-Vermilion Bay system (Graduate Assistantship). PI
- 2015-2016 NOAA, National Ocean Service, \$50,000. The Alliance for Coastal Technologies: National-Scale Efforts Toward Verification and Validation of Observing Technologies. CoPI with PI M. Tamburri (UMCES).
- 2012-2014 LDEO Postdoctoral Fellowship Award, \$115,000 (stipend & research budget). Effects of predicted ocean acidification on the growth and physiology of red-tide dinoflagellates. Postdoctoral Research Fellow. PI

Internal Awards:

- 2017-2018 UL Lafayette Student Technology Enhancement Program (STEP), \$20,122.71. Building a modern technology lab for aquatic ecology courses. PI
- ICaWR Pilot Project Funding, \$4,846. Oyster feeding and selectivity with hydrologic restoration-induced changes in phytoplankton prey communities. PI with M. La Peyre (LSU AgCenter)
- ICaWR Pilot Project Funding, \$4,986. Terrebone Bay plankton communities. CoPI with K. Robinson and J. Nelson (UL Lafayette)

- 2013 The Earth Institute, Columbia University, \$1,800. Undergraduate Research Assistant (Spring 2013) to work on Climate Center *Noctiluca miliaris* project. **PI**, with H. Gomes and J. Goes (LDEO).
- 2012-2013 The Climate Center, LDEO, \$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)

TEACHING EXPERIENCE

UL Lafayette

- Harmful Algae: Evolution, Ecology, and Ecosystem Impacts (BIOL 551/552, 1 credit) – graduate seminar offered in fall 2021 (10 graduate students)
- Survey of Marine Biology (BIOL 305, 3 credits) – offered in spring 2021 (20 undergraduate students)
- Scientific Grant Preparation (BIOL 595, 3 credits) – new course offered twice (2018, 2020) to graduate students (primarily Ph.D., average 10 students/semester)
- Estuarine Ecology & Coastal Marine Biology (BIOL 440G, 4 credits) – new course offered in 5 semesters to upper level undergraduate and graduate students (average 12 students/semester); satisfies field elective and writing requirements
- Plankton Ecology (BIOL 595, 3 credits) – new course co-taught with K. Robinson, offered once (2018, 9 students/semester)
- Principles of Ecology (BIOL 360, 4 credits) – existing course offered 3 semesters to upper level undergraduates (average 14 students/semester); satisfies field elective and writing requirements
- LUMCON Marine Field/Ecosystem Ecology – new LUMCON summer field course offered twice (2016, 2018) to upper level undergraduates from LA institutions (average 6.5 students/course)
- Individual Project (BIOL 410) – mentored research experience for undergraduate students (average 1 student/year)

MENTORING & ADVISING EXPERIENCE

Committee Chair or Co-Chair (3 M.S. graduated, 3 Ph.D., 1 M.S. in progress)

- Jaylyn Babitch, M.S. Biology, UL Lafayette, 2018 (current position: Biologist, City of San Jose, CA)
- Mrunmayee Pathare, M.S. Biology, UL Lafayette, 2019 (current position: Research Assistant II, Woods Hole Oceanographic Institution, MA)
- Christin Selle, M.S. Biology, UL Lafayette, 2020, co-chair with Kelly Robinson (current position: Histotechnologist, Elephas, Madison, WI)
- Andrea Jaegge, Ph.D. Biology, UL Lafayette, expected 2021
- Gulce Kurtay, Ph.D. Biology, UL Lafayette, expected 2023
- Julia Sweet, Ph.D. Biology, UL Lafayette, expected 2024
- Hans Prevost, M.S. Biology, UL Lafayette, expected 2022

Committee Member (3 Masters, 4 Ph.D. graduated; 2 M.S., 5 Ph.D. in progress)

- Max Bernt, Ph.D. Biology, UL Lafayette, 2019
- Jack Craig, Ph.D. Biology, UL Lafayette, 2019
- Lesley Kim, Ph.D. Biology, UL Lafayette, 2019

Ryan James, Ph.D. Biology, UL Lafayette, 2020
Justin Lesser, Ph.D. Biology, UL Lafayette, 2021
Marco Franco, M.S. Biology, UL Lafayette, 2017
Aubree Szczepanski, M.S. Marine Science, NCSU, 2019
Saraya Saadat, M.Arch. Architecture, UL Lafayette, 2018

Sanjana Banerjee, Ph.D. Biology, UL Lafayette, expected 2020
Zachary Topor, Ph.D. Biology, UL Lafayette, expected 2022
Stacy Calhoun, Ph.D., Biology, UL Lafayette, expected 2022
Juita Martinez, Ph.D. Biology, UL Lafayette, expected 2022
Sabrina Tabassum-Tackett, M.S. Biology, UL Lafayette, expected 2021
Granger Hanks, M.S. Biology, UL Lafayette, expected 2023

Undergraduate Research Mentees

UL Lafayette - Current

Vivian Mire
Bryce Laverne
Beau Phillips

UL Lafayette - Past

Collin Hebner (REU, Texas A&M University)
Claire Brovold (REU, Adrian College)
Eliot Pell (REU, Ball State University)
Tallie Foster (REU, Fitchburg State University; currently Program Assistant, AmeriCorps)
Rachel Humes (REU, Indiana University Northwest; currently Assistant Geologist, Terracon)
Eric Austin
Teri Lynn Lewis (currently Student Services Contractor, USGS)
Dalton Laroux
April Pruitt (currently pursuing graduate school, Yale University)
Amber Lauchner (recently completed M.S. in Biology, Plymouth State University)
Gina Woods (currently employed as research assistant, LUMCON)
Lauren Broussard
Hans Prevost (currently M.S. student, UL Lafayette)
Jenny Rhee
Quinnetta Humphries
Alexander Adams

LDEO

Heidi Keller Yeh (Barnard; currently Ph.D. student, Rutgers University)
Andrea Jaegge (REU, University of Alabama; currently Ph.D. student, UL Lafayette)

USC

Dustin Coit
Christine Sur (M.S. Ecology, UC Davis; currently Senior Natural Resources Advisor, U.S. House of Representatives)
Diane Rico (M.S. Oceanography, University of Washington)

INVITED PRESENTATIONS

National & International Venues

- 2020 A changing Gulf: understanding the effects of environmental variability and perturbation on coastal phytoplankton communities in the Gulf of Mexico and the food webs that depend on them. Rutgers University Department of Marine and Coastal Sciences, Nov 2020.
- A marginal sea of variability in ocean acidification and harmful algal blooms in the Gulf of Mexico. NOAA Ocean Acidification & Harmful Algal Blooms: Defining a Research Agenda, Virtual Webinar and Workshop, Jul-Aug 2020. (available online: <https://www.youtube.com/watch?v=mJYFp7GnBhs&feature=youtu.be>)
- From HABs to hurricanes: understanding the drivers of changing plankton communities and their effects on ocean food webs. Skidaway Institute of Oceanography, University of Georgia, Skidaway, GA, Mar 2020.
- From HABs to hurricanes: understanding the drivers of changing phytoplankton communities and their effects on ocean food webs. Florida International University, Department of Biological Sciences, Miami, FL, Feb 2020.
- 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.
- 2019 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.
- Lightning talk: Ecosystem responses to Hurricane stressors. Ecosystem Responses to Hurricanes Synthesis Workshop, Texas A&M Corpus Christi, Apr 2019.
- 2018 (*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.
- 2016 Facilitating Innovations in Environmental Monitoring Technologies. National Water Monitoring Conference, Tampa, FL. May 2016
- Phytoplankton dynamics in the coastal ocean: a tale of two blooms. University of West Florida, Department of Biology, Pensacola, FL. Apr 2016.
- 2015 Nutrient Sensor Challenge Summit: Overview and Objectives. Nutrient Sensor Challenge Summit, Carriage House, Washington DC. Aug 2015.
- 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. Mar 2015
- 2014 Results from User Surveys: Needs for the next generation of nutrient sensors. Alliance for Coastal Technologies Nutrient Sensor Challenge Workshop, Washington, DC. Sep 2014

- 2012 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.
- 2010 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. Jul 2010.
- 2009 Coastal Sensor Networks in Southern Californian Coastal Water in Support of Harmful Algal Bloom Research. Conference on Coastal Environmental Sensor Networks, Univ. Mass. Boston. Jul 2009.

Regional & Local Venues

- 2020 Cyanobacteria HABs in LA estuaries. Louisiana HAB Task Force Meeting, LSU, Baton Rouge, LA, Feb 2020.
- 2019 Beyond Biomass: The Variety of Roles and Controls Shaping Phytoplankton Communities. Southeastern Louisiana University, Department of Biology, Apr 2019.
Beyond biomass: The variety of roles and controls shaping phytoplankton communities. Louisiana State University, College of the Coast & Environment, Feb 2019.
- 2017 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.
Climate change and the ocean: an intimate relationship. Conversations on Climate Teach-In, UL Lafayette History Dept., Apr 2017
Charismatic megamicro(fauna): tiny organisms that make a difference. UL Lafayette Biology Society, Mar 2017.
- 2016 One phrase, two meanings: phytoplankton blooms in the coastal ocean. Sciences Interdisciplinary Monthly Meeting, Ray P. Authement College of Sciences, UL Lafayette, Nov 2016.
- 2015 Phytoplankton blooms: thoughts on an evolving definition. Louisiana State University Museum of Natural Science, Baton Rouge, LA. Oct 2015.
Plankton and hypoxia: complex feedbacks on physiology and community structure. Public Workshop on Hypoxia in the Gulf of Mexico, Lafayette, LA. Oct 2015.
Not your Mother's Bloom: Thoughts on an Evolving Definition. Southeast Louisiana University, Biology Department, Hammond, LA. Sep 2015.
- 2014 Finding meaning in the noise: High resolution plankton dynamics in the coastal ocean. University of Louisiana at Lafayette, Department of Biology, Lafayette, LA. Apr 2014.
- 2012 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. Mar 2012.
- 2009 Sensor network technology in support of aquatic microbiology. CENS Research Review, UCLA. Oct 2009.

- 2006 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)

National & International Scientific Conferences

- 2021 Kurtay, G*, H Prevost**, BA Stauffer. Microbial food web at onshore vs. offshore environments. Coastal & Estuarine Research Federation (CERF) 26th Biennial Conference, Nov 2021 (virtual)
- Sweet, JA*, S Bargu, WL Morrison, M Parsons, MG Pathare*, BJ Roberts, TM Soniat, BA Stauffer. Phytoplankton dynamics in Louisiana estuaries: building a baseline to understand current and future change. Coastal & Estuarine Research Federation (CERF) 26th Biennial Conference, Nov 2021 (virtual)
- Mire, VE**, G Kurtay*, BA Stauffer. Effects of estuarine freshening on predator-prey interactions in plankton food webs. Symposium for Undergraduate Research Exploration 2021 (SURE), University of Texas at Austin, Austin, TX, Oct 2021.
- Jaegge, AC*, S Casas, J La Peyre, M La Peyre, BA Stauffer. Impacts of Non-Toxic *Microcystis aeruginosa* on Oyster Feeding. 10.5 U.S. Symposium on Harmful Algae, May 2021 (virtual)
- 2020 Goodwin, K, J Raabe, F Muller-Karger, M Leinen, GJ Smith, H Bowers, G Canonico, K Egan, BA Stauffer. The future of eDNA sample collection: insights from virtual workshops. 4th Annual eDNA Technical Exchange Workshop (virtual), Nov 2020.
- Jaegge, AC*, JM Raabe, BA Stauffer. Floods and phytoplankton: Assessing impacts from the 2019 Mississippi River flooding. Gulf Estuarine Research Society (GERS) Fall Meeting (virtual), Nov 2020. (*awarded top graduate student presentation*)
- Sweet, J*, S Casas, J La Peyre, M La Peyre, J Lively, BA Stauffer. The Louisiana Diet: Investigating oyster food webs in our changing estuaries. 2020 Fisheries Forward Summit, Baton Rouge, LA, March 2020
- Jaegge, AC*, S Casas, J La Peyre, M La Peyre, BA Stauffer. Freshening estuaries: How do cyanobacteria affect oyster feeding? 2020 Fisheries Forward Summit, Baton Rouge, LA, March 2020
- Jaegge, AC*, J Raabe, BA Stauffer. Impacts of the 2019 Mississippi River Flooding on Estuarine Phytoplankton Communities. 2020 Ocean Sciences Meeting, San Diego, CA, Feb 2020.
- Kurtay, G*, BA Stauffer. Nanoplankton and Microzooplankton grazing in the Northern Gulf of Mexico. 2020 Ocean Sciences Meeting, San Diego, CA, Feb 2020.
- Stauffer, BA. Microzooplankton-induced mortality of protists in the Gulf of Mexico: across regions, along productivity gradients, and among functional groups. 2020 Ocean Sciences Meeting, San Diego, CA, Feb 2020.
- 2019 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 2018 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, Apr 2018.
- 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, Apr 2018.
- 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.
- Jaegge, AC*, BA Stauffer. Quantifying Environmental Controls on Phytoplankton Community Dynamics in Louisiana Coastal Estuaries. Ocean Sciences Meeting, Portland, OR. Feb 2018.
- 2017 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.
- 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.
- Stauffer, BA. Sub-mesoscale variability in phytoplankton assemblages in productive bays of south Louisiana. ASLO Aquatic Sciences Meeting, Honolulu, HI. Mar 2017.
- 2016 Building a base for nutrient sensing across applications: Lessons from the Nutrient Sensor Challenge. ASLO Summer Meeting, Santa Fe, NM. Jun 2016.

- Advancing Sensor Technology for Priority Water Programs. Short Course at National Water Monitoring Conference, Tampa, FL. May 2016.
- 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
- 2015 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
- 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*)
- 2013 Coastal sensor networks allow elucidation of causative mechanisms underlying algal bloom and fish kill events. ASLO Aquatic Sciences Meeting, New Orleans, LA. Feb 2013.
- 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.
- 2012 Tidally-mediated bloom initiation in a nearshore embayment resolved from a high resolution time-series. Europe Mer Timeseries Analysis in Marine Science and Applications for Industry conference, Brittany, France. Sep 2012.
- 2011 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.
- 2010 Networked Sensing of Small-Scale Water Column Dynamics in a Near-Shore Urban Embayment. ASLO Ocean Sciences Meeting, Portland, OR. Feb 2010.
- 2009 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. Conference on Coastal Environmental Sensor Networks, Univ. Mass. Boston. Jul 2009.
- 2007 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.
- 2006 Observation of Phytoplankton Bloom Dynamics in a Small Lake Using a Wireless Sensor Network. ASLO Summer Meeting, Victoria, BC, Canada. Jun 2006.
- 2005 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. Sep 2005.

Regional & Local Symposia

- 2021 Hebner, CJ**, BA Stauffer, NA D'Souza. The Effects of Rapid and Sustained Changes in Light and Salinity on *Heterosigma akashiwo*, REU & Summer Undergraduate Research Symposium, UL Lafayette, Lafayette, LA, Jul 2021
- Lavergne, B**, AC Jaegge*, NA D'Souza, BA Stauffer. Combined Effects of Increased Salinity and Temperature on *Microcystis aeruginosa* Growth. REU & Summer Undergraduate Research Symposium, UL Lafayette, Lafayette, LA, Jul 2021
- 2020 Jaegge, AC*, JM Raabe, BA Stauffer. Floods and phytoplankton: Assessing impacts from the 2019 Mississippi River flooding. Gulf Estuarine Research Society (GERS) Meeting, Virtual, Nov 2020.
- 2019 Lewis, TL**, A Jaegge*, J Raabe, BA Stauffer. Effects of the 2019 Floods on Water Quality and Phytoplankton in South Louisiana Estuaries. Fall 2019 McNair Scholars Symposium, UL Lafayette, Lafayette, LA, Dec 2019.
- Kurtay, G*, BA Stauffer. Distributions of pico- and nanoplankton in the northwestern Gulf of Mexico following Hurricane Harvey. Graduate Student Symposium, UL Lafayette, Lafayette, LA, Nov 2019.
- Pell, E **, A Jaegge*, G Kurtay*, B Lavergne**, BA Stauffer. Grow it Like it's Hot: How Warming and Freshening Estuaries Support Growth of Cyanobacteria, REU & Summer Undergraduate Research Symposium, UL Lafayette, Lafayette, LA, Jul 2019.
- 2018 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.
- 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.
- 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.
- 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.
- 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, Jul 2018.
- 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, Jul 2018.
- 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, Jul 2018.

- 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.
- 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.
- 2017 Jaegge, AC*, BA Stauffer. Phytoplankton dynamics in Louisiana's Atchafalaya-Vermilion Bay System. Graduate Student Symposium, Dept. of Biology, UL Lafayette. Sep 2017.
- Pathare, M*, BA Stauffer. Trophic interactions between microzooplankton and phytoplankton in a sub-tropical Louisiana estuary. Graduate Student Symposium, Dept. of Biology, UL Lafayette. Sep 2017.
- 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. Sep 2017.
- 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 Apr 2017.
- 2016 Lauchner, A**, BA Stauffer, M Pathare*. Microzooplankton Grazing of Phytoplankton within Vermilion Bay. Undergraduate Research Conference, UL Lafayette. Nov 2016.
- 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.
- 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. Apr 2016.
- 2012 Tidal cycling and microalgal bloom dynamics in a nearshore Southern California coastal environment. Postdoctoral Symposium, LDEO of Columbia University, Palisades, NY. Apr 2012.
- 2011 The YSI-Iver EcoMapper Platform: An AUV for the Masses. Monterey Bay Aquarium Research Institute, Moss Landing, CA. Apr 2011.
- 2009 Blooms in Southern California Coastal Waters. 2009. Conference on Coastal Environmental Sensor Networks, Univ. Mass. Boston. Jul 2009.
- Physical, chemical, and biological factors shaping phytoplankton community structure in King Harbor, Redondo Beach, California. CENS Site Visit, UCLA. May 2009.
- 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.

- 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.
- 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.
- 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.
- B Aswin, C Butler, D Caron, T Harmon, CM Ho, J Judy, D Kim, M Liu, A Ratâko, L Sabet, A Schnetzer, B Stauffer, YC Tai. New Wireless Miniature Sensor Technologies for CENS. CENS Site Visit, UCLA. May 2009.
- 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.
- Protistan dynamics in the near-shore marine environment. Biology Interdepartmental Graduate Symposium USC. May 2009.
- 2008 Studying algal bloom dynamics in King Harbor, CA, using coordinated ENS approaches and human-mediated systems. CENS NSF Site Visit, UCLA. May 2008.
- Dynamics of Microalgal Blooms in Redondo Beach, California. Biology Interdepartmental Graduate Symposium, USC. May 2008.
- 2007 Investigations of fine-scale diel migration of phytoplankton populations in King Harbor, Redondo Beach. CENS Research Review, UCLA. Oct 2007.
- 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.
- 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.
- 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.
- 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.

- 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.
- 2006 Characterization of the Phytoplankton Community in Lake Fulmor, CA, Using Embedded Sensor Networks. CENS Event. 2006.
- 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.
- 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
- 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.
- 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 Thompsom, 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

PROFESSIONAL SERVICE (since 2015)

Department & University

- 2021-present Member, Aspire Institutional Change initiative (IChange) Team, UL Lafayette
- 2021-present Member, Committee Governance Taskforce, UL Lafayette
- 2015-present Undergraduate advisor (approx. 15 students/year), Department of Biology, UL Lafayette
- 2020-2021 Member, Viewfinder Campus Climate Surveys, Office for Campus Diversity, UL Lafayette
- 2020 Outside Member, Instructor Promotion Committee, School of Geosciences, UL Lafayette
- 2019-2020 Member, Ad Hoc Committee on Campus Experience Survey, Graduate School, UL Lafayette
- 2019-2020 Faculty Search Committee Member (Physiology), UL Lafayette Dept. of Biology
- 2016-2020 Member, Partnership for Undergraduate Life Science Education (PULSE) Team, UL Lafayette, Department of Biology
- 2015-2020 Member, Undergraduate Environmental Biology Scholarships Committee, Dept. of Biology, UL Lafayette
- 2019 UL Lafayette Organizer, Coastal Connections competition at UL Lafayette in collaboration with Louisiana Sea Grant, April 2019
- 2018-2019 Member, Graduate Curriculum Committee, Graduate Council, UL Lafayette
- 2018-2019 Faculty Search Committee Member (Ecology), UL Lafayette Dept. of Biology
- 2017 UL Lafayette Organizer, Coastal Connections competition at UL Lafayette in collaboration with Louisiana Sea Grant, March 2017
- 2016-2017 Faculty Search Committee Member (Coastal Biology), UL Lafayette Dept. of Biology

Scientific Community

- 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, Journal of Plankton Research, Estuarine Coastal and Shelf Science
- Ongoing Ad hoc Proposal Review: NSF OCE, CAREER, and REU; NOAA ECOHAB and Sea Grant; US EPA Pathfinder Innovation Projects; AAAS Science & Technology Policy Fellowships; University of Toledo Interdisciplinary Research Initiation Award Program
- Ongoing Member: Association for the Sciences of Limnology & Oceanography (ASLO), Coastal and Estuarine Research Foundation (CERF), Gulf Estuarine Research Society (GERS), American Association for the Advancement of Science (AAAS)
- 2020-present Chair, Meetings Committee, Association for the Sciences of Limnology & Oceanography (ASLO)
- 2019-present Director, Healthy Streams, Healthy Coasts REU Program, UL Lafayette
- 2019-present Member-at-large, ASLO Board
- 2019-present HARRNESS Update Committee, National HAB Committee
- 2016-present Member, LUMCON Advisory Committee
- 2020-2021 Organizer & Facilitator, ACT eDNA Workshop series (virtual, [reports available online](#))
- 2020-2021 Member, Louisiana Percent for Art Selection Committee for LUMCON Blue Works
- 2021 Search Committee Member, Education Manager, Louisiana Sea Grant College Program
- 2020 Invited presenter and participant, NOAA Ocean Acidification & Harmful Algal Blooms: Defining a Research Agenda, Virtual Webinar and Workshop, Jul-Aug 2020.
- 2019 Proposal Review Panelist, NSF REU
- 2019 Invited participant, Ecosystem Responses to Hurricanes Synthesis Workshop, Texas A&M Corpus Christi, April 2019
- 2018-2019 Member, R/V Pelican Replacement Committee, LUMCON
- 2016-2019 Member, Ruth Patrick Award Committee, ASLO
- 2018-2019 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 Proposal Review Panelist, NOAA ECOHAB
- 2017 Session co-organizer, “Scales of variability in aquatic environments: are some more important than others?” ASLO Aquatic Sciences Meeting, Honolulu, HI, Feb 2017
- 2015-2017 Advisory Council Member, Tulane Nutrient Reduction Challenge
- 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
- 2015 Technical Advisory Committee Member, ACT Performance Verification of Variable Fluorescence

COMMUNITY SERVICE & OUTREACH (all)

- 2016-present Founder & Organizer, Science on the Bayou series for informal science communication (www.facebook.com/scienceonthebayou, approx. 25 events since 2016)
- 2016-2021 Co-admin, UL Lafayette Dept. of Biology Facebook page
- 2020 Virtual Outreach Event, “Impacts of the 2019 Mississippi River flooding,” with approx. 25 Vermilion Parish high school students, Nov 2020
- 2020 Speaker, “Massive events with microscopic-scale impacts,” [LUMCON Science Talks](#), Apr 2020
- 2020 Skype a Scientist, connected with one family and one 7th grade class
- 2017-2018 [Cruise blogs](#) and classroom visits (Episcopal School of Acadiana) for RAPID Plankton project
- 2015 Volunteer, Vermilionville Earth Day, Lafayette, LA
- 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 (<https://dornsife.usc.edu/uscseagrant/habwatch/>)
- 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.”
- 2006-2007 Co-developer of Plankton Exhibit with the Aquarium of the Pacific, Long Beach, CA

OCEANOGRAPHIC CRUISES, FIELD EXPERIENCE, & OTHER CREDENTIALS

- 2016-present Participated in several teaching and mentoring workshops, including Courageous Conversations, Allies Training, Mentoring Underrepresented & Minority Students, Engaged Student Learning, Trauma-Aware Teaching, etc.
- 2019 Leadership Principles I Training, UL Lafayette (20 hours)
- 2018 BoatUS Foundation Online Boating Safety Course (NASBLA-approved, USCG-recognized)
- 2018 Chief Scientist, RAPID Plankton Cruise 2, R/V Pelican, 7 days at sea
- 2017-2018 Three, week-long research cruises aboard R/V Point Sur and R/V Pelican in support of NSF RAPID research project
- 2016-2019 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)
- 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 Six 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.