

Jane Marie Caffrey
Center for Environmental Diagnostics and Bioremediation
University of West Florida
Pensacola, FL 32514

phone: (850) 857-6089 fax: (850) 474-3130
jcaffrey@uwf.edu

Education:

University of Maryland. Ph.D. Marine Environmental and Estuarine Studies Program. 1989.
Dissertation title: The Effect of Submersed Macrophytes on Nitrogen Cycling in Estuarine Sediments.

Louisiana State University. M.S. Marine Science. 1983. Thesis title: The Influence of Physical Factors on Water Column Nutrients and Suspended Sediments in Fourleague Bay, Louisiana

Cornell University. A.B. Biology. 1981.

Professional Experience:

Professor. Center for Environmental Diagnostics and Bioremediation. University of West Florida. August 2014 - present

Associate Professor. Center for Environmental Diagnostics and Bioremediation. University of West Florida. May 2008 – August 2014

Research Assistant Professor. Center for Environmental Diagnostics and Bioremediation. University of West Florida. 1999 - May 2008

Research Oceanographer. Institute of Marine Science. University of California, Santa Cruz. June 1995-June 2003.

Research Coordinator. Elkhorn Slough National Estuarine Research Reserve. December 1995-December 1998.

Oceanographer. Water Resources Division. U.S. Geological Survey. June 1993 - June 1995.

Adjunct Faculty. Department of Oceanography. Florida State University. Summer 1994.

Post-Doctoral Research Associate. Water Resources Division. U.S. Geological Survey. June 1991-June 1993.

Fulbright scholar. Department of Ecology and Genetics. University of Aarhus. Denmark. Aug. 1990- May 1991.

Post-Doctoral Research Associate. Horn Point Environmental Laboratories. University of Maryland Jan-June 1990.

Graduate Research Assistant. Horn Point Environmental Laboratories. University of Maryland 1984-1989.

Research Associate. Center for Wetland Resources. Louisiana State University Jan-Aug. 1984

Graduate Research Assistant. Center for Wetland Resources. Louisiana State University 1981-1983.

Publications:

- Beck, M.W., Cressman, K., C. Griffin, **J.M. Caffrey**. Water quality trends following anomalous phosphorus inputs to Grand Bay, Mississippi, USA. Accepted Gulf and Caribbean Research.
- Caffrey, J.M., S. Bonaglia, and D. J. Conley. Short exposure to oxygen and sulfide alter nitrification, denitrification, DNRA activity in seasonally hypoxic estuarine sediments. In revision.
- Murrell, M.C., **J.M. Caffrey**, D.T. Marcovich, M.W. Beck, B.M. Jarvis, J.D. Hagy III. Seasonal oxygen dynamics in a warm temperate estuary: effects of hydrologic variability on measurements of primary production, respiration, and net metabolism. *Estuaries and Coasts* DOI 10.1007/s12237-0328-9.
- Holmes, C.D., N.P. Krishnamurthy, **J.M. Caffrey**, W.M. Landing, E.S. Edgerton, K.R. Knapp, U.S Nair. 2016. Thunderstorms increase mercury wet deposition. *Environmental Science and Technology*. 50:9343-9350 DOI: 10.1021/acs.est.6b02586.
- Caffrey, J.M.**, J.T. Hollibaugh, B. Mortazavi. 2016. Living oysters and their shells as sites of nitrification and denitrification. *Marine Pollution Bulletin*. 112:86-90.
<http://dx.doi.org/10.1016/j.marpolbul.2016.08.038>
- Hester, C.M., H. M. Smith, M. Head, H. Langsten, S. Linder, L. Sartory, E. Manor, J. Norman and **J. M. Caffrey**. 2016. Comparing production and biogeochemistry of native and transplanted *Thalassia testudinum* and *Halodule wrightii* in Big Lagoon, Florida, USA. *Gulf of Mexico Science*. 33:14-25.
- Caffrey, J.M.** and M.C. Murrell. 2016. A historical perspective on eutrophication in the Pensacola Bay estuary, FL, USA. pp. 199-213 In P. Glibert and T. Kana (eds). *Aquatic Microbial Ecology and Biogeochemistry: A Dual Perspective*. Invited book chapter.
- Das, R. W. Landing, M. Bizimis, L. Odum and **J. Caffrey**. 2015. Mass independent fractionation of mercury isotopes as source tracers in sediments. *Procedia Earth and Planetary Science* 13: 151-157. doi:10.1016/j.proeps.2015.07.036.
- Caffrey, J.M.**, M.C. Murrell, K.R.S Amacker, J. Harper, S. Phipps, and M. Woodrey. 2014 Sustained observations of estuarine metabolism in 3 estuaries in the northeast Gulf of Mexico. *Estuaries and Coasts* invited Special Issue, "Drivers of Change in Shallow Coastal Photic Systems" 37: 222-241. <http://dx.doi.org/10.1007/s12237-013-9701-5>
- Yvon-Durocher, G., **J. M. Caffrey**, A. Cescatti, M. Dossena, P. del Giorgio, J.M. Gasol, J.M. Montoya, J. Pumpanen, P.A. Staehr, M. Trimmer, G. Woodward & A.P. Allen. 2012. Reconciling differences in the temperature-dependence of ecosystem respiration across time scales and ecosystem types. *Nature* 487: 472-476.
- Mortazavi, B., A.A. Riggs, **J.M. Caffrey**, H. Genet, and S.W. Phipps. 2012. The contribution of benthic nutrient regeneration to primary production in a shallow eutrophic estuary, Weeks Bay, Alabama. *Estuaries and Coasts*. 35:862-877.

- Bagui, S., J. Brown, **J. Caffrey**, S. Bagui. 2012. Designing a relational database for tracking and analysis of atmospheric deposition of mercury and trace metals in the Pensacola Bay Watershed. *International Journal of Sustainable Society*. 4: 240-265.
- Caffrey, J.M.**, W.M. Landing, S.D. Nolek, K.J. Gosnell, S.S Bagui, and S.C. Bagui. 2010. Atmospheric deposition of mercury and major ions to the Pensacola (Florida) watershed: spatial, seasonal, and inter-annual variability. *Atmospheric Chemistry and Physics* 10:1-24.
- Landing, W.M., **J.M. Caffrey**, S.D. Nolek, K.J. Gosnell and W.C. Parker. 2010. Atmospheric deposition of mercury and other trace elements in Pensacola, Florida. *Atmospheric Chemistry and Physics* 10:4867-4877.
- Caffrey, J.M.**, N. Bano, J.T. Hollibaugh and J. Haskins. 2010. Effects of upwelling on short-term variability in microbial and biogeochemical processes in estuarine sediments from Elkhorn Slough, California, USA. *Aquatic Microbial Ecology*. 58: 261-271.
- Murrell, M.C., J.G. Campbell, J.D Hagy III, and **J.M. Caffrey**. 2009. Effects of irradiance on benthic and water column processes in a Gulf of Mexico estuary: Pensacola Bay, Florida, USA. *Estuarine Coastal and Shelf Science*.81:501-512.
- Smith, K.A. and **J.M. Caffrey**. 2009. The effects of human activities and extreme meteorological events on sediment nitrogen dynamics in an urban estuary, Escambia Bay, Florida, USA. *Hydrobiologia*. 627:67-85.
- Caffrey, J.M.**, N. Bano, K. Kalanetra and J. T. Hollibaugh. 2007. Ammonia-oxidation and ammonia oxidizing Bacteria and Archaea from estuaries with differing histories of hypoxia. *ISME Journal* 1:660-662.
- Caffrey, J.M.**, T.P. Chapin, H.W. Jannasch, and J.C. Haskins. 2007. High nutrient pulses, tidal mixing and biological response in a small California estuary, Elkhorn Slough, CA, USA: variability in nutrient concentrations from hourly to decadal time scales. *Estuarine, Coastal and Shelf Science* 71: 368-380.
- Caffrey, J.M.**, M.C. Murrell, C. Wigand and R. McKinney. 2007. Effect of nutrient loading on biogeochemical and microbial processes in a New England high salt marsh. *Biogeochemistry* 82:251-264.
- DiDonato, G.T., E.M. Lores, M.C. Murrell, L.M. Smith, and **J.M. Caffrey**. 2006. Benthic nutrient flux in a small estuary in northwestern Florida (USA). *Gulf and Caribbean Research*. 18:15-25.
- Murrell, M.C. and **J.M. Caffrey**. 2005. High cyanobacterial abundance in three Gulf of Mexico estuaries. *Gulf and Caribbean Research*. 17:95-106.
- Chapin, T.P., **J.M. Caffrey**, H.W. Jannasch, L. Coletti, J.C. Haskins and K. Johnson. 2004. Nitrate sources and sinks in Elkhorn Slough, CA: results from continuous in situ nitrate analyzers. *Estuaries* 27:882-894.
- Caffrey, J.M.** 2004. Factors controlling net ecosystem metabolism in U.S. estuaries. *Estuaries* 27: 90-101.

- Caffrey, J.M.** 2003. Production, Respiration and Net Ecosystem Metabolism in U.S. Estuaries. *Environmental Monitoring and Assessment*. 81: 207-219.
- Caffrey, J.M.**, N.E. Harrington, I. Solem, and B.B. Ward. 2003. Biogeochemical Processes in a Small California Estuary: 2. Nitrification Activity, Community Structure and Role in Nitrogen Budgets. *Marine Ecology Progress Series*. 248: 27-40.
- Caffrey, J.M.**, N.E. Harrington, and B.B. Ward. 2002. Biogeochemical Processes in a Small California Estuary: 1. Benthic Fluxes and Pore Water Constituents Reflect High Nutrient Freshwater Inputs. *Marine Ecology Progress Series*. 233:39-53.
- Caffrey, J.M.**, M. Brown, B. Tyler, M. Silberstein (eds.) 2002. Changes in a California Estuary: an Ecosystem Profile of Elkhorn Slough. Elkhorn Slough Foundation. Moss Landing, CA.
- Caffrey, J.M.**, M. Silberstein and L. Strnad. 2002. Chapter 1. Introduction. IN Caffrey, J.M., M. Brown, B. Tyler, M. Silberstein (eds.) Changes in a California Estuary: an Ecosystem Profile of Elkhorn Slough. Elkhorn Slough Foundation. Moss Landing, CA.
- Caffrey, J.M.** 2002. Chapter 3. Climate. IN Caffrey, J.M., M. Brown, B. Tyler, M. Silberstein (eds.) Changes in a California Estuary: an Ecosystem Profile of Elkhorn Slough. Elkhorn Slough Foundation. Moss Landing, CA.
- Caffrey, J.M.** and W. Broenkow. 2002. Chapter 4. Hydrology. IN Caffrey, J.M., M. Brown, B. Tyler, M. Silberstein (eds.) Changes in a California Estuary: an Ecosystem Profile of Elkhorn Slough. Elkhorn Slough Foundation. Moss Landing, CA.
- Silberstein, M., C. Zabin, L. Newberry, D. Mountjoy, L. Strnad, **J.M. Caffrey**. 2002. Chapter 7. Post Columbian History to Present Day Land Use. IN Caffrey, J.M., M. Brown, B. Tyler, M. Silberstein (eds.) Changes in a California Estuary: an Ecosystem Profile of Elkhorn Slough. Elkhorn Slough Foundation. Moss Landing, CA.
- Zimmerman, R. and **J.M. Caffrey**. 2002. Chapter 8. Primary Producers. IN Caffrey, J.M., M. Brown, B. Tyler, M. Silberstein (eds.) Changes in a California Estuary: an Ecosystem Profile of Elkhorn Slough. Elkhorn Slough Foundation. Moss Landing, CA.
- Caffrey, J.M.** 2002. Chapter 12. Biogeochemical Cycling. IN Caffrey, J.M., M. Brown, B. Tyler, M. Silberstein (eds.) Changes in a California Estuary: an Ecosystem Profile of Elkhorn Slough. Elkhorn Slough Foundation. Moss Landing, CA.
- Caffrey, J.M.**, Mountjoy, D., M. Silberstein and C. Zabin. 2002. Chapter 14. Management Issues for the Elkhorn Slough Watershed. IN Caffrey, J.M., M. Brown, B. Tyler, M. Silberstein (eds.) Changes in a California Estuary: an Ecosystem Profile of Elkhorn Slough. Elkhorn Slough Foundation. Moss Landing, CA.
- Caffrey, J.M.** and C. Zabin. 2002. Chapter 15. Summary. IN Caffrey, J.M., M. Brown, B. Tyler, M. Silberstein (eds.) Changes in a California Estuary: an Ecosystem Profile of Elkhorn Slough. Elkhorn Slough Foundation. Moss Landing, CA.
- Mortazavi B., R.L. Iverson, W. Huang, F.G. Lewis, and **J.M. Caffrey**. 2000. Nitrogen Budget of Apalachicola Bay, a Bar-built Estuary in the Northeastern Gulf of Mexico. *Marine Ecology Progress Series*. 195:1-14.

- Caffrey, J.M.**, J.E. Cloern, and C. Grenz. 1998. Changes in Production and Respiration during a Spring Phytoplankton Bloom in San Francisco Bay, California: Implications for Net Ecosystem Metabolism. *Marine Ecology Progress Series*. 172:1-12.
- Caffrey, J.M.**, D.E. Hammond, J.S. Kuwabara, L.G. Miller, and R.R. Twilley. 1996. Benthic Processes in South San Francisco Bay: The Role of Organic Inputs and Bioturbation. In. pp. 425-444. J.T. Hollibaugh (ed.). *San Francisco Bay: The Ecosystem*. AAAS Pacific Division.
- Caffrey, J.M.** 1995. Spatial and seasonal patterns in sediment ammonium concentrations and regeneration rates in San Francisco Bay, CA. *Estuaries*. 18: 219-233.
- Caffrey, J.M.** and L.G. Miller. 1995. A comparison of two nitrification inhibitors used to measure nitrification rates in estuarine sediment. *FEMS Microbiology Ecology*. 17:213-220.
- Caffrey, J.M.**, N.P. Sloth, H. Kaspar, and T.H. Blackburn. 1993. Effect of organic loading on nitrification and denitrification in a marine sediment microcosm. *FEMS Microbiology Ecology*. 12:159-167.
- Seitzinger, S.P., L.P. Nielsen, **J. Caffrey**, and P.B. Christensen. 1993. Denitrification measurements in aquatic sediments: a comparison of three methods. *Biogeochemistry* 23:147-167.
- Caffrey, J.M.** and W.M. Kemp. 1992. Influence of the submersed plant, Potamogeton perfoliatus L., on nitrogen cycling in estuarine sediments. *Limnology and Oceanography*. 37:1483-1495.
- Caffrey, J.M.** and W.M. Kemp. 1991. Seasonal and spatial patterns of oxygen production, respiration and root-rhizome release in Potamogeton perfoliatus L. and Zostera marina L. *Aquatic Botany* 40:109-128.
- Caffrey, J.M.** and W.M. Kemp. 1990. Nitrogen cycling in sediments with submerged macrophytes: Microbial transformations and inorganic pools associated with estuarine populations of Potamogeton perfoliatus L. and Zostera marina. *Marine Ecology - Progress Series*. 66:147-160.
- Kemp, W.M., P. Sampou, **J. Caffrey**, M. Mayer, K. Henriksen and W.R. Boynton. 1990. Ammonium recycling versus denitrification in Chesapeake Bay sediments. *Limnology and Oceanography* 35:1545-1563.
- Denes, T.A. and **J.M. Caffrey**. 1988. Changes in seasonal water transport in a Louisiana estuary, Fourleague Bay, Louisiana. *Estuaries* 11(3):184-191.
- Caffrey, J.M.** and J.W. Day, Jr. 1986. Control of the variability of nutrients and suspended sediments in a Gulf Coast estuary by climatic forcing and spring discharge of the Atchafalaya River. *Estuaries* 9:295-300.

Reports

- Caffrey, J.M., B. Albrecht, R.E. Capps 2017. Seagrass abundance and productivity in Pensacola Bay and Santa Rosa Sound. Final Technical Report. Florida Fish and Wildlife Commission Fish and Wildlife Research Institute. January 31, 2017.
- Dillon, K., **J. Caffrey**, R.H. Carmichael, K. Cressman and M. Woodrey. 2016. Water Quality in Bangs Lake: effects of recurrent phosphate spills to a coastal estuary. Mississippi Water Resources Research Institute (MWRRI)/US Geological Survey Final Technical Report. March 31, 2016
- Caffrey, J.M.** and R. Noble. 2015. Collaboration, innovation and monitoring: ASLO and the National Water Quality Monitoring Council. ASLO Bulletin. 24:83–84 DOI: 10.1002/lob.10051
- Caffrey, J.M.**, M. Ederington-Hagy, B. Wight. 2015. Multi-scale synthesis of water quality data for Gulf Coast Parks. Final report submitted to National Park Service.
- Caffrey, J.M.** and W.M. Landing. 2013 Atmospheric Deposition of Mercury, Trace Metals, and Major Ions Around a Coal-fired Power Plant. Final Report to Electric Power Research Institute. Palo Alto.
- Teal, J.M., R. Best, **J. Caffrey**, C.S. Hopkinson, K.L. McKee, J.T. Morris, S. Newman and B. Orem. 2012. Mississippi River Freshwater Diversions in Southern Louisiana: Effects on Wetland Vegetation, Soils, and Elevation. Edited by A.J. Lewitus, M. Croom, T. Davison, D.M. Kidwell, B.A. Kleiss, J.W. Pahl, and C.M. Swarzenski. Final Report to the State of Louisiana and the U.S. Army Corps of Engineers through the Louisiana Coastal Area Science & Technology Program; coordinated by the National Oceanic and Atmospheric Administration. 49 pages.
- Albrecht, B. **J.M Caffrey**, A. Maestre, R. A. Snyder, Z. Hu, M. Guterrez, and R. L. Wetzel. 2012. An integrated water quality monitoring plan for Northwest Florida and Alabama watersheds. Report from August 18, 2011 workshop at UWF. <http://www.uwf.edu/cedb/research.cfm> 14 pages.
- Caffrey, J.M.** and W.M. Landing 2010. Atmospheric deposition of mercury, trace metals and major ions to a watershed around a coal-fired power plant. Interim Report to Electric Power Research Institute. Palo Alto: 2010. 1021566.
- Caffrey, J.M.** 2010. Hypoxia and Benthic Processes in Pensacola Bay and other Florida Estuaries along the Gulf Coast. Report to FDEP for Nutrient Criteria Determination based on Nutrient Criteria workshop in Pensacola, FL, February 10, 2010.
- Caffrey, J.M.**, W.M. Landing, S. Bagui and S. Bagui. 2009. Atmospheric deposition of mercury and trace metals to the Pensacola Bay Watershed. Final report to U.S. Environmental Protection Agency. Region IV. August 2009.
- Caffrey, J.M.** and R. Noble. 2007. ASLO and the National Water Quality Monitoring Council. ASLO Bulletin 16:22-23.
- Sanger, D.M., M.D. Arendt, Y. Chen, E.L. Wenner, A.F. Holland, D. Edwards and **J. Caffrey**. 2002. A synthesis of water quality data: National Estuarine Research Reserve system-wide monitoring program (1995-2000). National Estuarine Research Reserve Technical Report Series 2002: 3. South Carolina Department of Natural Resources, Marine Resources Division Contribution No. 500. 135 p.
- Wenner, E.L., A.F. Holland, M.D. Arendt, Y. Chen, D. Edwards, C. Miller, M. Meese, and **J.M. Caffrey**. 2001. A synthesis of water quality data from the National Estuarine Research

- Reserves system wide monitoring program. Report to NOAA Estuarine Reserve Division. MRD contribution No 459.
- Caffrey, J.M.**, A.P. DeVogelaere, J.E. Holte, and ABA Consultants. 1998. Elkhorn Slough Bibliography (Fourth Edition). Elkhorn Slough Foundation.
- Caffrey, J.**, S. Shaw, M. Silberstein, A. DeVogelaere, M. White, K. Parker, and K. Thomasberg. 1997. Central Bay Estuarine Water Quality Monitoring Program 1988-1997. Data Report. Elkhorn Slough National Estuarine Research Reserve and Elkhorn Slough Foundation.
- Caffrey, J.M.**, S. Shaw, M. Silberstein, A. DeVogelaere, and M. White. 1997. Water quality monitoring in Elkhorn Slough: a summary of results 1988-1996. unpublished report to Elkhorn Slough Foundation and Elkhorn Slough National Estuarine Research Reserve.
- Werner, M.R., M. Silberstein, M. Los Huertos, S. Gliessman, J. Newman, R. Tjeerdema, **J. Caffrey**, S. Shaw, A. De Vogelaere, J. Mason. 1997. Agriculture and wetlands, examining the interface at the Azevedo Ranch and the Elkhorn Slough National Estuarine Research Reserve in coastal central California. A final report submitted to the U.S. Department of Commerce National Oceanic and Atmospheric Administration.
- Caffrey, J.M.** 1997. Chapter 4 - The Chemical Environment. In. Science Applications International Corporation (eds.) Outer Continental Shelf Environmental Studies Program: Northeastern Gulf of Mexico Coastal and Marine Data Search and Synthesis; Synthesis Report. U.S. Department of the Interior, U.S. Geological Survey, Biological Resources Division, USGS/BRD/CR -- 1997-004. 304 p.
- Caffrey, J.M.** 1996. Effect of land-use practices on nutrient dynamics in subtidal estuarine sediments in Elkhorn Slough, CA. Final report to National Oceanic and Atmospheric Administration, Sanctuaries and Reserves Division. Grant # NA47OR0198.
- Caffrey, J.M.** and B.B. Ward. 1996. Data Report for Cruise No. 94-119 in the Eastern Tropical North Pacific. Institute of Marine Science, University of California Santa Cruz.
- Boesch, D.F., **J.M. Caffrey**, J.E. Cloern, D.F. D'Elia, D.M. DiToro, W.W. Walker, Jr. 1996. Florida Bay Oversight Panel: Ad Hoc Committee on nutrients. Florida Bay Nutrients: Perspectives on the July 1-2 1996 Workshop. Submitted to Program Management Committee, Florida Bay Research Program.
- Edmunds, J.L., B.E. Cole, J.E. Cloern, J.M. Caffrey, and A.D. Jassby. 1995. Studies of the San Francisco Bay, California, Estuarine Ecosystem. Pilot regional monitoring results, 1994. U.S. Geological Survey. Open-File Report 95-378. 436 pages.
- Jassby, A.D., Cloern, J.E., Cole, B.E., and Caffrey, J.M. 1995, Choosing optimum station configurations for summarizing water quality characteristics, in 1994 Annual Report, San Francisco Estuary Regional Monitoring Program for Trace Substances: San Francisco Estuary Institute, p. 185-197.
- Jassby, A., Cloern, J.E., **Caffrey, J.**, Cole, B., and Rudek, J., 1994, San Francisco Bay/Delta Regional Monitoring Program plankton and water quality pilot study, 1993, in 1993 Annual Report, San Francisco Estuary Regional Monitoring Program for Trace Substances: San Francisco Estuary Institute, p. 117-128.
- Caffrey, J.M.**, B.E. Cole, J.E. Cloern, J. Rudek, A.C. Tyler, and A.D. Jassby. 1994. Studies of the San Francisco Bay, California, Estuarine Ecosystem. Pilot regional monitoring results, 1993. U.S. Geological Survey. Open-File Report 94-82. 412 pages.

Book Reviews

Caffrey, J.M. 2001. Review of “Nitrogen loading in coastal water bodies: An atmospheric perspective” edited by R.A. Valigura, et al. *Limnology and Oceanography*. Vol 46(6):1584.

Caffrey, J.M. 2000. Review of “Coastal Ecosystem Processes” by D.M. Alongi. *Quarterly Review of Biology*. Vol 75.

Professional Societies:

American Geophysical Union

American Society of Limnology and Oceanography

Estuarine Research Federation

Society of Wetland Scientists

Synergistic Activities:

Member National Water Quality Monitoring Council and member of National Monitoring Network Steering Committee. 2004 – present.

NOAA Diversion Panel March 2010.

Member Science Advisory Committee for Georgia Coastal Ecosystem Long Term Ecological Research. 2002 - 2011

NSF Chemical Oceanography Panel May 2004, May 2007

Review proposals for NOAA, NSF, Sea Grant (MIT, Rhode Island, Florida, Georgia, Louisiana, Maryland, Puerto Rico)

Review manuscripts for *Science*, *AMBIO*, *Applied Geochemistry*, *Applied Microbiology*, *Aquaculture Environmental Interactions*, *Aquatic Microbial Ecology*, *Aquatic Botany*, *Biogeochemistry*, *Continental Shelf Research*, *Deep Sea Research*, *Ecological Engineering*, *Estuarine Coastal and Shelf Science*, *Estuaries and Coasts*, *FEMS Microbiology Ecology*, *Hydrobiologia*, *International Society of Microbial Ecology Journal*, *Journal of Applied Ecology*, *Journal of Coastal Research*, *Journal of Geophysical Research*, *Journal of the North American Benthological Society*; *Journal of Marine Research*, *Limnology and Oceanography*, *Marine Biology Research*, *Marine Ecology Progress Series*, and *Marine Pollution Bulletin*, *PLoS ONE*, *Science of the Total Environment*.

Judge for Graduate Student Symposium, Dauphin Island Sea Lab, March 13-14, 2015.

University Service

HMCSE Faculty Personnel Committee (2017-present)

Honors Working Group for HMCSE (2017-present)

Scholarly Activities Task Force and Subcommittee on the organization and operation of the Office of Research and Sponsored Programs. member of committee and subcommittee (2014-5).

Selection Committees for Dean of College of Science, Engineering and Health and Biology Visiting Assistant Professor positions (2014)

Marine Biology Review Committee member (Department) (2011-2012)

Selection Committees for Marine Biology (Biology) and post-doctoral (CEDB) positions (Department) (2011-2012, 2014)

Office of Undergraduate Research - Research Advisory Committee – Reviewer and Review Panel member (University) (2010-2015), Judging committee (2012-2015)

Faculty Sponsored Merit Scholarship - Committee member (University) (2009 - 2014), Chair (2014-2015)

Faculty/Staff Campaign – Peer Communicator (University) (2010 - 2012)

Public Service:

Invited speaker for Escambia County Restore Non-Profit Workshop, Pensacola, FL, April 30, 2015

Participant in Seagrass Awareness Day, Gulf Breeze, FL, March 17, 2015

Grants:

2015-2017 – Florida Institute of Oceanography – FLRACEP – Evaluating Fish Production and Ecosystem Impacts of Artificial Reefs with William Patterson, University of South Alabama and Dauphin Island Sea Lab, and Robert Turpin, Escambia County Marine Resources Division \$293,992.

2015-2016 – Florida Fish and Wildlife Conservation Commission – Seagrass abundance and productivity in Pensacola Bay and Santa Rosa Sound. \$100,000

2015-2016 – Mississippi Water Resources Research Institute – Water Quality in Bang’s Lake: effects of recurrent phosphate spills to a coastal estuary with Kevin Dillon, University of Southern Mississippi and Ruth Carmichael, Dauphin Island Sea Lab \$73,537

2015 - University of West Florida CSEH-RAC travel grant \$750

2014-2015 – Mississippi Water Resources Research Institute – Water Quality in Bang’s Lake: effects of recurrent phosphate spills to a coastal estuary with Kevin Dillon, University of Southern Mississippi and Ruth Carmichael, Dauphin Island Sea Lab \$77,957

2012-2014 – National Park Service – GC-CESU – Synthesis of Water Quality Data for Gulf of Mexico Coastal Parks \$51,584

2012 - University of West Florida - ADVANCE Scholar – host for Distinguished Visiting Scholar, Mary Silver, UCSC \$1,882

2011 - University of West Florida CAS-RAC travel grant

2010-2012 – YSI Minding the Planet Grant. \$25,000

2009 University of West Florida – Scholarly and Creative Activities Grant \$2,000

- 2008-2012 Atmospheric Deposition of Mercury and Trace Metals in the Pensacola Bay Watershed. with Bill Landing, Florida State University. Electric Power Research Institute \$911,176
- 2004-8 Atmospheric Deposition of Mercury and Trace Metals in the Pensacola Bay Watershed. with Bill Landing, Florida State University. Environmental Protection Agency Partnership for Environmental Research and Community Health about \$516,000 out of total project \$ 2, 563,075.
- 2003-2006 Effect of Diurnal and Weekly Water Column Hypoxic Events on Nitrification and Nitrogen Transformations in Estuarine Sediments. with Tim Hollibaugh, University of Georgia. National Science Foundation. Chemical Oceanography. \$450,405.
- 2001 A Synthesis of Water Quality Data from the National Estuarine Research Reserve's System Wide Monitoring Program. with A.F. Holland and E. Wenner, SCDNR. NOAA. \$20,000
- 1998 In Situ Nutrient Monitoring in Estuaries. with Hans Jannasch, MBARI. Cooperative Institute for Coastal and Estuarine Environmental Technology.
- 1998 Community structure and species composition of nitrifying bacteria in aquatic environments. with Bess Ward, Princeton. NSF-Biological Oceanography
- 1995 Role of the Flocculent Layer and Sediments in Carbon and Nitrogen Mineralization in San Francisco Bay. Institute of Marine Science, Shell Oil settlement
- 1994 Effect of land-use practices on nutrient dynamics in subtidal estuarine sediments in Elkhorn Slough, CA. NOAA, Sanctuaries and Reserves Division

Honors:

- 2017 – Peer Reviewer of Distinction for Estuaries and Coasts
- 2016 – Visiting Researcher, Lund University. Support by Biodiversity and Ecosystem Services in a Changing Climate Program, Center for Environmental and Climate Research, Lund University and EU funded COCOA project.
- 2014 – Rite of Passage Lecture Series– University of West Florida
- 2014 – Texas Bays and Estuaries – Invited Speaker
- 2014 – Grand Bay National Estuarine Research Reserve Introduction to MS Coastal Habitats – Invited Speaker
- 2013 – Grand Bay National Estuarine Research Reserve Symposium – Invited Speaker
- 2013 - University of West Florida Honors Program – Nautilus Award
- 2013 - University of West Florida – Distinguished Research and Creative Activities Award
- 2012 – 5th Annual Mattie Kelly Environmental Symposium on Choctawhatchee Bay – Invited Speaker
- 2011 - University of West Florida - ADVANCE Scholar participant
- 2010 - University of West Florida – member of UWF Million Dollar Research Hall of Fame

2010 – U.S. EPA – Honorable Mention in Scientific and Technological Achievement Award

1998 - Award for most collaborative research in poster session of the Monterey Bay Sanctuary Symposium. March 1998. Nutrient Inputs to Elkhorn Slough, CA: Interpreting an 8 Year Record of Volunteer Water Quality Monitoring.

1990 - Fulbright Scholarship.

1990 - National Research Council Postdoctoral Research Associateship

Courses Taught:

Coastal Marine Ecology: PCB4048/PCB 5445 – enrollment 11 (Fall 2017)

Directed Study: PCB 6905 Nutrient cycling – enrollment 1 (Spring 2017)

Directed Study: PCB5905 Classic papers in oceanography and marine biology – enrollment 2 (Fall 2016)

Directed Study: PCB 6905 Method Development – enrollment 1 (Spring 2016 & Summer 2016)

Directed Study: PCB 4905 Marine Invertebrate Ecology – enrollment 1 (Spring 2016, Fall 2016)

Directed Study: PCB4905/PCB 6905 Phytoplankton Ecology – enrollment 1 (Summer 2016, Fall 2016, Spring 2017)

Directed Study: Seagrass Ecology PCB 6905 – enrollment 1 (Fall 2015)

Global Biogeochemical Cycles – University of Lund (Sweden) – PhD enrollment 20 (Fall 2014) guest lecturer

Wastelands to Wetlands IDH 4032 - University of West Florida – enrollment 5-12 (Fall 2012, Fall 2014, Fall 2016)

Directed Study: Laboratory Methods/Water Quality Monitoring/ enrollment 3 (Fall 2014, Aquatic Botany BOT 4404 - University of West Florida –enrollment 20 - 47 (Spring: 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2017)

Aquatic Botany BOT 5990 - University of West Florida –enrollment 3 (Spring: 2015)

Directed Study: Aquatic Botany (graduate level) - University of West Florida –enrollment 1 (Spring 2014)

Estuarine Ecology PCB 4048/PCB 5445 - University of West Florida – enrollment 10 - 17 (Spring 2008, Fall 2009, Fall 2011, Fall 2013)

Estuarine Ecology Lab PCB 4048L/PCB 5445L - University of West Florida – enrollment 10 - 17 (Fall 2009, Fall 2011, Fall 2013)

Directed Study: Phytoplankton Ecology University of West Florida – enrollment 1 (Spring 2014, Spring 2015)

Directed Study: Seagrass Ecology – University of West Florida – (Summer 2011 - enrollment 3 plus 4 student volunteers, Fall 2011 enrollment 3, Spring 2012 enrollment 2, Summer 2012 – enrollment 1 plus 3 student volunteers, Fall 2012 Enrollment 1 plus 2 student volunteers, Spring 2013 Enrollment 2 plus 1 volunteer)

Directed Study: Ecology of Pensacola Bay – University of West Florida – enrollment 4 (Fall 2010)

Directed Study: Research on Estuarine Processes – University of West Florida – enrollment 2 (Fall 2009)

Directed Study: Topics in Coastal Oceanography– University of West Florida – enrollment 3 (Fall 2008)

Directed Study: Bio-Mathematical Modeling - University of West Florida – enrollment 2 (Spring 2007)

Directed Study: Topics in nutrient cycling in shallow estuaries – University of West Florida – enrollment 4 (2005)

Introductory Oceanography for non majors – Florida State University (1994)

University of California Santa Cruz (1996)

Special Topics: Denitrification in Estuaries – Florida State University (1994)

Graduate Students:

Grace Sommerville Master's student (2017-current) University of West Florida

Kendra Brooks Master's student (2016 – current) University of West Florida

Rachel Capps Master's student (2015 - 2017) University of West Florida Thesis Title: Temporal differences in nitrogen fixation rates within sediments colonized by subtropical seagrass species, *Thalassia testudinum* and *Halodule wrightii*

Gary Baine Master's student (2014 - 2017) University of West Florida Thesis Title: Effects of nutrient input and microzooplankton grazing on phytoplankton productivity in the Grand Bay estuary, Mississippi

Marthe Covell Master's student (2010 - 2016) University of West Florida Thesis Title: Latitudinal patterns of ciliate rDNA diversity in the surface plankton of the Pacific Ocean

Gelies Afonso Master's student. (2013 - 2014) University of West Florida. Left program

Kendra Straub Amacker Master's student. (2010 - 2013) University of West Florida. Thesis Title: Comparison of nutrient and light limitation in three Gulf of Mexico estuaries

Kristin Smith. Master's student. (2004-2006) University of West Florida. Thesis Title: The effects of human and climatic impacts on sediment nitrogen dynamics in Escambia Bay, Florida

Post doctoral mentoring

Florian Cesbron. University of West Florida. 2016

Stefano Bonaglia. Lund University. 2016

Graduate Student mentoring

Ines Bartl PhD Student (2017) Rostock University, Germany. Provided a referee report on her doctoral thesis “Nitrogen transformation processes in the coastal zones of the Baltic Sea”.

Tara Plee Master's Student (current) University of West Florida. Biology. Member of committee

Amy Brower Master's Student (current) University of West Florida. Biology. Member of committee

Nichelle Vantassel Master's Student (current) University of West Florida. Biology. Member of committee

Amanda Morrow Master's Student (changed to non-thesis) University of West Florida. Biology. Member of committee

Katelyn Knight Master's Student (current) University of West Florida. Biology. Member of committee

Zachary Barrett Master's Student (2017) University of West Florida. Biology. Directed Study (Fall 2016, Spring 2017)

Matthew Davis Master's Student (2017) University of West Florida. Biology. Member of committee

Nine Henriksson Master's Student. (2017) University of West Florida. Biology. mentor

Joshua Presley Master's Student (2017) University of West Florida. Biology. Directed Study (Spring 2016, Summer 2016)

Marie Head. Master's Student (changed to non-thesis) University of West Florida. Biology. Member of committee

Reena Torrance. Master's Student (2016) University of West Florida. Biology. Member of committee

Alexandra Stancil. Master's Student (changed to non-thesis) University of West Florida. Biology. Member of committee.

Catherine Gross. Master's Student (2014) University of West Florida. Environmental Studies. Member of committee

Josette Hutcheson. Master's Student (2014) University of West Florida. Biology. Member of committee

Cinnamon Morrison. Master's Student (2014) University of West Florida. Biology. Member of committee

Claire Shipman. Master's Student University of West Florida. Environmental Studies. Member of committee (left program)

Heather Policicchio. Master's Student University of West Florida. Environmental Studies. Member of committee(left program)

Erin Hunter. Master's Student. (2014) University of West Florida. Biology. Member of committee

Bethany Wight. Master's Student. (2013) University of West Florida. Biology. Member of committee

Dawn Prince. Master's Student. (2012) University of West Florida. Environmental Studies. Member of committee

Melissa Overton. Master's Student. (2013) University of West Florida. Biology. Member of committee (changed to non-thesis)

Jennifer Chastain. Master's student. University of West Florida. Environmental Studies. Member of committee (left program)

Jessie Rosanbaum. Master's Student. (2012) University of West Florida. Biology. Member of committee

Ashley Riggs. Master's Student. University of Alabama. Mentor.

Alex Maestre, Graduate student, Student worker

Jon Stewart. Master's student. University of West Florida. Environmental Studies. Member of committee (left program)

Gaurang Karmakar, Graduate student, Student worker

Jessie Brown. Graduate Student. Student worker

Kate Shepard. Master's student. (2008) University of West Florida. Biology. Member of committee

Arup Sinha, Graduate student, Student worker

Brandon Jarvis. Master's student. (2008) University of West Florida. Environmental Studies. Member of committee

Sara Cleveland. (2004-2006) Master's student. Florida State University. mentor

Jeffrey Allison. Master's student. (2006) University of West Florida. Biology. Member of committee

Matt Wagner. Master's student. (2006) University of West Florida. Biology. Member of committee

Bruno Giri. PhD student. University of Georgia. Marine Sciences. Member of committee (changed program)

Neil Harrington. Master's student. (1990) University of California Santa Cruz. Marine Sciences. Member of committee

Nicole Beck. PhD student. University of California Santa Cruz. mentor

Behzad Mortazavi. PhD student. Florida State University. mentor

Undergraduate, middle school and high school student mentoring/student workers (*recipients of UWF funding for research):

Mackenzie Rolfus Undergraduate. University of West Florida. Student Volunteer (Fall 2017)

Caitlin Turnbull Undergraduate. University of West Florida. Student Volunteer (Summer 2017)

Lily Casson Undergraduate. University of West Florida. Student Volunteer (Summer 2017)

*Jade Jacobs Undergraduate. University of West Florida. Honors Thesis Research, SURP funding (Summer 2017)

Wendy Teuchler Undergraduate. University of West Florida. OUR Explorer (Spring 2017), OUR Works! (Fall 2017)

*Sierra Hobbs Undergraduate. University of West Florida. Student Volunteer, SURP funding (Spring 2017, Summer 2017)

*Beija Gore Undergraduate. University of West Florida. Student Volunteer – Recipient of OUR Research Funding, SURP funding (Fall 2016, Spring 2017, Summer 2017)

Jack Prior Undergraduate. University of West Florida. Student Volunteer (Spring 2017)

*Porsha Hernandez Undergraduate. University of West Florida. OURWorks! Student Worker. Recipient of OUR travel funding (Fall 2016)

Carrie Daniels Undergraduate. University of West Florida. Student Worker (Fall 2016, Spring 2017)

Mackenzie Farrell Undergraduate. University of West Florida. directed study (Fall 2016)

Rhea Verma. High School. Pensacola High School IB program. volunteer in lab

Maya Humeda. High School. Pensacola High School IB program. mentor for extended essay project

Jakob Schliewen. High School. volunteer in lab (Summer 2016)

Lily Casson. High School. Washington High School. volunteer in lab (Summer 2016)

Jordan Rains. Undergraduate. University of West Florida. volunteer in lab (Summer 2016), Lab technician (Fall 2016)

Chelsea Barfield. Undergraduate. University of West Florida. Student Worker (Fall 2015, Spring 2016, Summer 2016)

Katherine Haynes. Undergraduate. University of West Florida. Student Worker (Fall 2015, Spring 2016, Summer 2016)

*Stephen Buchanan. Undergraduate. University of West Florida. volunteer in lab and Directed Study – Recipient of OUR Research funding (Spring 2016, Summer 2016)

Diana Langguth. Undergraduate. University of West Florida. volunteer in lab (Spring & Summer 2016)

Steven Rabney. Undergraduate. University of West Florida. Directed Study (Spring 2016)

Brian Bielski. Undergraduate. University of West Florida. volunteer in lab (Fall 2015)

Jenna Sleek. Undergraduate. University of West Florida. Student Worker (Summer and Fall 2015, Spring through Fall 2016)

Jessica Goel. Montessori School. volunteer in lab (Spring 2015).

Carolyn Hagy. Episcopal Day School. volunteer in lab (Spring 2015)

*Heather Barrineau. Undergraduate. University of West Florida. Directed Study – Receptient of OUR Research funding (Fall 2014)

*Roxanne Quiquerez. Undergraduate. University of West Florida. Directed Study – Receptient of OUR Research funding (Fall 2014, Spring 2015)

Sahil Verma III. High School. Pensacola High School IB program. volunteer in lab, mentor for extended essay project

Lindsay Guyette. High School. Pensacola High School IB program. volunteer in lab, mentor

Kaleb Price, Undergraduate. University of West Florida. Student worker (Summer 2014)

Tashana Jones, Undergraduate. University of West Florida. Student worker (Summer 2014)

Rachel Dragon, Undergraduate. University of West Florida. Directed Study (Spring 2014).

*Natalie Hunt, Undergraduate. University of West Florida. – Recipient of OUR Travel funding to Coastal and Estuarine Research Federation meeting

Lorenzo Modestini, High School. Pensacola High School IB program. mentor for extended essay project

*Tiffany Nay, Undergraduate. University of West Florida. Directed Study – Receptient of OUR Research funding (Spring 2013)

Cheyenne Hunt-Alderson, Undergraduate. University of West Florida. Directed Study (Spring 2013)

*Danielle Pfeiffer, Undergraduate. University of West Florida. Directed Study– Receptient of OUR Research funding (Fall 2012)

Kristina Inman, Undergraduate. University of West Florida. Directed Study (Spring 2012)

Joel Marks, Undergraduate. University of West Florida. mentor (Spring 2012)

**Chelsea Hester, Undergraduate student, Student worker, Directed Study – Receptient of OUR Research and OUR Travel funding to Coastal and Estuarine Research Federation meeting (Summer 2011through Summer 2012)

*Heather Smith, Undergraduate. University of West Florida. Directed Study - Receptient of OUR Travel funding to Coastal and Estuarine Research Federation meeting (Summer 2011-Summer 2012)

*Marie Gaona, Undergraduate. University of West Florida. Directed Study - Receptient of OUR Travel funding to Coastal and Estuarine Research Federation meeting (Summer –Fall 2011)

*Holly Langsten, Undergraduate. University of West Florida. Directed Study - Receptient of OUR Travel funding to Coastal and Estuarine Research Federation meeting (Summer –Fall 2011)

Joel Norman, Undergraduate. University of West Florida. Directed Study (Fall 2011)

Ellen Manor, Undergraduate. University of West Florida. Directed Study (Fall 2011)

Sebastian Rivera. Undergraduate. University of West Florida. mentor (Summer 2011)

Samantha Gourlie Undergraduate. University of West Florida. mentor (Summer 2011)

Lindsay Sartory, Undergraduate. University of West Florida. Directed Study (Summer 2011)

Jeremy Kester, Undergraduate, Student worker

Hayden Ward, High School. Pensacola High School IB program. mentor

Josh Chen, Undergraduate, University of Chicago, mentor (Summer 2010)

Kendra Straub. Undergraduate. University of West Florida. Directed Study, Student worker (2009-2011)

Bethany Wight. Undergraduate. University of West Florida. Directed Study (2009)

Autumn Dunn. Undergraduate. Student worker

*Nathaniel Davila. Undergraduate. University of West Florida. Directed study & Student worker
Recipient of UWF student funding for Research

Jessie Brown. Undergraduate Student. Student worker (2007-2009)

Kay Li. High School. Pensacola High School IB program. Mentor for extended essay project (2009-2010)

Jennie Robinson. High School. Pensacola High School IB program. Mentor for extended essay project (2009-2010)

Monika Scott. Undergraduate. University of West Florida. Student worker

Virginia Eller. Undergraduate. University of West Florida. Directed study (2005)

Tanner Martin. Undergraduate. University of West Florida. Student worker (2005-2006)

Francine Aftanas. Undergraduate. University of West Florida. Student worker (2004-2005)

Diver volunteers

Graduate Students: Stewart Hood, Matt Davis, Christina Toms, Nine Henriksson, Andrew

Derlinkowski, Jennifer Rogerson, Austin Burkhart, Kendra Brooks, Amy Brower, Kerri Foote

Undergraduate Students: Leah Hartigan, Amy Brower, Ryan Lavoie

Presentations since 2003 (*student presenter):

Response of subtropical seagrasses to nutrient and organic carbon loading. Coastal and Estuarine Research Federation meeting, November 5-9, 2017. Providence, RI.

*Changes in primary production, nutrient fluxes and rates of succession following the deployment of an artificial reef system in the Northeast Gulf of Mexico. Coastal and Estuarine Research Federation meeting, November 5-9, 2017. Providence, RI. K. Brooks presenter

*Nitrogen Availability in Seagrass Beds Dominated by *Thalassia testudinum* and *Halodule wrightii*. Coastal and Estuarine Research Federation meeting, November 5-9, 2017. Providence, RI. R. Capps presenter

*Evaluating primary productivity and respiration on artificial reefs using biofilm samplers. Coastal and Estuarine Research Federation meeting, November 5-9, 2017. Providence, RI. B. Gore presenter

Effects of nutrient input and microzooplankton grazing on phytoplankton productivity in the Grand Bay estuary, Mississippi. September 8, 2017. Grand Bay NERR, Moss Point, MS

Ecosystem responses to the installation of artificial reefs: from phytoplankton to fishes. American Fisheries Society, August 20-24, 2017. Tampa, FL. W. Patterson presenter

Biogeochemical responses to the installation of artificial reefs on the shallow Northeastern Gulf of Mexico Shelf: Primary production, respiration and nutrient fluxes. Goldschmidt Conference, August 13-19, 2017. Paris, France F. Cesbron presenter

*Evaluating Primary Productivity, Respiration and nutrient fluxes on Artificial Reefs using Biofilm Samplers. SURP symposium, August 11, 2017. B. Gore presenter

*The Bacterial and Nutrient Analysis of the Effects of Storm Events on Bayou Chico's Watershed. SURP symposium, August 11, 2017. Sierra Hobbs and Son Truong presenters

* Comparative Analysis of Nitrate Levels in Pensacola Area Rain Water. SURP symposium, August 11, 2017. J. Jacobs presenter

*Nitrogen fixation in seagrass beds dominated by *Thalassia testudinum* and *Halodule wrightii*. UWF Student Scholars Symposium. April 20, 2017. R. Capps presenter.

*Changes in primary production, nutrient fluxes and rates of succession follow the deployment of an artificial reef system in the Northeast Gulf of Mexico. UWF Student Scholars Symposium. April 20, 2017. K. Brooks presenter. Honorable Mention for graduate Biology poster

*Primary production and respiration on artificial reefs. UWF Student Scholars Symposium. April 20, 2017. B. Gore presenter.

Biogeochemical baseline before artificial reef deployment in the shallow Northeastern Gulf of Mexico. Aquatic Sciences. ASLO meeting. Feb 26 – Mar 3, 2017. Honolulu, HI. F. Cesbron presenter.

*Nitrogen fixation in seagrass beds dominated by *Thalassia testudinum* and *Halodule wrightii*. Aquatic Sciences. ASLO meeting. Feb 26 – Mar 3, 2017. Honolulu, HI. R. Capps presenter.

What happens when phosphate spills into an estuary? Collaboratively examining phosphogypsum inputs in the Grand Bay NERR to plan for the future. NERR annual meeting Nov 16, 2016. K. Cressman presenter.

Changes in primary production at Grand Bay National Estuarine Research Reserve: indications from long-term monitoring data. GERS-SWS meeting Nov 2-5, 2016. K. Cressman presenter.

Biogeochemical baseline before artificial reef deployment in the shallow Northeastern Gulf of Mexico. GERS-SWS meeting Nov 2-5, 2016 Pensacola Beach, FL. F.Cesbron, presenter

* Seasonal and spatial changes in phytoplankton biomass on the shallow Northeastern Gulf of Mexico Shelf near Pensacola, FL. GERS-SWS meeting Nov 2-5, 2016 Pensacola Beach, FL. K. Brooks and P. Hernandez, presenters

* Nitrogen fixation in seagrass beds dominated by *Thalassia testudinum* and *Halodule wrightii*. GERS-SWS meeting Nov 2-5, 2016 Pensacola Beach, FL. R. Capps, presenter.

*Response of benthic microalgae to phosphorus inputs in Grand Bay National Estuarine Research Reserve. GERS-SWS meeting Nov 2-5, 2016 Pensacola Beach, FL. J. Sleek, presenter

*Effects of nutrient input on phytoplankton productivity and community structure in the Grand Bay estuary in Mississippi. GERS-SWS meeting Nov 2-5, 2016 Pensacola Beach, FL. G. Baine, presenter.

*Effects of nutrient input on phytoplankton productivity and community structure in the Grand Bay estuary in Mississippi. National Monitoring Conference May, 2-6 2016. Tampa, FL. G. Baine, presenter.

*Nitrogen fixation in seagrass beds dominated by *Thalassia testudinum* and *Halodule wrightii*. National Monitoring Conference May, 2-6 2016. Tampa, FL. R. Capps, presenter.

Understanding long-term changes by linking monthly chlorophyll measurements to high-frequency water quality data. National Monitoring Conference May, 2-6 2016. Tampa, FL. K. Cressman, presenter

*Effects of nutrient input on phytoplankton productivity and community structure in the Grand Bay estuary in Mississippi. Student Scholars Symposium. April 21, 2016. UWF. G. Baine, presenter.

*The phytoplankton community in the dune lakes of Walton County. Student Scholars Symposium. April 21, 2016. UWF. S. Buchanan, presenter.

*Nitrogen fixation in seagrass beds dominated by *Thalassia testudinum* and *Halodule wrightii*. Student Scholars Symposium. April 21, 2016. UWF. R. Capps, presenter.

*The effects of artificial reefs on primary production. Student Scholars Symposium. April 21, 2016. UWF. K. Haynes and C. Barfield, presenters. Winner of best Biology poster

*Effects of nutrient input on phytoplankton productivity and community structure in the Grand Bay estuary in Mississippi. Ocean Sciences Meeting. February 21-26, 2016. New Orleans, LA. G. Baine, presenter.

*Nitrogen Availability in Seagrass Beds Dominated by *Thalassia testudinum* and *Halodule wrightii* and Its Effect on the Seagrass Health and Proliferation. Ocean Sciences Meeting. February 21-26, 2016. New Orleans, LA. R. Capps, presenter

*Response of benthic microalgae to phosphorus inputs in Grand Bay National Estuarine Research Reserve. Ocean Sciences Meeting. February 21-26, 2016. New Orleans, LA. J. Sleek, presenter

- Oysters as a tool for removing fixed nitrogen from estuaries. Faculty and Student Scholars Symposium. April 23, 2015. UWF.
- Factors influencing primary production and respiration in the Grand Bay National Estuarine Research Reserve. Mississippi Water Resources Research Institute Symposium, April 7, 2015. Jackson, MS.
- Oysters as a tool for removing fixed nitrogen from estuaries. Interagency Ecological Program, March 18-21, 2015. Folsom, CA (Hollibaugh presenter)
- Living oysters as active sites of nitrification and denitrification. Association of the Sciences of Limnology and Oceanography. February 22-28, 2015. Granada Spain
- Bringing together research and management to examine the consequences of repeated phosphorus spills in a coastal estuary. Association of the Sciences of Limnology and Oceanography. February 22-28, 2015. Granada Spain
- *Response of benthic microalgae to phosphorus inputs in Grand Bay National Estuarine Research Reserve. Bays and Bayous. December 2 - 3, 2014. Mobile AL. K. Price and T. Jones (presenters)
- Multi-scale synthesis of water quality data for Gulf Coast Parks. Webinar for National Park Service. September 24, 2014
- Biological effects of repeated phosphorus spills on the Grand Bay National Estuarine Research Reserve. Biology Seminar, UWF. September 5, 2014
- Evaluating water and sediment quality in the Gulf of Mexico Coastal National Parks. The 9th National Monitoring Conference April 28 - May 2, 2014. Cincinnati, OH.
- The value of long term monitoring to research and management: Using high frequency water quality data to understand ecological processes. Texas Bays and Estuaries. April 23-24, 2014. Port Aransas, TX
- * Influence of Environmental Factors on Diversity and Abundance of Meiofauna in Three Florida Estuaries Coastal and Estuarine Research Federation. November 3-7, 2013. San Diego, CA. G. Afonso presenter
- *Seasonal changes of epiphyte populations and overlying water nutrients in bodies of water in Pensacola, FL. Coastal and Estuarine Research Federation. November 3-7, 2013. San Diego, CA. N. Hunt presenter
- Sediment biogeochemistry in restored and native subtropical seagrass beds. Association of the Sciences of Limnology and Oceanography. February 18-21 2013. New Orleans, LA
- *Comparing nutrient levels and phytoplankton response in 3 northern Gulf of Mexico Estuaries. Gulf Estuarine Research Society. November 8-9, 2012. Dauphin Island Sea Lab, AL. K. Straub presenter
- *Temporal and Spatial Variability of Mercury, pH, and Non-Sea Salt Sulfate Fluxes Associated with Changes in Anthropogenic Emissions in the Pensacola Bay Region. April 30-May 4, 2012. Portland, OR. A. Maestre presenter

- Implementing the National Monitoring Network in the Florida Panhandle. 5th Annual Mattie Kelly Environmental Symposium on Choctawhatchee Bay. April 27, 2012. Niceville, FL. Invited speaker.
- Resolving drivers of variability in estuarine metabolism from sustained observations of water quality in the SE US. MAA Chapter Meeting: Environmental Statistics. November 18-19, 2011. Pensacola, FL.
- *Comparing nutrient levels and phytoplankton response in 3 northern Gulf of Mexico Estuaries. Coastal and Estuarine Research Federation. November 6-10, 2011. Daytona Beach Florida. K. Straub presenter
- *Community metabolism and nutrient fluxes in transplanted and natural seagrass beds in Pensacola, FL. Coastal and Estuarine Research Federation. November 6-10, 2011. Daytona Beach Florida. Smith, Hester, Gaona & Langsten presenters
- *Role of light, pore water nutrients and hydrogen sulfide in the success of seagrass restoration in Pensacola Bay, FL. Coastal and Estuarine Research Federation. November 6-10, 2011. Daytona Beach Florida. A. O'Connor presenter
- The Contribution of Benthic Nutrient Regeneration to Primary Production in a Shallow Eutrophic Estuary, Weeks Bay, Alabama. Coastal and Estuarine Research Federation. November 6-10, 2011. Daytona Beach Florida. B. Mortazavi presenter
- Resolving drivers of variability in estuarine metabolism from sustained observations of water quality in the SE US. Coastal and Estuarine Research Federation. November 6-10, 2011. Daytona Beach Florida.
- Role of climate and local emission sources in the wet deposition of mercury and major ions in the Pensacola Bay region 10th International Conference on Mercury as a Global Pollutant. July 24-29, 2011. Halifax, Nova Scotia, Canada
- Effects of Deepwater Horizon Oil Spill on Community Respiration in the Intertidal Zone. Bays and Bayous. Mississippi and Alabama Sea Grant. November 2010. Mobile, AL.
- Spatial and Temporal Trends in Atmospheric Deposition in the Pensacola Bay Watershed. National Water Quality Monitoring Conference. April 25-29, 2010. Denver, CO.
- The Effect of Upwelling on Short Term Variability in Sediment Biogeochemistry in a Small California Estuary, Elkhorn Slough, CA, USA. American Society of Limnology and Oceanography. January 26-30, 2009. Nice, France.
- Atmospheric deposition of mercury, trace metals and major ions in the Pensacola Bay watershed: implications for Choctawhatchee Bay. Symposium on Choctawhatchee Bay. June 1-2, 2008.
- Atmospheric Deposition of Mercury, Trace Metals and Major Ions in the Pensacola Bay Watershed. National Monitoring Conference May 18-23, 2008. Atlantic City, NJ
- *Application of the diagenetic model CANDI in Pensacola Bay. Ocean Sciences meeting. March 2-7, 2008. Orlando, FL N. Davila - presenter

Ammonia oxidation and ammonia-oxidizing Bacteria and Archaea populations from estuaries with differing histories of hypoxia. Estuarine Research Federation meeting November 2007, Providence, RI.

*Nutrient Cycling in Escambia Bay Sediments. NW Florida Symposium. October 5,2007, Pensacola FL.

Atmospheric Deposition of Mercury, Trace Metals and Major Ions in the Pensacola Bay Watershed. NW Florida Symposium. October 5,2007, Pensacola FL.

Nitrification Response to Intermittent Hypoxia in Three Southeastern Estuaries. February 2007. American Society of Limnology and Oceanography, Santa Fe., NM.

*The effects of human and climatic impacts on sediment nitrogen dynamics in Escambia bay, Florida. February 2007. American Society of Limnology and Oceanography, Santa Fe., NM. K Smith - presenter

Nitrification and Benthic Fluxes in Three Southeastern Estuaries: Response to Intermittent Hypoxia. Invited presentation - Louisiana Universities Marine Consortium. December 2006

Sources and Sinks of Nitrogen in Weeks Bay, AL. Alabama-Mississippi Bays and Bayous Symposium. November 2006. Mobile, AL

Total gaseous mercury concentrations in Pensacola, FL. March 2006. American Chemical Society. Atlanta, GA.

Spatial and temporal variability in precipitation chemistry in the Pensacola Bay watershed. March 2006. American Chemical Society. Atlanta, GA.

*Comparing nitrification and nutrient dynamics in three estuaries: Weeks Bay, AL; Pensacola Bay, FL; and the Duplin River, GA. October 2005 Estuarine Research Federation. Norfolk, VA. K. Smith presenter

*Comparing porewater nutrients and sediment characteristics in three estuaries: Weeks Bay, AL; Pensacola Bay, FL; And The Duplin River, GA October 2005 Estuarine Research Federation. Norfolk, VA. E. Gaige and T. Martin presenters

Combining long-term and high frequency water quality data to understand ecological processes in estuaries October 2005 Estuarine Research Federation. Norfolk, VA

The Role of Nitrification in the Nitrogen Budget of Pensacola Bay. June 2004. American Society of Limnology and Oceanography. Savannah, GA

Within Estuary Spatial Variation in Production, Respiration and Net Ecosystem Metabolism. September 2003. Estuarine Research Federation. Seattle, WA

Effect Of Nutrient Loading On Biogeochemical And Microbial Processes In A New England High Salt Marsh (*Spartina patens*). Society of Wetland Scientists. June 2003. New Orleans LA.