

Lisa A. Waidner

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EDUCATION AND ACADEMIC TRAINING

USDA CSREES Postdoctoral Fellow and Postdoctoral Researcher (2008-2010).

College of Agriculture & Natural Resources, University of Delaware.

Co-advisors: Robin W. Morgan (Dean and Professor) and Joan Burnside (Professor)

Postdoctoral Researcher (2007-2008).

Delaware Biotechnology Institute, College of Marine and Earth Studies, University of Delaware.

Advisor: Thomas E. Hanson.

University of Delaware. Ph.D. (2007) College of Marine Studies. Dissertation title: *Abundance, Diversity and Distribution of Aerobic Anoxygenic Phototrophic Bacteria in the Delaware Estuary*.

Advisor: David L. Kirchman.

University of Maryland. M.S. (1993) Graduate School, Baltimore. Sci.M. in Applied Molecular Biology.

University of Maryland Baltimore County. B.S. (1991) Biological Sciences.

PROFESSIONAL EXPERIENCE

Associate Professor (2025-) and Assistant Professor. (2018-2025) Center for Environmental Diagnostics and Bioremediation (CEDB) and Biology, University of West Florida. Pensacola, FL.

CEDB Research Scientist (2016), CEDB Research Assistant Professor (2017-2018), and Biology Adjunct Professor (2016-2018), University of West Florida. Pensacola, FL.

Principal Research Scientist. (2014-2016) BHO Technology, LLC. Baton Rouge, LA.

Principal Research Associate. (2012-2014) H₂OPE Biofuels, LLC. Greenwood Village, CO and Lewes, DE.

Principal Research Associate. (2010-2012) Elcriton, Inc. Newark, DE and New Castle, DE.

Technician, Research Assistant, and Ph.D. student. (2000-2007) College of Marine Studies and College of Earth, Ocean and Environment, University of Delaware. Lewes, DE.

Tech-Linesm Supervisor. (2000) Technical Services, Life Technologies, Inc. Rockville, MD.

Staff Specialist. (1999 - 2000) Technical Services, Life Technologies, Inc. Rockville, MD.

Teacher's Assistant. (1997) Biotechnology Graduate Program, Johns Hopkins University. Rockville, MD.

Technical Associate, Technical Services. (1996 - 1999) Technical Services, Life Technologies, Inc. Gaithersburg, MD and Rockville, MD.

Research Assistant. (1992-1996) Department of Chemistry and Biochemistry, University of Maryland Baltimore County. Baltimore, MD.

Intern. (1992) National Institutes of Health, National Institute on Aging, Gerontology Research Center. Baltimore, MD.

PUBLICATIONS (*, graduate student; **, undergraduate student)

- Babae, S., Mayonu, M., Demers, N.E., Toro-Farmer, G., **Waidner, L.A.**, and Wang, B. (2025) Metabolomics analysis of eastern oysters (*Crassostrea virginica*) exposed to *Vibrio cholerae* toxin. *International Journal of Environmental Health Research*, 1-14. doi.org/10.1080/09603123.2025.2609881
- Bowman*, L.T., Caffrey, J.M. and **Waidner, L.A.**¹ (2025), Subtropical seagrass epiphytes: Nitrogen fixation rates align with *Crocospaera*-like cyanobacteria abundances. *Limnology and Oceanography*, 70: 3958-3971.
- Waidner**¹, L.A., Daniel, C.E., Kovar, S.E., and J.C. Spain. (2024) Use of qPCR to monitor 2, 4-dinitroanisole degrading bacteria in water and soil slurry cultures. *Journal of Industrial Microbiology and Biotechnology*, 2024, 51, kuae047. <https://doi.org/10.1093/jimb/kuae047> (¹ corresponding)
- Matallana-Surget, S., Nigro, L.M., **Waidner, L.A.**, Lebaron, P., Wattiez, R., Werner, J., Fraser, R., Dimitrov, D., Watt, R., and W.H. Jeffrey (2024) Clarifying the Murk: Unveiling Bacterial Dynamics in Response to Crude Oil Pollution, Corexit-Dispersant, and Natural Sunlight in the Gulf of Mexico. *Frontiers in Marine Science*, 10, Section, Marine Molecular Biology and Ecology.
- Plummer, S.M., Plummer, M.A., Merkel, P.A. and L.A. **Waidner** (2024) Using Directed Evolution to Improve Hydrogen Production in Chimeric Hydrogenases from Algal Species. *Enzyme and Microbial Technology*, 173:110349.
- Waidner, L.A.** and T.V. Potdukhe* (2023) Tools to Enumerate and Predict Distribution Patterns of Environmental *Vibrio Vulnificus* and *Vibrio Parahaemolyticus*. *Microorganisms*, 11(10):2502.
- Headrick*, E.L., Nigro, L.M. **Waidner, L.A.**, Ederington-Hagy, M., Simmering*, A. Snyder, R.A. and W.H. Jeffrey (2023) Acute inhibition of bacterial growth in coastal seawater amended with crude oils with varied photoreactivities. *Frontiers in Ecology and Evolution*, 11, Section, Biogeography and Macroecology.
- Gao, Y.-Z., Palatucci*, M.L., **Waidner, L.A.**, Li, T., Guo, Y., Spain, J.C., and Zhou, N.-Y. (2021) A Nag-like dioxygenase initiates 3,4-dichloronitrobenzene degradation via 4,5-dichlorocatechol in *Diaphorobacter* sp. strain JS3050. *Environmental Microbiology*. 23(2):1053–1065.
- Potdukhe*, T.V., Caffrey, J.M. Rothfus*, M.J., Daniel*, C.E., Swords**, M.E., III, Albrecht, B.B., Jeffrey, W.H., and **Waidner, L.A.** (2020) Viable Putative *Vibrio vulnificus* and *parahaemolyticus* in the Pensacola and Perdido Bays: Water Column, Sediments, and Invertebrate Biofilms. *Frontiers in Marine Science*, 8, Section, Global Change and the Future Ocean.
- Babcock*, K.K., Cesbron, F., Patterson, W.F., Garner, S.B., **Waidner, L.A.**, and Caffrey, J.M. (2020). Changing Biogeochemistry and Invertebrate Community Composition at Newly Deployed Artificial Reefs in the Northeast Gulf of Mexico. *Estuaries and Coasts*, 43:680–692.
- Palatucci*, M.L., **Waidner, L.A.**, Mack, E.E., and Spain, J.C. (2019). Aerobic biodegradation of 2,3- and 3,4-dichloronitrobenzene. *Journal of Hazardous Materials*, 378:120717.
- Madeira, C.L., Jog, K.V., Vanover, E.T., Brooks, M.D., Taylor, D.K., Sierra-Alvarez, R., **Waidner, L.A.**, Spain, J.C., Krzmarzick, M.J., and Field, J.A. (2019). Microbial Enrichment Culture Responsible for the Complete Oxidative Biodegradation of 3-Amino-1,2,4-triazol-5-one (ATO), the Reduced Daughter Product of the Insensitive Munitions Compound 3-Nitro-1,2,4-triazol-5-one (NTO). *Environmental Science and Technology*, 53(21):12648–12656.
- Plummer, M., Plummer, S.M., Merkel, P.A., Hagen, M., Biddle, J.F., and **Waidner, L.A.** (2016) Using directed evolution to improve hydrogen production in chimeric hydrogenases from *Clostridia* species. *Enzyme and Microbial Technology*, 93-94:132-141.

- Schab, C.M., Park, S., **Waidner, L.A.**, and Epifanio, C.E. (2013) Return of the Native: Historical Comparison of Invasive and Indigenous Crab Populations near the Mouth of Delaware Bay. *Journal of Shellfish Research*, 32(3):751-758.
- Jamindar, S., Polson, S.W., Srinivasiah, S., **Waidner, L.A.**, and Wommack, K.E. (2012) Evaluation of Two Approaches for Assessing the Genetic Similarity of Virioplankton Populations as Defined by Genome Size. *Applied and Environmental Microbiology*, 78(24):8773-8783.
- Waidner, L. A.**, Burnside, J., Anderson, A. S., Bernberg, E. L., German, M. A., Meyers, B. C., Green, P. J., and Morgan, R.W. (2011) A microRNA of infectious laryngotracheitis virus can downregulate and direct cleavage of ICP4 mRNA. *Virology*, 411(1):25-31.
- Waidner, L.A.**, Morgan, R.W., Anderson, A.S., Bernberg, E.L., Kamboj, S., Garcia, M., Riblet, S.M., Ouyang, M., Isaacs**, G.K., Markis**, M., Meyers, B.C., Green, P.J., and Burnside, J. (2009) MicroRNAs of Gallid and Meleagrid herpesviruses show generally conserved genomic locations and are virus-specific. *Virology*, 388(1):128-136.
- Waidner*, L.A.**, and Kirchman, D.L. (2008) Diversity and distribution of ecotypes of the aerobic anoxygenic phototrophy gene, *pufM*, in the Delaware estuary. *Applied and Environmental Microbiology*, 74(13):4012-4021.
- Elifantz, H., **Waidner*, L.A.**, Cottrell, M.T., and Kirchman, D.L. (2008) Diversity and abundance of glycosyl hydrolase family 5 in the Sargasso Sea. *FEMS Microbiology Ecology*, 63(3):316-327.
- Campbell, B.J., **Waidner*, L.A.**, M.T. Cottrell, M.T., and Kirchman, D.L. (2008) Abundant proteorhodopsin genes in the North Atlantic Ocean. *Environmental Microbiology*, 10(1):99-109.
- Waidner*, L.A.**, and Kirchman, D.L. (2007) Aerobic anoxygenic phototrophic bacteria attached to particles in turbid waters of the Delaware and Chesapeake estuaries. *Applied and Environmental Microbiology*, 73(12):3936-3944.
- Waidner*, L.A.**, and Kirchman, D.L. (2005) Aerobic anoxygenic photosynthesis genes and operons in uncultured bacteria in the Delaware River. *Environmental Microbiology*, 7(12):1896-1908.
- Cottrell, M.T., **Waidner*, L.A.**, Yu, L., and Kirchman, D.L. (2005) Bacterial diversity of metagenomic and PCR libraries from the Delaware River. *Environmental Microbiology*, 7(12):1883-1895.
- Waidner*, L.A.**, Flynn, E.K., Wu, M., and Karpel, R.L. (2001) Domain effects on the DNA-interactive properties of T4 gene 32 protein. *Journal of Biological Chemistry*, 276(4):2509-2516.

TECHNICAL REPORTS (*, graduate student; **, undergraduate student). Links are to UWF Institutional Repository.

- Waidner, L.A.**, Jeffrey, W.H., and Caffrey, J.M. (2020). [Technical report summarizing results from winter 2020 sampling](#): Escambia County 2020 Aquatic Bacteria Survey, *Vibrio* Assessment (Pensacola, FL: University of West Florida)
- Caffrey, J.M., Cesbron, F., Patterson III, W.F., **Waidner, L.A.**, Jeffrey, W.H., Tarnecki, J.H., Garner, S.B., and K.K. Babcock* (2024) [Evaluating Fish Production and Ecosystem Impacts of Artificial Reefs](#). In Raineault, N.A. (Florida Institute of Oceanography) *Results and Impacts of the First Decade of the Florida RESTORE Act Centers of Excellence Program*, pp. 24-25. Also available at Zenodo: <https://zenodo.org/records/10735729>
- Caffrey, J.M., Jeffrey, W.H., and **L.A. Waidner** (2023) [UWF Study Area and Final Report](#). In the FIT Report, "Restore Lagoon Inflow Project (Phase 3): Project Summary." pp. 23, 33-34, 47-59 and Appendix D, pp. 348-393.

PRESENTATIONS (*, graduate student; **, undergraduate student, presenter underlined)

Open-source data acquisition and analyses for turbidity and other water quality parameters in two locations within the Pensacola Bay System. (April 16, 2026) Feldman*, J., Hawkins**, M., Mastrandrea*, L., and **Waidner**, L.A. UWF 2026 Spring Student Scholars Symposium, Pensacola, FL.

Tracking estuarine bacteria and *Vibrio vulnificus* in Bayou Texar, January to April. (April 16, 2026) Meronvil**, J., Feldman*, J., de la Cruz-Tepatate**, L., and **Waidner**, L.A. UWF 2026 Spring Student Scholars Symposium, Pensacola, FL.

My Experience As A Lab and Field Assistant. (April 16, 2026) de la Cruz-Tepatate**, L. and **Waidner**, L.A. UWF 2026 Spring Student Scholars Symposium, Pensacola, FL.

Open-source data acquisition and analyses for turbidity and other water quality parameters in two locations within the Pensacola Bay System. (April 8, 2026) Feldman*, J., Hawkins**, M., Mastrandrea*, L., and **Waidner**, L.A. Pensacola and Perdido Bay Estuary Program (PPBEBP) Management Conference, Pensacola, FL.

Oyster metabolic signatures as sentinels for *Vibrio vulnificus* in three Florida Gulf coast regions. (Nov. 9-13, 2025) Waidner, L.A., Demers, N.E., Toro-Farmer, G., and Wang, G. with Feldman*, J. (substitute presenter). Coastal and Estuarine Research Federation (CERF) 28th Biennial Conference, Richmond, VA.

All oil spills are not created equally: A view from the bacterial world. (June 4-6, 2025) Jeffrey, W.H., P.P. Benz, M.L. Brock, M. Ederington-Hagy, E. Headrick, K. Houghton, J. Hutcheson, S. Matallana-Surget, L.M. Nigro, R.L. Richardson, A. Simmering, and L.A. **Waidner**. One Ocean Science Congress. Nice, France.

Overview of Current Alliance Water Resources Team Project: "AI-Directed Tool Development for Pathogenic 'Flesh-eating' *Vibrio* Bacteria" (May 7, 2025) Bo Wang, B., Demers, N.E., Toro-Farmer, G., and Waidner, L.A. Gulf of America Alliance All-Hands Meeting. Biloxi, MS.

Vibrio bacteria in oysters: Potential effects by water quality, hydrological, and meteorological parameters in two local bodies of water (April 17, 2025) Shelby Roberts**, Hannah Gaskin**, Sydney Roche**, Nidia Castillo**, Lindsay Brown*, Jacob Feldman**, Dr. Nora Demers, Dr. Gerardo Toro-Farmer, Dr. Bo Wang, and Dr. Lisa **Waidner**. UWF 2025 Spring Student Scholars Symposium, Pensacola, FL.

A seasonal comparison of prokaryotic diversity in surface waters of the West Antarctic Peninsula (Aug. 2024) Wade H. Jeffrey, Hope Ebert*, Leila Harris*, Ari Simmering*, J.D. Grattepanche, Elizabeth Everett**, Rebecca Gast, Robert Sanders, Lisa A. **Waidner**, and Jane M. Caffrey. XIth SCAR – Open Science Conference & Biennial Meetings, Scientific Committee on Antarctic Research. Pucón-Punta Arenas, Chile.

Nutrient cycling in health and degraded seagrass beds: a comparison between Florida West and East Coast Estuaries (Feb. 2024) Jane M. Caffrey, Lisa A. **Waidner**, Austin Fox, Rachel Presley*, Lacey T. Bowman*, Isabella Orrantia Marmol**, Joe Moss, and Wade H. Jeffrey. Ocean Sciences Meeting (AGU, ASLO, TOS). New Orleans, LA.

A seasonal comparison of prokaryotic diversity and photoheterotrophy in surface waters of the west Antarctic peninsula (July - Aug. 2023) Wade H. Jeffrey, Hope Ebert*, Leila E. Harris*, Ari Simmering*, J.D. Grattepanche, Elizabeth Everett**, Rebecca Gast, Robert Sanders, Jane M. Caffrey, and Lisa A. **Waidner**. Scientific Committee on Antarctic Research (SCAR) Biology XIII Symposium. Christchurch, New Zealand.

- Seasonal Comparison of Prokaryotic Diversity and Photoheterotrophy in Surface Waters of the West Antarctic Peninsula (June 2023) Hope Ebert*, Leila Harris*, Ari Simmering*, J.D. Grattepanche, Elizabeth Everett**, Rebecca Gast, Robert Sanders, Lisa A. **Waidner**, Jane M. Caffrey, and Wade H. Jeffrey. ASLO Aquatic Sciences Meeting, Palma De Mallorca, Spain.
- Optimizing Primers for DNA Extraction of *nifH* - Do Epiphytes Play a Role in N Fixation? (Apr. 2022) Isabella Orrantia Marmol**, Lacey T. Bowman*, Lisa A. **Waidner**, and Jane M. Caffrey. UWF Spring Student Scholars Symposium, Pensacola, FL.
- Overview of Antibiotic Resistance Among Naturally-Occurring Bacteria, with a Focus on Methicillin-Resistant *Staphylococcus aureus* (MRSA): Possible Presence of the *mecA* Gene in Pensacola Bay Area Water and Sediment Samples (Apr. 2023) Wesley Wilmot** and Lisa A. **Waidner**. UWF Spring Student Scholars Symposium, Pensacola, FL.
- Seasonal Variation of Epiphyte Abundance and Nitrogen Fixation Rates for Two Seagrass Species (Oct. 2022) Lacey T. Bowman*, Lisa A. **Waidner**, and Jane M. Caffrey. Gulf Estuarine Research Society (GERS) Biennial Meeting, Ocean Springs, MS.
- Artificial reefs: Hotspots of carbon cycling in a “barren” landscape? (May 2022) Jane M. Caffrey, Florian Cesbron, Kendra Babcock*, Steven B. Garner, Juliana Giraldo-Menses**, Beija Gore**, Melissa Ederington Hagy, Wade Jeffrey, Michael C. Murrell, William F. Patterson III, Katerina Smyth**, and Lisa A. **Waidner**. Joint Aquatic Sciences Meeting (JASM), Grand Rapids, MI.
- Seasonal Variation of Epiphyte Abundance and Nitrogen Fixation Rates of Two Seagrass Species. (May, 2022) Lacey T. Bowman*, Lisa A. **Waidner**, and Jane M. Caffrey. Joint Aquatic Sciences Meeting (JASM), part of “Integrating perspectives on nitrogen fixation across the aquascape.” Grand Rapids, MI.
- Spatial and temporal patterns of photoheterotrophic bacteria and ³H-leucine incorporation along the Western Antarctic Peninsula. (Apr. 2022). Leila Harris*, Rebecca Gast, J-D. Grattepanche, Robert Sanders, Ari Simmering*, Lisa **Waidner**, and Wade Jeffrey. UWF Student Symposium, Pensacola, FL.
- Factors affecting Water Quality at Bruce Beach Park in Pensacola, FL. (Apr. 2022) Jessica Marquis**, Shay Harvin**, Julianna O’Bar*, Hope Ebert*, Maisha Epps**, Barbara Albrecht, Lisa **Waidner**, and Jane Caffrey. University of West Florida Student Symposium. Pensacola, FL.
- Intersection of Art and Biology: A study defining the Relationship between Turbidity and Aerobic Anoxygenic Phototrophic Bacteria from Local Waterways, Measured using Infrared Based Technology. (Apr. 2022) Diana Kerowa*, Grace McIntyre-Willis**, Sydney Moore**, Allison Peck**, Brianna Robbins**, Domani Turner-Ward**, Thomas Asmuth, and Lisa A. **Waidner**. University of West Florida Student Symposium. Pensacola, FL.
- Near Infrared Device (NIR): An Alternative Method of Measuring Turbidity in Sea Waters. (Apr. 2022) Kelvin Williamson*, Thomas Asmuth, Elise Brown**, Hania Ikram**, Danielle Muir**, Sarah Quinlan**, Alyssa Zaleske**, and Lisa A. **Waidner**. University of West Florida Student Symposium. Pensacola, FL.
- 2022 HIP Student Showcase winner, BEST RESEARCH WITH FACULTY.** Near Infrared Device: A Low-cost Solution to Measure the Turbidity of Water. (Apr. 2022) Lacey Bowman*, Thomas Asmuth, Dylan Bass**, Sunny Doan**, Mae Flener**, Julianna O’Bar*, and Lisa A. **Waidner**. University of West Florida Student Symposium. Pensacola, FL.

- Alliance of the Arts and Sciences: Development of a 3-DPrinted Turbidity Sensor through Trans-Collaboration. (Apr. 2022) Christina Kilpatrick*, Rebekah Dilavore*, Connor Webb**, Sara Thompson**, Ani Montverde**, Douglas Hunter**, Thomas Asmuth, and Lisa A. **Waidner**. University of West Florida Student Symposium. Pensacola, FL.
- The Fungal Root Microbiome of Rice Cultivars, Presidio and CL15 Correlation of Associated Fungal Species with Plant Growth. (Apr. 2022) Elena M. Weaver**, Tristan S. Craig*, Lisa A. **Waidner**, and Joe E. Lepo. University of West Florida Student Symposium. Pensacola, FL.
- Fungal Nitrogen Assimilatory Genes in the Rice Rhizosphere. (Apr. 2022) Tristan S. Craig*, Elena M. Weaver**, Joe E. Lepo, and Lisa A. **Waidner**. University of West Florida Student Symposium. Pensacola, FL.
- Enumerating Total Bacteria and Iron Oxidizing Bacteria in the Waters of Julian Mill Creek. (Apr. 2022) Selina J. Detzel**, Barbara B. Albrecht and Lisa A. **Waidner**. University of West Florida Student Symposium. Pensacola, FL.
- Spatial and temporal patterns of photoheterotrophic bacteria and 3H-leucine incorporation along the Western Antarctic Peninsula. (Feb.-Mar. 2022) Harris*, L., R. Gast, J-D. Grattepanche, R. Sanders, A. Simmering*, L. **Waidner**, and W.H. Jeffrey. ASLO Association for the Sciences of Limnology and Oceanography Ocean Sciences Meeting (Virtual Conference)
- Factors affecting Urban Water Quality in the Florida Panhandle. (Nov. 2021) Shay Harvin**, Julianna O'Bar*, Hope Ebert*, Barbara B. Albrecht, Lisa A. **Waidner**, and Jane M. Caffrey. CERF Coastal and Estuarine Research Federation 26th Biennial Conference. (Virtual Conference)
- Viable *Vibrio vulnificus* and *parahaemolyticus* in the Pensacola and Perdido Bays. (Nov. 2021) Trupti V. Potdukhe*, Jane M. Caffrey, Mackenzie J. Rothfus*, Carrie E. Daniel*, Michael E. Swords III**, Barbara B. Albrecht, Wade H. Jeffrey, and Lisa A. **Waidner**. CERF Coastal and Estuarine Research Federation 26th Biennial Conference. (Virtual Conference)
- Prezi: [Viable Vibrio vulnificus and V. parahaemolyticus in the Pensacola and Perdido Bays: Water Column, Sediments, and Invertebrate Biofilms](#). (Apr. 2021) Trupti V. Potdukhe*, Jane M. Caffrey, Mackenzie Rothfus*, Carrie E. Daniel*, Michael E. Swords III**, Barbara Albrecht, Wade H. Jeffrey, and Lisa A. **Waidner**. University of West Florida Student Symposium. Pensacola, FL.
- Prezi: [Testing the Effects of Grazing on Photoheterotrophic Bacteria in the Pensacola Bay System](#). (Apr. 2021) Carrie E. Daniel* and Lisa A. **Waidner**. University of West Florida Student Symposium. Pensacola, FL.
- Viable *Vibrio vulnificus* and *V. parahaemolyticus* in the Pensacola and Perdido Bays: Water Column, Sediments, and Invertebrate Biofilms. (Dec. 2020). Trupti V. Potdukhe*, Jane M. Caffrey, Michael E. Swords III**, Mackenzie Rothfus*, Carrie E. Daniel*, Wade H. Jeffrey, Barbara B. Albrecht, and Lisa A. **Waidner**. Bays and Bayous Symposium (Virtual Conference)
- Use of Bioinformatics to Improve Molecular Tools for Enumerating Pathogenic *Vibrio vulnificus* and *Vibrio parahaemolyticus*. (Dec. 2020) Kelsey Hope*, Trupti V. Potdukhe*, Jade Harrell*, Samantha Christerson**, Jacie Rae Rivard**, and Lisa A. **Waidner**. AGU 2020 Fall Meeting (Virtual Conference)
- Use of bioinformatics to improve molecular tools for enumerating pathogenic *Vibrio vulnificus* and *Vibrio parahaemolyticus* in coastal Gulf of Mexico waterways. (Aug. 2020) Kelsey Hope* and Lisa A. **Waidner**. UWF Summer Undergraduate Research Program SURP Symposium.

- Oyster Ecology: Understanding Factors Affecting their Respiration, Excretion, and Microbiome. (Apr. 2020) Kylyn Kay**, Lacey T. Bowman**, Jane M. Caffrey, and Lisa A. **Waidner**. University of West Florida Student Symposium. Pensacola, FL. (Kay and Bowman, co-presenters)
- Determining the Variability in Seasonal Abundance of *Vibrio* spp. in the Coastal Waters of Pensacola Beach. (Apr. 2020). Gina Rodriguez**, Jackson Reimer**, Lisa A. **Waidner** and Wade H. Jeffrey. University of West Florida Student Symposium. Pensacola, FL.
- Enumerating new Photoheterotrophy Genes in Polar Regions. (Apr. 2020) Kelsey Hope**, Gabriela Castaing**, Logan Severson**, Ari Simmering*, Leila Harris*, Wade H. Jeffrey, and Lisa A. **Waidner**. University of West Florida Student Symposium. Pensacola, FL. (Hope, Castaing, and Severson, co-presenters)
- Vibrio vulnificus* and *Vibrio parahaemolyticus* abundance in water, sediment, and biofilm samples in the Pensacola Bay System. (Apr. 2020) Trupti V. Potdukhe*, Carrie E. Daniel*, Michael E. Swords III**, Gina Rodriguez**, Lacey Bowman*, Mackenzie Rothfus*, Wade H. Jeffrey, Jane M. Caffrey, Barbara B. Albrecht, and Lisa A. **Waidner**. University of West Florida Student Symposium. Pensacola, FL.
- Comparative metaproteomics to assess environmental changes: The combined effects of oil, sunlight and dispersant on marine microbial communities. (Feb. 2020) Sabine Matallana Surget, Lisa M. Nigro, Lisa A. **Waidner**, Johannes Werner, Philippe Lebaron, and Wade H. Jeffrey. ASLO Aquatic Sciences Meeting, San Diego, CA.
- Response of Microbial Processes Following Deployment of Artificial Reefs in the Northeast Gulf of Mexico. (Nov. 2019) Katerina Smyth**, Juliana Giraldo-Menses**, Beija Gore**, Florian Cesbron, Wade H. Jeffrey, Melissa Ederington Hagy, William F. Patterson III, Lisa A. **Waidner**, and Jane M. Caffrey. CERF Coastal and Estuarine Research Federation. Mobile, AL.
- Community Knowledge and Perceptions of the Presence of *Vibrio vulnificus*. (Nov. 2019) Niyiah Roney**, Jani Ngalame**, Mark Prousalis*, Kwame Owusu-Daaku, and Lisa A. **Waidner**. CERF Coastal and Estuarine Research Federation. Mobile, AL. (Ngalame and Roney, co-presenters)
- The Regulation of Bacterial Activity and Abundance by Environmental Parameters within a Subtropical Coastal Estuary. (Nov. 2019) Mark Prousalis*, Matthew Schwartz, Ari Simmering*, Erika Neat-Headrick*, Kelsey Hope**, Leila Harris*, Beija Gore**, Jane M. Caffrey, Wade H. Jeffrey, and Lisa A. **Waidner**. Coastal and Estuarine Research Federation (CERF). Mobile, AL.
- An Assessment of *Vibrio* Presence and Knowledge in a Subtropical Coastal Estuary. (Aug. 2019) Jani Ngalame**, Niyiah Roney**, Mark Prousalis*, Kwame Owusu-Daaku, and Lisa A. **Waidner**. UWF Summer Undergraduate Research Program SURP Symposium, Pensacola, FL. (Ngalame and Roney, co-presenters)
- Response of Microbial Processes Following Deployment of Artificial Reefs in the Northeast Gulf of Mexico. (Apr. 2019) Beija Gore**, Juliana Giraldo-Menses**, Katerina Smyth**, Florian Cesbron, Wade H. Jeffrey, William F. Patterson III, Lisa A. **Waidner**, and Jane M. Caffrey. University of West Florida Student Symposium, Pensacola, FL.
- The abundance of *Vibrio vulnificus* in Indian Bayou, a Subtropical Coastal Estuary. (Apr. 2019) Jani Ngalame**, Mark Prousalis*, Erika Neat*, Jane M. Caffrey, Wade H. Jeffrey, and Lisa A. **Waidner**. University of West Florida Student Symposium, Pensacola, FL.
- The Regulation of Bacterial Activity and Abundance by Environmental Parameters within a Subtropical Coastal Estuary. (Apr. 2019) Mark Prousalis*, Ari Simmering*, Erika Neat*, Kelsey Hope**, Leila Harris*, Beija Gore**, Wade H. Jeffrey, Matthew Schwartz, and Lisa A. **Waidner**. University of West Florida Student Symposium, Pensacola, FL.

- The Influence of Environmental Factors on the Abundance and Composition of *Vibrio vulnificus* within Bacteria Communities of a Subtropical Coastal Estuary. (Apr. 2019) Kelsey Hope**, Leila Harris*, Mark Prousalis*, and Lisa A. **Waidner**. University of West Florida Student Symposium. Pensacola, FL.
- Proteorhodopsin bacteria and aerobic anoxygenic phototrophic bacteria abundance in the Pensacola Bay system. (Nov. 2018) Carrie E. Daniel**, Jane M. Caffrey, Melissa Ederington Hagy, Barbara B. Albrecht, Wade H. Jeffrey, and Lisa A. **Waidner**. Bays and Bayous. Mobile AL.
- Proteorhodopsin Bacteria Abundance in the Pensacola Bay System. (Apr. 2018) Carrie E. Daniel**, Sara Ousley**, Megan Gossett**, Melissa Ederington Hagy, Barbara Albrecht, Claudia O'Steen, Thomas Asmuth, Alexis Janosik, Wade H. Jeffrey, and Lisa A. **Waidner**. University of West Florida Student Symposium. Pensacola, FL.
- Pensacola Bay and Gulf of Mexico Photoheterotrophy: Bacteria Community Seasonal Shifts and Light-Induced Growth. (Aug. 2017) Meredith Snyder**, Melissa Overton*, Wade H. Jeffrey, and Lisa A. **Waidner**. UWF Summer Undergraduate Research Program SURP Symposium, Pensacola, FL.
- Furthering the Mitochondrial Genome Investigation of *Donax variabilis* using PCR and Plasmid Vectors: A Course Based Undergraduate Teaching Project. (Apr. 2017) Austin Clark**, Joseph Reidy*, Hui-Min Chung, and Lisa A. **Waidner**. University of West Florida Student Symposium. Pensacola, FL.
- Thompson Bayou Microcosm Experiments: Aerobic Anoxygenic Phototrophic Bacteria Community Shifts Upon Particle Enrichment. (Apr. 2017) Carrie Daniel**, Melissa Ederington Hagy, Wade H. Jeffrey, and Lisa A. **Waidner**. University of West Florida Student Symposium. Pensacola, FL.
- Aerobic Anoxygenic Phototrophic Bacteria in Coastal Gulf of Mexico Community Shifts Upon Exposure to MC252 Water Accommodated Fraction and Dispersant. (Feb. 2017) Lisa A. **Waidner**, Sabine Matallana Surget, Lisa M. Nigro, Philippe LeBaron, Melissa Ederington Hagy, Melissa Brock**, Carrie Daniel**, Jessica Valek**, and Wade H. Jeffrey. ASLO Aquatic Sciences Meeting, Honolulu, HI.
- The ethanol effect: Understanding the cellular basis for fetal alcohol syndrome. (2010) Siburt, T**, Adams, E.L., **Waidner**, L.A., Czymmek, K.J., Klintsova, A.Y., and R.R. Helton. University of Delaware Undergraduate Research Symposium. Newark, DE.
- Expression of microRNAs in feather tips of Marek's Disease virus infected chickens. (2010) Markis, M.**, Isaacs, G.K. Bernberg, E.L. Lagasse, G.A.**, Anderson, A.S., Waidner, L.A., Burnside, J. and R.W. Morgan. 5th International Workshop on the Molecular Pathogenesis of Marek's Disease Virus and 1st Symposium on Avian Herpesviruses. Athens, GA.
- Marek's Disease virus microRNA mdv1-miR-M4 acts as a miR-155 homolog and down regulates JARID2. (2010) Anderson, A.S., Bernberg, E.L., Markis**, M., **Waidner**, L.A., Bolisetty, M., Beemon, K., Morgan, R.W., and J. Burnside. 5th International Workshop on the Molecular Pathogenesis of Marek's Disease Virus and 1st Symposium on Avian Herpesviruses. Athens, GA.
- A microRNA of Infectious Laryngotracheitis Virus downregulates the major transcription factor ICP4. (2010) **Waidner**, L.A., Morgan, R.W., Anderson, A.S., Bernberg, E.L., German, M.A., Meyers, B.C., Green, P.J., and J. Burnside. RNA Silencing: Mechanism, Biology and Application. Keystone, CO.
- Richard B Rimler Memorial Award**: Feather tip monitoring of Marek's Disease virus in experimental and commercial settings. (2010) Markis, M.**, Rosenberger, J.K., Rosenberger, S. Isaacs, G.K., Bernberg, E.L., Lagasse**, G.L., Anderson, A.S., **Waidner**, L.A., Burnside, J. and R.W. Morgan. American Association of Avian Pathologists. Atlanta, GA.

- MicroRNAs of oncogenic and non-oncogenic avian herpesviruses have conserved genomic locations but no sequence similarity. (2009) **Waidner**, L.A., R.W. Morgan, A.S. Anderson, E.L. Bernberg, M. Markis, G.K. Isaacs, G.A. Lagasse**, N.A. Rager**, M. Garcia, S.M. Riblet, M.A. German, B.C. Meyers, P.J. Green, and J. Burnside. Keystone Symposium MicroRNA and Cancer. Keystone, CO.
- Marek's Disease virus microRNA expression in feather tips. (2009) Markis, M.***, G.K. Isaacs, E.L. Bernberg, A.S. Anderson, G.A. Lagasse**, L.A. **Waidner**, J. Burnside, J.K. Rosenberger, and R.W. Morgan. AAAP/AVMA Annual Meeting. Seattle, WA.
- Genetic analysis of Chesapeake Bay virioplankton assemblages based on major capsid gene (gp23) and randomly amplified polymorphic DNA. (2008) Jamindar, S.*, S. Srinivasiah*, L.A. **Waidner**, D.M. Winget*, and K.E. Wommack. Am. Society for Microbiology 108th General Meeting. Boston, MA.
- Abundance of aerobic anoxygenic photosynthetic bacteria in turbid estuarine waters. (2006) **Waidner**, L.A.* and D.L. Kirchman. ASLO/TOS/AGU Ocean Sciences Meeting, Honolulu, HI.
- Dynamics of photoheterotrophic bacteria in the Delaware Estuary. (2005) **Waidner**, L.A.*, M.T. Cottrell and D.L. Kirchman. Delaware Estuary Science Conference, Partnership for the Delaware Estuary. Cape May, NJ.
- Unique anoxygenic photosynthesis genes and operons in uncultured bacteria in the Delaware Estuary. (2004) **Waidner**, L.A.*, M.T. Cottrell and D.L. Kirchman. ASLO/TOS Ocean Sciences, Honolulu, HI.
- Metagenomic analysis of uncultured *Cytophaga* and other microbes in marine and freshwater consortia. (2004) Kirchman, D.L., M.T. Cottrell and L.A. **Waidner***. Genomes to Life Program, Department of Energy Office of Science Biological and Environmental Research, Washington, DC.
- Interactions between the Asian shore crab (*Hemigrapsus sanguineus*) and the common mud crab (*Panopeus herbstii*): Larval supply vs. post-settlement competition. (2003) Epifanio, C.E., S. Park*, E.K. Grey and L.A. **Waidner***. Proceedings of the 3rd International Conference on Marine Bioinvasions. La Jolla, CA.
- A metagenomic library of bacterial DNA isolated from the Delaware River. (2003) Kirchman*, D.L., M.T. Cottrell and L.A. **Waidner***. Genomes to Life Program Workshop, Arlington, VA. *Co-presenters.
- Bacterial stratification in deep-sea hydrothermal vent chimneys as determined by molecular methods. (2001) Campbell, B.J., L.A. **Waidner***, A.L. Reysenbach, G.W. Luther III and S.C. Cary. American Society of Limnology and Oceanography (ASLO). Albuquerque, NM.
- Cloned RNase A. (1998) **Waidner**, L.A. and R. Roberts. Life Technologies Genome Analysis Meeting. Objective-strategic support for CONCERT nucleic acid purification and cGMP production. Rockville, MD.
- Double-stranded DNA-interactive properties of intact and truncated gene 32 protein. (1997). Karpel, R.L., H.I. Ziserman, and L.A. **Waidner***. ASBMB, American Society for Biochemistry and Molecular Biology. San Francisco, CA.
- Nucleic acid interactive properties of bacteriophage T4 gene 32 protein and its substituent domains. (1996) Karpel, R.L., L.A. **Waidner***, E.K. Flynn** and H.I. Ziserman. Biophysical Society Meeting. Baltimore, MD.
- Effects of bacteriophage T4 gene 32 protein and deletion mutants on nucleic acid conformational interchange. (1995) **Waidner**, L.A.*, E.K. Flynn**, and R.L. Karpel. "Molecular Recognition in Biochemistry," 1st Joint Biochemistry Symposium of the University of Maryland. Baltimore, MD.

Rate and fidelity of hybridization of oligonucleotides to DNA templates. (1994) **Waidner**, L.A.* and R.L. Karpel. The American Chemical Society 28th Middle Atlantic Regional Meeting. Baltimore, MD.

Protein-nucleic acid and protein-protein binding properties of T4 gene 32 protein and its proteolytic products. (1994) **Karpel**, R.L., E.K. Flynn** and L.A. **Waidner***. ASBMB American Society for Biochemistry and Molecular Biology. Washington, D.C.

Art and Teaching Presentations resulting from Interdisciplinary Collaborations:

UWF High Impact Practice Project, *STEAM Collaborations in Bioinformatics and Industrial Design: Enhancing Interdisciplinary Cohorts*. **Waidner**, Lisa A. (Apr 2022) University of West Florida HIP Faculty Presentations. Pensacola, FL.

STEAM2020 Exhibition and Colloquium. February 2020. Pensacola Museum of Art, Pensacola, FL. Thomas Asmuth and Lisa **Waidner**. *The Ecosystem Status: Tannins, Bacteria, and Genes*. Foreground, water from local bayou, Santa Rosa County, FL, mixed with polyacrylamide in a slab gel in which leaf is embedded to demonstrate source of humic acids. Background, visualization of colony blots in x-ray film of bacterial gene library screening.

STEAM2020 Exhibition and Colloquium. February 2020. Pensacola Museum of Art, Pensacola, FL. Thomas Asmuth and Lisa **Waidner**. *Land to Sea*. Autoradiograph of an ³⁵S-Sanger sequencing run, displayed in lightbox; foreground, plywood box and gelled waters with various degrees of humics.

GRANTS, CONTRACTS, HONORS AND OTHER AWARDS

External funding

Co-PI. Gulf of Mexico Alliance (GOMA). July 2024 – July 2027. *An AI-Directed Tool Development for Pathogenic ‘Flesh-eating’ Vibrio Bacteria Prediction and Control*. PI, Bo Wang, FIT. Co-PI’s: Lisa Waidner, UWF; Nora Demers, FGCU, and Gerardo Toro-Farmer (NCF). \$200,000 (UWF portion **\$41,000**)

Florida Research Development Alliance (FlORDA) NSF Directorate for Engineering Germination program (Summer 2022 – Summer 2023). Selected by the *Florida Coastal Challenges* program, and awarded travel money to Nova Southeastern University, Ft. Lauderdale, FL. **\$982**

Co-PI. Department of Defense (DoD) Strategic Environmental Research and Development Program (**SERDP**). June 2019 – June 2023. *Complete Biodegradation of Insensitive High Explosive Compounds*. PI, Jim Field (U. of Arizona). At UWF, Jim Spain & Waidner, co-PI’s. \$1,125,180 (UWF portion, **\$274,366**)

Co-PI. Florida Department of Education. July 2022 – June 2023. *Restore Lagoon Inflow (RLI) Research – Indian River Lagoon (IRL)*. PI, Jeff Eble (Florida Institute of Technology). At UWF, PI, Wade Jeffrey; co-PI’s Jane M. Caffrey and Lisa A. Waidner. \$921,500 (UWF portion **\$200,000**)

PI. Escambia County, FL. Jan. 2020 – July 2020. *Aquatic Bacteria Survey*. PI, Waidner; co-PI’s, Jane M. Caffrey and Wade H. Jeffrey. **\$60,000**

Co-PI. Florida Institute of Oceanography (FIO). Notification of award June 2018. *Understanding diversity of bacterioplankton and phytoplankton in estuarine and coastal environments*. PI, Jane M. Caffrey; co-PI, Waidner. **\$22,000** (4 days at \$5,500/day)

(**J. Spain, PI**). Funded Waidner salary for work on the DuPont Corporate Remediation Group contract LBIO-65019. (Fall 2017) **\$8,195**

PI. NSF SBIR Phase I (2012) *Cultivation of Duckweed for Bioremediation of Delaware and Chesapeake Watersheds* (Waidner for Elcriton, Inc., transferred to Shawn Jones) **\$149,707**

PI. USDA Postdoctoral Fellowship, Animal Genomes Part D. (2009-2010) **\$125,000**

Internal funding

UWF High Impact Practice (HIP) award for Spring 2022 HIP course integration. Implemented new field and lab-based activities in *Bioinformatics for Biologists* (PCB 4125 & PCB 5525) and Thomas Asmuth’s course, *Advanced Interactive Electronic Art* (ART 4633C). **\$2,500**

UWF ITEP Project entitled *Next Generation Biology Student Technology: Advancing Computational Skills for Biology through Courses and Independent Research Projects*. Waidner PI, with co-PI, Biology Department Chair, Phil Darby. (2019) **\$62,293** for 32 laptops and portable, lockable carts.

2017, 2019, 2020, and 2025 HMCSE Travel Awards. **\$750** each year, for conference/workshop travel.

Internal funding, ctd.

UWF research awards to Waidner's undergraduate** and graduate* student mentees:

- \$500 OUR indiv. (2026) Jonathan Meronvil**
- \$3,986 OUR SURP (2026) Kiley Iveson**, (\$3,600 student stipend + \$386 supplies)
Effects of seagrass density on water turbidity and abundances of aerobic anoxygenic phototrophic bacteria
- \$3,951 OUR SURP (2025) Jacob Feldman**, (\$3,470 student stipend + \$481 supplies)
 - On August 8, 2025, Jacob earned the 2nd Place (\$100) poster award; for his project entitled, "Factors affecting *Vibrio vulnificus* abundance in oyster liquor."
 - On August 14, 2025, Jacob and one other student were selected by UWF OUR and the HMCSE Dean to present and talk about their SURP experiences for the 08/14/25 UWF Board of Trustees meeting; video of this BOT meeting is at this link, where the SURP presentation starts at 2 hr and 34 minutes:
<https://www.youtube.com/watch?v=KcI06MidLAo>
- \$500 OUR indiv. (2021) Selina Detzel**
- \$1,000 HMCSE grad. (2021) Carrie Daniel*
- \$500 OUR indiv. (2021) Elena Weaver**
- \$1,495 HMCSE grad. (2021) Tristan Craig*
- \$1,472 HMCSE grad. (2020) Trupti Potdukhe*
- \$750 OUR group (2020) Kelsey Hope**, Gabriela Castaing**, & Logan Severson**
- \$1,125 HMCSE grad. (2019) Mark Prousalis*
- \$3,000 OUR indiv. (2019) Jani Ngalame**, GeoScholars (\$2,500 student stipend + \$500 supplies)
- \$450 OUR indiv. (2018) Carrie Daniel**

Internal UWF Innovative Interdisciplinary Research Grant: STEAMing the River to the Gulf: Water Quality Assessments and Communication (2017) **\$43,000**. PI, Waidner; co-PIs, Thomas Asmuth (UWF Art) and Alexis Janosik (UWF Biology)

Other internal institutional awards:

2022 winner, UWF HIP Faculty Showcase: Waidner and Asmuth: [STEAM Collaborations in Bioinformatics and Industrial Design: Enhancing Interdisciplinary Cohorts](#)

2022 winner, UWF HIP Student Showcase: [BEST RESEARCH WITH FACULTY](#) was awarded to the student group presentation led by Lacey T. Bowman.

University of Delaware Frances Severance Academic Council Award, given for the best thesis or dissertation within a program area. (May 2008)

University of Delaware Publication Award, for best student first-authorship paper for Appl. Environ. Microbiol. 73:3936-3944. (May 2008)

University of Delaware Dissertation Fellows Award. Academic Year 2006-2007. Annual University-wide competitive funding to provide stipend in the last year of dissertation completion.

University of Delaware Marion R. Okie Fellow. Academic Year 2001-2002. Student stipend fellowship, based on academic and research excellence and demonstrated leadership abilities.

Life Technologies, Inc. 1999 Annual Level 3 Award. For excellent performance, Technical Services Database Upgrade.

Life Technologies, Inc. 1998 Annual Level 3 Nomination. Nominated for Technical Support and Customer Training Team (TSCTT). Received Level 2 Award.

SYNERGISTIC ACTIVITIES AND SERVICE

UWF GRADUATE STUDENTS AND THESIS COMMITTEES:

Serving as M.S. thesis committee member, with thesis advisor listed, or (*) if Waidner is the chair

Student, Time Frame	(Defense date)	Department, Committee chair
1. Mallory Palatucci, Spring 2016 – Summ. 2017	(07/27/17)	Biology, chair Jim Spain
2. Khursana Duty, Fall 2017 – Summ. 2019	(04/03/19)	Biology, chair Hui-Min Chung
3. Ari Simmering, Spring 2018 – Summ. 2020	(08/21/20)	Biology, chair Wade Jeffrey
4. Erika Neat Headrick, Spring 2018 – Summ. 2019	(08/23/19)	Biology, chair Wade Jeffrey
5. Mark Prousalis, Spring 2018 – Summ 2020	(07/20/20)	EES, chair Matt Schwartz
6. Leila Harris, Fall 2018 - (Switched to non-thesis Fall 2023)		Biology, chair Wade Jeffrey
7. Trupti Potdukhe, Fall 2019 – Fall 2021	(10/18/21)	Biology*
8. Carrie Daniel, Fall 2019 – Summ. 2022	(02/21/22)	Biology*
9. Hope Ebert, Spring 2021 – Summ. 2023	(02/24/23)	Biology, chair Wade Jeffrey
10. Mackenzie Rothfus, Summ. 2020 – Spr. 2022	(03/09/22)	Biology, chair Jane Caffrey
11. Jessica Smith, Summ. 2020 – Spr. 2022	(02/24/22)	Biology, chair Jim Spain
12. Tristan Craig, started Spring 2021. (Switched to non-thesis 12/07/21)		Biology*
13. Lacey Bowman, Fall 2021 – Summ. 2023	(07/05/23)	Biology, chair Jane Caffrey
14. Rebekah DiLavore, Fall 2021 – Spring 2023	(04/10/23)	Biology, chair Scott Taylor
15. Kayla Mabry, Summ. 2022 – Spring 2023	(06/14/23)	Biology, chair Scott Taylor
16. Jamie Martinez, started Fall 2022. (Switched to non-thesis 07/13/23)		Biology*
17. Alyssa Cotten, Fall 2023 –		Biology, chair Wade Jeffrey
18. Lola Balogun, Fall 2022 – Fall 2024	(10/16/24)	Biology, chair Jim Spain
i. Balogun: Continued meetings for advisement and additional data analyses into Fall 2024		
19. Lauren Hamilton, Fall 2024 –		Biology, chair Wade Jeffrey
i. Hamilton: Several individual and partial committee meetings in F2024 and Spr2025		
20. Sydney Rodell, Fall 2025 –		Biology, chair Wade Jeffrey
21. Charlotte Dubose, Fall 2025		Biology, chair Wade Jeffrey

COMMUNITY SERVICE:

1. *U. of Delaware*: (Fall 2025). Mentor for University of Delaware program, “UD GRAD LEAP” One first-year Ph.D. student (U. of Delaware College of Agriculture and Natural Sciences).
2. *Pensacola region*: (July 18 and July 25, 2025) Provided professional expertise interview for Sinclair Broadcasting (WEAR TV Channel 3, Brent Kearney) regarding *Vibrio vulnificus* (the “flesh-eating bacterium”) cases in our local area, precautions, and environmental factors that contribute to higher risks of human exposure and infection. Pensacola, FL.
3. *U. of Delaware*: (Winter 2024-2025). Mentor for University of Delaware program, “UD Job Shadow” 2 UG students, both seniors, one majoring in Wildlife Ecology Conservation, second in Entomology and Wildlife Ecology.
4. *U. of Delaware*: (Summer 2023). Mentor for University of Delaware program, “UD Summer Job Shadow Program.” 2 UG students, Computer Science Freshman and Philosophy Sophomore.
5. *U. of Delaware*: (Winter 2022). Mentor for University of Delaware program, “Hens Hiring Hens: UD Job Shadow.” 1 UG student, double major Wildlife Ecology and Conservation.
6. *U. of Delaware*: (Winter 2021). Mentor for University of Delaware program, “Hens Hiring Hens: UD Job Shadow.” 1 UG student and 1 Ph.D. student.
7. *General outreach*: (Winter 2021), provided interview and lab tour to the “*Dude Lives*” TV series which follows an existential journey, to find the “truth” of this life. The episode on Biology focused on many philosophical and technical questions, including simply, “What is life?”

8. *U. of Delaware*: (Winter 2020 and Summer 2021). Mentor for University of Delaware program, “Hens Hiring Hens: UD Job Shadow.” 2 UG students, Winter 2020; 2 UG in Summer 2021.
9. *Pensacola K-12 schools*: (Jan. 2019) Advisor, Gulf Breeze HS Marine Science program.
10. *Pensacola / Northwest Florida*: (2018-2019) Served as technical advisor to BFA “Project Oyster and Detective Oyster,” Urban 5 Star POP, and Bruce Beach-Washerwoman Creek proposals.
11. *Pensacola K-12 schools*: (Oct. 2018) Provided microbiology-focused class assignment interviews with students of Booker T. Washington High School, Pensacola, FL.
12. *Pensacola / Northwest Florida*: (May 2018) With Barbara Albrecht, Bream Fisherman Association, demonstration of research labs to the Sunday’s Child grant panel.
13. *Pensacola / Northwest Florida*: (Spring 2018) Panel member, “Editing our Evolution,” Pensacola MESS Hall, NSF NISE Network program participant.
14. *Northwest Florida K-12 schools*: (Feb. 2018) STEAM Night, Jay High School (Jay, FL). UWF STEM and Art demonstration, with UWF postdoctoral teaching fellow, Claudia O’Steen.
15. *Pensacola / Northwest Florida*: (Oct. 2017) STEAMing exhibit, UWF TAG, with Thomas Asmuth and Claudia O’Steen.
16. *Pensacola K-12 schools*: (Sept-Oct. 2017) With Barbara Albrecht, President of BFA, UWF student, Sara Ousley and UWF postdoctoral teaching fellow, Claudia O’Steen, presented ecology concepts to 92 middle school students (7th and 8th grades), as part of “The Oceans” class at Brown Barge Middle School.
17. *Pensacola / Northwest Florida*: (May 2017) UWF STEAMing Tent and Activities, Lionfish Awareness Day, Pensacola, FL, with Thomas Asmuth.
18. *Northwest Florida K-12 schools*: (Spring 2017) Judge, middle and high school “Northwest Florida Regional Science Fair.”

DEPARTMENT SERVICE:

1. *CEDB*: (Winter 2025 – Spring 2026) Chair, Search Committee, CEDB Associate Professor/Professor and CEDB Chair, position #110640. Committee members: Amanda Croteau, Phillip Schmutz, and M.A. Karim.
2. *Biology*: (Winter 2025 – Spring 2026), Member, Search Committee, Biology Chair, Position #119760. Committee Chair, Alexis Janosik; Committee members: Chris Pomory, Michelle Jensen, Peter Cavnar, Lisa Waidner.
3. *CEDB*: (Winter 2024 - Spring 2025) Assisted with hosting University of Connecticut researcher and her student in oyster site collection planning, execution, laboratory work.
4. *CEDB*: (Fall 2024 - Spring 2025) Served as technical advisor to the molecular biology technician in qPCR assay development, interpretation and troubleshooting with assay findings, and data analyses, CEDB Project, Microbial Source Tracking (FL-DEP project).
5. *Biology*: (Fall 2024) Hosted Biology Department seminar speaker, David Merkler, USF.
6. *Biology*: (Fall 2024) Recruitment activity, tour, and Q&A with a potential transfer student interested in Marine Biology major and research.
7. *CEDB*: (Winter 2024-2025) Assisted in hosting visiting scientist and student from University of Connecticut, oyster project unrelated to *Vibrio* project.
8. *Biology*: (Fall 2023 and Spring 2024) Served on the Biology Department 7-year review Research Subcommittee, for the 7-year review Biology Department review.
9. *CEDB*: (Spring 2024) Served on the Search Committee for new CEDB hire for the position, Assistant Professor, job posting #110630. Resulted in the successful hire of Amanda Croteau.
10. *Biology*: (Spring 2023) Provided laboratory tour and general overview of the research and teaching facilities for a Pace High School senior, who is now a second-year UWF Biology student.
11. *Biology*: (Spring 2022) Assist Chair and Graduate Program Coordinator with graduate course writing assessment materials.
12. *Biology*: (Nov-Dec, 2021 and Spring 2022) UWF Biology ByLaws Committee.

13. *Biology*: (Spring 2022) UWF Biology Executive Committee.
14. *Biology*: (Fall 2021) UWF Biology Marine Biology Curriculum Committee.
15. *Biology*: (Summer 2021) Participated in introduction of transfer students to research programs at the BIO-CoRE Faculty Meet and Greet. (PIs, Hui-Min Chung and Peter Cavnar)
16. *Biology*: (Summer 2019) Assisted with new Marine Biology curriculum and assisted with curriculum change requests for *Molecular Aquatic Microbial Ecology*, MCB 4990 & 5990.
17. *Biology*: (Feb. 2019) With Coordinator of Visit Experience, Office of Undergraduate Admissions, provided a personalized laboratory tour to prospective student and family.
18. *Biology*: (Sept 2018 – May 2019). Wrote and submitted Curriculum Change Requests for implementation of *Bioinformatics for Biologists*, PCB 4125 & 5525.
19. *Biology*: (Spring 2019) Member, Marine Biology & Biomedical Curricula committees.
20. *CEDB and Art Departments*: (Summer 2019) Assisted, with Jane Caffrey and Mike Murrell, in Art Department course, ART3905 SPECIAL TOPICS IN CERAMICS. Instructor, Meagan Gates.
21. *Biology*: (Summer 2019) Served as a faculty panel member and “BioCORE Meet and Greet” for NSF CURE integration into Genetics Laboratory and Cell Biology Laboratory (PIs, Hui-Min Chung and Peter Cavnar)
22. *Biology*: (Spring 2020) Undergraduate Student Engagement Committee.

COLLEGE SERVICE:

23. *HMCSE*: Starting Spring 2026, Serving as the representative for Biology/CEDB for HMCSE College Faculty Personnel Committee (term 2026- 2029)
24. *HMCSE*: (Spring 2025 to present) Serving on the T&P Mentoring Committee for Assistant Professor, Amanda Croteau (Earth and Environmental Sciences)
25. *HMCSE*: (Spring 2019) Wrote the exams and coordinated the middle and high school Science Olympiad events, *Heredity* and *Designer Genes*.
26. *HMCSE*: (Spring 2019) Assisted with recruiting for HMCSE and Biology Department at the *UWF Explore!* recruiting event.
27. *HMCSE*: (Spring 2018) Wrote the exams and coordinated the regional B and C sections of the ECOLOGY events (middle- and high-schoolers) for Northwest Florida Science Olympiad.
28. *UWF HMCSE and USF*: (Summer 2017) Served as lab and data analysis mentor to visiting student from U. South Florida (Meredith Snyder) who was the SURP student for another UWF faculty mentor.

UNIVERSITY SERVICE:

1. (Summer 2026) Office of Undergraduate Research – Serving as a SURP for undergraduate Biology student, Kiley Iveson (Marine Biology major)
2. (Spring 2026) Served as OUR Explorers Program Mentor (1 student).
3. (Summer 2025) Office of Undergraduate Research – Served as a Faculty Reviewer for the SURP students’ practice poster presentations.
4. (Fall 2026) Reviewed OUR Project proposals, Cycle 1 (6 total proposals, Sept. 2025)
5. (Summer 2025) Office of Undergraduate Research – Served as SURP Mentor for undergraduate Biology student, Jacob Feldman (Marine Biology major)
6. (Summer 2025) Office of Undergraduate Research -- On 08/06/25, served as faculty reviewer for the SURP student practice poster session.
7. (Spring 2025) Provided interview, *Vibrio vulnificus* literature, and guidance to current understanding of *Vibrio* distribution in the natural environment. The meeting and Q&A was for an EES M.S. graduate student in UWF COH course, PHC-Public Health Concern 6300: Environmental Health
8. (Spring 2025) Served as OUR Explorers Program Mentor (3 students).
9. (Fall 2024) Reviewed OUR Project proposals, Cycle 2 (5 total proposals, Nov. 2024)
10. (Spring 2024) Served as OUR Explorers Program Mentor (2 students).

11. (Fall 2023) Reviewed OUR Project proposals, Cycle 1 (5 total proposals, Oct. 2023)
12. (Fall 2022 – Spring 2026) UWF Sponsored Research Advisory Committee. Last meeting as member of this committee was on March 2, 2026.
13. (Fall 2022) Reviewed OUR Project proposals (8 total proposals in Sept and Nov. 2022)
14. (Spring 2022) Served as OUR Explorers Program Mentor (2 students).
15. (Spring 2021) Served as OUR Explorers Program Mentor (3 students).
16. (Spring 2020) Served as a STEM mentor, Anchor Down Mentor Program, for First and Second Year Experiences, Office of Student Retention Initiatives.
17. (Spring 2020) Served as a mentor to 2 undergraduate OUR Explorers
18. (Spring 2019) Served as a mentor to 2 undergraduate OUR Explorers
19. (Spring 2019) Served as a CUTLA reviewer for University-wide assessment reports.
20. (Fall 2018 - Spring 2019) Served as committee member on the High Impact Practice (HIP) Undergraduate Research Working Group.
21. (Fall 2018 - Spring 2019) Reviewed OUR Project proposals (6 proposals).
22. (Spring 2017) Served as OUR Explorers Program Mentor (3 students).
23. (Spring 2017) Judge for UWF Undergraduate and Graduate Student Symposium.

PROFESSIONAL SERVICE:

24. *Manuscript peer reviews for the following journals:* Microbiology (The Microbiology Society), Applied Microbiology and Biotechnology (AMBB, Springer), International Journal of Molecular Sciences (IJMS), Microorganisms, MDPI Genes (Polar Genomics), ISME Journal, Deep Sea Research, Environmental Science and Technology, Frontiers in Marine Science, Molecular Ecology, MDPI Viruses, MDPI Pathogens, MDPI Toxins, Gulf and Caribbean Research, and Water Research (Elsevier).
25. *Ad hoc grant proposal reviews:* NSF Biol. Oceanography Program and UNC WRI Program.
26. *Prescott's Microbiology 11th Edition:* (Summer 2020) Reviewer and Focus Group panelist.

SERVICE TALKS - INVITED LECTURES AND SEMINARS:

Relationships of environmental parameters with *Vibrio* abundances in oyster microbiomes. (May 2025) UWF Biology Seminar Course. *Instructor: Jake Siedlik. PCB4922 (45 students), PCB5924 (8 students)*

UWF Fall 2024 – 2 class sessions, Guest instructor: *Professional Development, BSC6840*. Two 75-minute class sessions, including hosting UWF librarian on literature search tools, providing guest lecture and leading discussions on scientific literature in the biological sciences, biology career options, research activities and publications in academic and industrial positions. Also led a LinkedIn profile development activity. *Instructor: Wade Jeffrey.*

Vibrio vulnificus and *Vibrio parahaemolyticus* in waterbodies of Escambia County (April 2024) (*invited talk*) Escambia County Marine Advisory Committee Seafood Safety Symposium. Pensacola, FL.

Vibrio vulnificus and *Vibrio parahaemolyticus*. (Nov. 2023) (*invited talk*) University of West Georgia, UWG Biology Seminar and Special Events. Escambia County Marine Advisory Committee Seafood Safety Symposium. Carrollton, GA.

UWF Fall 2023 – Guest instructor: *Professional Development, BSC6840*. One 75-minute guest lecture and led discussion on career options, research activities and publications in academic and industrial positions. Led a LinkedIn profile development activity. *Instructor: Wade Jeffrey.*

FDACS Monthly Division Roundup: *Vibrio vulnificus* and *Vibrio parahaemolyticus* (June 2023) (*invited talk*). Florida Department of Department of Agriculture and Consumer Services, Division of Aquaculture; Tallahassee FL.

Vibrio vulnificus and *Vibrio parahaemolyticus* in the Pensacola Bay System (April 2023) Wade H. Jeffrey, Jane M. Caffrey, and **Lisa A. Waidner** (*invited talk*). Escambia County Seafood Safety Symposium, Escambia County Central Office Complex, Pensacola, FL.

UWF Spring 2023 – Guest instructor. Microbial Ecology in the Pensacola Bay System and other Environments. (Jan. 2023) UWF Biology Seminar Course. *Instructor: Peter Cavnar*.

UWF Spring 2022 student club – Provided talk and hands-on demonstration and activity for the UWF University-wide Student Group, "ArtSci Union," Union of arts & sciences: Improving science communication.

UWF Fall 2021 – For the UWF Kugelman Honors Program, IDH 4031, Ecology of FL. Provided guest lecture, Vibrio bacteria in Florida: The good, the bad, and the ugly. (Sept 2021) Selected the peer-reviewed literature for student readings and generated quiz and exam questions for this portion of the course. *Instructor: Frank Gilliam*.

UWF Spring 2021 – **Seminar**. Vibrio bacteria in Florida: The good, the bad, and the ugly. (Feb. 2021) UWF Biology Seminar Course. *Instructor: Jane Caffrey*.

UWF Fall 2020 – Guest instructor: *Professional Development, BSC6840*. One 75-minute guest lecture and led discussion on career options, research activities and publications in academic and industrial positions. *Instructor: Wade Jeffrey*.

Invited talk. Vibrio bacteria: The good, the bad, and the ugly. (Spring 2020) Escambia County Science Hour. Pensacola, FL.

Invited PBS television segment. Medical Matters and Public Health Concerns. *Aware! With Dee Dee Sharp*. (Oct. 2019) **Waidner, L.A.** and **Lanza, J.J.** Pensacola, FL.

UWF Fall 2019 – For the UWF Kugelman Honors Program, IDH 4031, Ecology of FL. Provided guest lecture, Vibrio bacteria in Florida (Oct 2019), selected the peer-reviewed literature for student readings and generated quiz and exam questions for this portion of the course. *Instructor: Frank Gilliam*.

UWF Spring 2019 – Guest instructor: *Aquatic Botany BOT4404C, 4 credits*. One guest lecture on harmful algal blooms and phytoplankton controls. *Instructor: Jane Caffrey*.

UWF Spring 2019 – Guest instructor: One guest lecture presented at *Biology Seminar, undergraduate and graduate, PCB4922 & PCB5924*. Seminar entitled: Photoheterotrophic Bacteria in the Pensacola Bay System. *Instructor: Phil Darby*.

Editing our Evolution Forum: NSF Facilitating a National Dialogue on Human Genome Editing. National Informal Stem Network. (May 2018) Pratt, M., Fleekop, J., Chmiel, J.D., Jenson, M., and Waidner, L.A. Pensacola MESS Hall, Pensacola, FL.

UWF Fall 2017 – Guest instructor (3 lectures): *Microbiology. MCB3020*. In addition to guest lecturing (microbial genetics and expression control), developed new material for demonstration of Microbial Taxonomy, Phylogeny, Systematics. *Instructor: Joe Lepo*.

UWF Fall 2017 – Guest instructor (1 lecture): *Estuarine Ecology. PCB4048 and PCB5445*. Estuarine contaminants, with a focus on the Pensacola Bay System. *Instructor: Jane Caffrey*.

UWF Fall 2016– Guest instructor (1 lecture): *Classic Papers in Oceanography and Aquatic Ecology PCB5905*. *Instructor: Jane Caffrey*.

Invited seminar. The Use of Duckweed for Wastewater Bioremediation and Biofuel Production. (2012) Center for the Inland Bays, Scientific & Technical Advisory Committee. Lewes, DE.

University of Delaware: Fall 2009 – Guest lecturer (3 lectures and class activity sessions). *Introduction to*

Bioinformatics, ANSC644. Taught theory and practice of phylogenetic analyses. Wrote and administered the Phylogenetics practical examination. *Instructor: Carl Schmidt.*

Invited seminar with honorarium. Metagenomics, ecotypes, and distribution of aquatic bacteria with a “new” metabolism. (2006) Department of Biological Sciences, University of Maryland Baltimore County. Baltimore, MD.

University of Delaware: Fall 2005 – Guest lecture, Using genomics for clues to environmental adaptations. U of Delaware College of Marine Studies, *Environmental Genomics* Course. *Instructor: Adam Marsh.*

PROFESSIONAL SERVICE ACTIVITIES PRIOR TO 2016:

STEM Role Model. (2011) As Elcriton, Inc. Scientist, served as mentor for young women contemplating science and engineering careers at the 12th annual American Association of University Women (AAUW) Award Luncheon for Excellence in Science and Math, 11th grade girls (Newark, DE).

“Coast Day” Demonstrations. (2000 through 2006, and 2010-2012) Planning, organizing, and implementing research displays in an annual general public outreach event for >10,000 visitors each year. Research activity research exhibitions, with hands-on demonstrations for children. U. of Delaware, Lewes, DE.

Instructor. (2010 and 2012) “Dirty DNA: Profiling Soil Microbes” at the Delaware State 4-H Environmental Camp, co-sponsored by University of Delaware Institute of Soil and Environmental Quality and The Delaware Environmental Institute. Taught field and laboratory techniques to 4H campers.

Ag Day Demonstrations, (2008-2010 and 2012). Exhibition of research activities for the general public at “AG Day,” ISEQ/DENIN/DBI booth 2010 was awarded a **First Place Blue Ribbon for science teaching.**

INBRE/EPSCoR Seminar Series and Outreach. (2007, 2008) Sat on panels for INBRE/EPSCoR interns to discuss Ph.D. programs and postdoctoral training. Moderated several seminar series presentations.

Bacterial production and radioactive waste management. (June 2003-2007) Aided Wommack laboratory in bacterial production samples and managing radioactive waste for Chesapeake Bay observatory cruises.

Reviewer for Journals: *Environmental Microbiology Reports*, *Applied and Environmental Microbiology*, *Bioresource Technology*, *Journal of Shellfish Research*.

TEACHING

Enrollment in bold: **G**, graduate student; **UG**, undergraduate student.

University of West Florida

1. Summer 2026: *BSC6905 JF-Oyster & WQ Rsch*, 1 credit. **1 G**, Jacob Feldman.
2. Spring 2026: *BCH3033 Biochemistry I*, 3 credits. **80 UG**.
3. Spring 2026: *PCB4905, MH Microb Ecol*, 1 credit. **1 UG**, Mia Hawkins.
4. Fall 2025: *BSC6905 LM-Oyster & WQ Rsch*, 1 credit. **1 G**, Logan Mastrandrea.
5. Fall 2025: *BSC6905 Oyster DNA qPCR research*. 1 credit. **1 G**, Jacob Feldman.
6. Fall 2025: *Molecular Aquatic Microbial Ecology (MAME), MCB4631 & MCB5633*, 3 credits. **26 UG and 3 G**.
7. Spring 2025: *BSC4905 Rsch: WQ and Oysters*, 1 credit. **1 UG**, Hannah Gaskin.
8. Spring 2025: *BSC4905 Rsch: Vibrio and Water Quality*, 3 credits. **1 UG**, Shelby Roberts
9. Spring 2025: *Molecular Aquatic Microbial Ecology (MAME), MCB4631 & MCB5633*, 3 credits. **6 UG^A and 2 G** (^Anote, scheduling mistake, overlapped with other marine biology major course)
10. Fall 2024: *Molecular Aquatic Microbial Ecology (MAME), MCB4631 & MCB5633*, 3 credits. **45 UG and 2 G**.
11. Spring 2024: *Microbiology. MCB3020*, 3 credits. **69 UG**
12. Fall 2023: *Molecular Aquatic Microbial Ecology (MAME), MCB4631 & MCB5633*, 3 credits. **34 UG and 1 G**.
13. Summer 2023: *PCB6905 DIS, Molecular Ecology Research*, 3 credits. **1 G**, Ilan Cosmas.
14. Summer 2023: *Thesis, 1 credit, BSC6971*. **1 G**, Jamie Martinez.
15. Spring 2023: *Advanced Molecular Biology and Bioinformatics for Biologists. PCB4125 and PCB5525*, 3 credits. **9 UG and 7 G**.
16. Spring 2023: *PCB4905 DIS, Antibiotic Resistance*, 1 credit. **1 UG**, Wesley Wilmot.
17. Fall 2022: *Molecular Aquatic Microbial Ecology (MAME), MCB4631 & MCB5633*, 3 credits. **35 UG and 1 G**.
18. Fall 2022: *PCB4905 DIS, Aquatic Microbial Ecology*, 2 credits. **1 UG**, Domani Turner-Ward.
19. Summer 2022: *Thesis, 1 credit, BSC6971*. **1 G**, Carrie Daniel.
20. Spring 2022: *Advanced Molecular Biology and Bioinformatics for Biologists. PCB4125 and PCB5525*, 3 credits. **6 UG and 6 G**.
21. Spring 2022: *PCB4905 DIS, Molecular Rice Rhizome Research*, 1 credit. **1 UG**, Elena Weaver.
22. Spring 2022: *PCB6905 DIS, Molecular Rice Rhizome Research*, 3 credits. **1 G**, Tristan Craig.
23. Spring 2022: *Thesis, 1 credit, BSC6971*. **1 G**, Carrie Daniel.
24. Fall 2021: *Molecular Aquatic Microbial Ecology (MAME), MCB4631 & MCB5633*, 3 credits. **27 UG and 1 G**.
25. Fall 2021: *Professional Development in Biology, BSC6840*, 3 credits. **20 G**.
26. Fall 2021: *Thesis credits, 2 total, BSC6971*. 1 credit each: **2 G**, Trupti Potdukhe and Carrie Daniel.
27. Summer 2021: *Advanced Molecular Biology and Bioinformatics for Biologists. PCB4125 and PCB5525*, 3 credits. **3 UG and 5 G**.
28. Summer 2021: *Thesis credits, 2 total, BSC6971*. 1 credit each: **2 G**, Trupti Potdukhe and Carrie Daniel.
29. Summer 2021: *BSC6905 DIS, Molecular N-Cycling Pathways and Genes*, 3 credits. **1 G**, Kelsey Hope.
30. Spring 2021: *Molecular Aquatic Microbial Ecology (MAME), MCB4990 & 5990*, 3 credits. **34 UG and 5 G**.
31. Spring 2021: *Thesis credits, 2 total, BSC6971*. 1 credit each: **2 G**, Trupti Potdukhe and Carrie Daniel.
32. Spring 2021: *BSC6905 DIS, Vibrio Molecular Directed Independent Study*, 2 credits. **1 G**, Trupti Potdukhe
33. Spring 2021: *BSC6905 DIS, Photoheterotrophy Molecular*, 2 credits. **1 G**, Carrie Daniel.
34. Fall 2020: *Molecular Aquatic Microbial Ecology (MAME), MCB4990*, 3 credits. **31 UG**.

35. Fall 2020: *BSC6905 DIS, In Silico Data Analyses*, 2 credits. **1 G**, Jade Harrell.
36. Summer 2020: *Advanced Molecular Biology and Bioinformatics for Biologists. PCB4125 and PCB5525*, 3 credits. **13 UG** and **6 G**.
37. Spring 2020: *Molecular Aquatic Microbial Ecology (MAME), MCB4990 & 5990*, 3 credits. **8 UG** and **3 G**. Created this new course to address a gap in the changes to Marine Biology major curriculum (removal of Microbiology and Molecular Biology requirements).
38. Spring 2020: *MCB4905 DIS, Microbiology Research*, 1 credit. **1 UG**, Logan Severson.
39. Spring 2020: *PCB4905 DIS, Molecular Microbial Research*, 1 credit. **1 UG**, Gaby Castaing.
40. Fall 2019: *Microbiology. MCB3020*, 3 credits. **122 UG**.
41. Fall 2019: *DIS Microbial Ecology Research, PCB6905* 1 credit. **1 G**, Trupti Potdukhe
42. Fall 2019: *DIS Photoheterotrophic Microbial Ecology Research, PCB6905* 1 credit. **1 G**, Carrie Daniel
43. Summer 2019: *DIS, 1 credit: Photoheterotrophy Research, PCB6971*. **1 G**, Leila Harris.
44. Summer 2019: *DIS, 1 credit: Molecular Research, PCB4905*. **1 UG**, Kelsey Hope.
45. Summer 2019: *Marine Field Studies, OCB3108 (FIO course)*, 3 credits. Instructor Jane Caffrey. Co-Instructors: Wade Jeffrey, Frank Gilliam, and Lisa Waidner. In 5th week, during UWF activities, FIO students received lecture and demonstration by Waidner (06/12/19) of staining and filtration for total prokaryote counts; students experience image capture, abundance and size data acquisition and analysis using AX70 microscope and image analysis software. Students will receive data on 10 stations collected at various locations within the Panhandle. Waidner wrote the module on prokaryote abundance and epifluorescence microscopy; demonstrated the methods and provided microscopy images and data, and wrote the exam questions pertaining to microbial ecology and microscopy. **16 UG**.
46. Spring 2019: *Advanced Molecular Biology and Bioinformatics for Biologists. PCB4990 and PCB5990*, 3 credits. **10 UG** and **4 G**.
47. Spring 2019: *Directed Independent Study, 1 credit: Vibrio Literature Research, PCB3905*. **1 UG**, Jaime Williams.
48. Fall 2018: *3 sections Molecular Biology Laboratory. PCB4524L, 1 credit each section*. Developed new curriculum modules, including the use of qPCR to enumerate bacterial and human cell DNA loads in student cheek samples. **61 UG total, plus 2 post-graduates auditing the course**.
49. Fall 2018: *Independent Study, Research Techniques and Lab Skills, PCB4905*, 3 credits. **1 UG**, Carrie Daniel.
50. Spring 2018 – Instructor and course developer: *Advanced Molecular Biology and Bioinformatics for Biologists. PCB4990 and PCB5990*, 3 credits. Developed this new course to address a gap in existing curriculum to assist students interested in analyses of macromolecule (DNA, RNA, protein) data. **8 UG** and **12 G**.
51. Fall 2017: *Molecular Biology Laboratory. PCB4524L, 1 credit*. Developed new curriculum modules, including the use of PCR subcloning to involve students in my current photoheterotrophy research. Students learned how to amplify proteorhodopsin genes from mixed community DNA using PCR. Students subcloned products and analyzed subcloning efficiency. **10 UG**. New curriculum modules were used by **3 sections**, average **12 UG** each section.
52. Summer 2017: *DIS, Molecular Techniques and Lab Skills, PCB6905*, 3 credits. **1 G**, Kendra Brooks.
53. Spring 2017: *Genetics Laboratory PCB3063C, 1 credit*. Re-wrote Lab Manual Part II. Trained other Instructors and TAs in molecular methods including PCR subcloning and bioinformatics for student lab activity curriculum. Designed the new bioinformatics module. **24 UG**. New curriculum modules were used by **4 sections**, average **22 UG** each section.
54. Fall 2016: *Genetics Laboratory PCB3063C, 1 credit*. **24 UG**.

55. Fall 1997. Teacher's Assistant for Johns Hopkins University, Biotechnology Graduate Program. A joint industry-academic lab training program, held at Life Technologies, Rockville, MD. Worked as the TA for two courses:
 - a. Introduction to Tissue Culture Techniques in Cell Biology (*instructor, Tim Fawcett*)
 - b. Recombinant Protein Expression, Production, and Analysis (*instructors, Donna Fox and Tim Fawcett*)

UWF STUDENT LABORATORY AND RESEARCH MENTORING

(graduate* and undergraduate** students)

- 1) **Jessica Valek (Fall 2016)
- 2) **Carrie Daniel (Aug. 2016 to Dec. 2018 as undergraduate student).
 - a. * Carrie Daniel (Fall 2019 to Summer 2022 as M.S. student)
- 3) **Kirsten Ayres (Jan. 2017 to Jan. 2018)
- 4) **Jack Prior (Spring 2017)
- 5) **Brooke Davis (Spring 2017)
- 6) **Meredith Snyder (USF Tampa undergraduate, visiting student, May to August 2017)
- 7) **Kreston Debrick (Post-graduate Intern, Fall 2017)
- 8) **Guilherme de Lima (Aug. 2017 to Aug. 2018)
- 9) **Verdion Martina (Fall 2017)
- 10) **Sara Ousley (Spring and Summer 2018)
- 11) *Mallory Palatucci (Summer 2016 to Spring 2017)
- 12) *Rachel (Capps) Presley Fall 2016 to Summer 2017).
- 13) *Kendra Brooks (May to August 2017)
- 14) *Khursana Duty (Nov. 2017 to May 2019)
- 15) *Jenny Dysvik-Edgeworth (Jan. 2018 to Nov. 2018)
- 16) *Mark Prousalis (Jan. 2018 to May 2021)
- 17) **Jaime Williams (Spring 2019)
- 18) **Jani Ngalame (Jan. 2019 to Jan. 2020)
- 19) **Niyiah Roney (May 2019 to Jan. 2020)
- 20) *Leila Harris (Dec. 2018 to Spr. 2020, Fall 2021, and Spring 2023)
- 21) **Nicole Brown (Post-graduate Intern, May 2019 to Aug. 2019)
- 22) **Kelsey Hope (Sept. 2018 to May 2022 as undergraduate student)
 - a. *Kelsey Hope (Spring 2021 to Fall 2021 as M.S. student)
- 23) **Gaby Castaing (Fall 2019 to April 2020)
- 24) **Logan Severson (Fall 2019 to April 2020)
- 25) *Jade Harrell (Fall 2020)
- 26) *Trupti Potdukhe (Fall 2019 to Fall 2021)
- 27) *Mackenzie Rothfus (Spring and Summer 2021)
- 28) *Tristan Craig (Spring 2021 to Spring 2022)
- 29) **Elena Weaver (Spring 2022)
- 30) **Selena Detzel (Spring 2022)
- 31) *Lacey Bowman (Spring 2022 to present, *currently working on manuscript*)
- 32) **Sydney Moore (Spring 2022)
- 33) **Domani Turner-Ward (Fall 2022 and Spring 2023)
- 34) **Wesley Wilmot (Spring 2023)
- 35) *Jamie Martinez (Aug. 2022 to July 2023)
- 36) *Alyssa Cotton (starting Fall 2023)
- 37) *Ilan Cosmas (Summer 2023)
- 38) **Katherine Lundgren (Fall 2024)
- 39) **Shelby Roberts (Fall 2024 and Spring 2025)
- 40) **Hannah Gaskin (Fall 2024 and Spring 2025)
- 41) **Nidia Castillo (Fall 2024 and Spring 2025)

- 42) **Lindsay Brown (Fall 2024 and Spring 2025)
- 43) **Sydney Roche (Fall 2024 and Spring 2025)
- 44) **Jacob Feldman (Fall 2024 – Summer 2025)
- 45) *Logan Mastrandrea (Fall 2025)
- 46) **Sierra Rich (Fall 2025)
- 47) *Jacob Feldman, as graduate student (Fall 2025 – present)
- 48) **Jonathan Meronvil (Fall 2025 - present)
- 49) **Kiley Iveson (Fall 2025 - present)

PROFESSIONAL DEVELOPMENT

WORKSHOPS AND PROFESSIONAL DEVELOPMENT WHILE AT UWF

- Fall 2025 and Dec. 2025 – JoVE **Active Learning training webinars**, “Learning in Living Systems Biology” and “Active Learning Flipped Course Design - Using Quizzes to Assess Reasoning”
- Summer 2025 – Fall 2025. Digital Accessibility Fundamentals (06/17/2025); HMCSE-specific Digital -Accessibility Training (08/21/2025), and online Canvas Course, earning the AIM CORE TRAINING BADGE (Aug. – Sept. 2025).
- April, 2024. UWF HIP: *Reflect to Connect: Strategies for Faculty to Integrate Reflective Practices into HIP Activities/Courses*
- 2023-2024. UWF HIP workshops for integrating high-impact practices into formal coursework and research mentoring.
- Summer 2022 through Spring 2023. Through the Florida Research Development Alliance (FloRDA). Participated in the Florida Coastal Challenges program, funded through the National Science Foundation Directorate for Engineering Germination.
- Fall 2022 and Spring 2023. UWF HMCSE Inclusive Faculty Mentoring Program (Sept 2022 - May 2023)
- Spring 2021. Hanover Webinar -- Understanding the RFP: the foundation of a responsive proposal (sponsored by UWF RAE).
- Spring 2020. “*EvaluateUR*” with A. Schwartz (OUR), M. Schwartz (RAE), and Jill Singer, SUNY Buffalo State, who provided information regarding the use of external evaluators in educational-based grant proposals and projects.
- Fall 2019. HMCSE NSF Proposal Development workshop, UWF Research Office.
- Throughout Spring 2019, was invited to serve as one of four reviewers on the 2018-2019 spring CUTLA review of University-wide assessment reports. For the Assessment Report Review Project, we scored and documented the quality of all departmental (ALP) assessment reports. Training began in January 2019, with fortnightly meetings to validate the scoring methods and discuss ambiguities encountered in individual department reports. The final report was compiled in May 2019.
- Spring 2019. Faculty and Students GeoScholars Initiation Session.
- Spring 2019. UWF Faculty Mentoring Workshop.
- Spring 2019. UWF CUTLA Workshop: Guidelines for Curriculum Assessment.
- Spring 2019. UWF CUTLA Seminar: Document the Quality of Your Service.
- Spring 2019. UWF CUTLA Workshop: Tenure and Promotion.
- Dec. 2018. At UWF, I facilitated the ThermoFisher Applied Biosystems representative training on the QuantStudio3 instrument and associated software, attended by staff and students.
- Spring 2018. UWF Research & Sponsored Programs two-day grant workshop.
- May 2018. HMCSE 2018 Summer Faculty Workshop. A working event to “facilitate the preparation of plans, initiatives and other activities related to student engagement in research.”

OTHER PROFESSIONAL DEVELOPMENT

- Introduction to Flow Cytometry. Spring 2010. University of Delaware, Department of Biological Sciences. Operation and theory of flow cytometry and flow sorting techniques.
- “Networking and Mentoring for Postdocs in the Life Sciences.” 2009-2010. University of Delaware, Delaware Biotechnology Institute.
- ArcGIS Training. 2007. Introduction to Geography Information Systems, U of Delaware.
- Open Helix Genome Browser Training. 2005. Presented at the Delaware Biotechnology Institute, Newark, DE. In-depth training of genomics bioinformatics programs.
- Targeted Selection Interviewer Training. 1999. Development Dimensions International (DDI). Interviewing training by members of Life Technologies, Inc. Human Resources and Finance.
- “MENTTOR” (Maximizing Experience, Networks and Talent Through One-on-one Relationships). 1999 - 2000. For the Life Technologies, Inc. mentoring program, selected as one of 16 mentees from all U.S. employees. Mentor: Senior Vice President of R&D, Derek Woods, Ph.D.

PROFESSIONAL SOCIETIES

AAAS American Association for the Advancement of Science (2006-present)
AAUW American Association of University Women (2010-present)
ASLO American Society of Limnology and Oceanography (2000-present)
BFA Bream Fisherman’s Association (2016-present)
Center for the (Delaware) Inland Bays, Scientific and Technical Advisory Committee (2011-present)
CERF Coastal and Estuarine Research Federation (2018-present)
GWIS Graduate Women in Science (2018-present)
Partnership for the Delaware Estuary (2005-present)