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EDUCATION

Ph.D. 2014, Microbiology, Auburn University (School of Fisheries, Aquaculture and Aquatic Sciences, Auburn, AL). *"Studies on the microbiota of fishes and the factors influencing their composition"*.
B.Sc. 2007, Biology, Middle Tennessee State University, Murfreesboro, TN.

CURRENT PROFESSIONAL APPOINTMENTS

Assistant Extension Professor, Production Aquaculture, Auburn University. Dauphin Island, AL (2021-present).
Adjunct Scientist, Mote Marine Laboratory. Sarasota, FL (2022-present).
Senior Marine Scientist I, Dauphin Island Sea Lab. Dauphin Island, AL (2022-present).

FORMER PROFESSIONAL APPOINTMENTS

2019-2021	**Staff Scientist**, Marine Immunology Program, Mote Marine Laboratory. Sarasota, FL
2018-2021	**Assistant Quality Assurance Officer**, Mote Marine Laboratory. Sarasota, FL
2016-2021	**Adjunct Faculty**, College of Science & Mathematics, University of South Florida Sarasota-Manatee. Sarasota, FL
2017-2020	**Adjunct Faculty**, Nursing Program, Southern Technical College. Fort Myers, FL.
2014-2019	**Mote Postdoctoral Research Fellow**. Mote Marine Laboratory, Marine Immunology program. Sarasota, FL. Directed by CJ Walsh.
2010-2014	**Graduate Research Assistant**. School of Fisheries, Aquaculture, & Aquatic Sciences, Auburn University. Auburn. AL. Directed by CR Arias.

PUBLICATIONS*

Refereed Journal Articles (32)

32. **Tarnecki, A.M.**, C. Faulk, L. Fuiman. 2026. Microbiota of larval red drum (*Sciaenops ocellatus*): Influence of parental diet. Aquaculture 615: 743609. doi: 10.1016/j.aquaculture.2025.743609.
31. Garlock, T., LaFontaine, Q., Grice, R., **A.M. Tarnecki**. Market trends and challenges for Alabama's emerging oyster aquaculture industry. Journal of Extension [Accepted 5 May 2025].
30. Wang. Z., S. Casas, J. La Peyre, S. Rikard, M.L. Williams, **A.M. Tarnecki**, D. Bushek, X. Guo. 2025. Genomic selection for dermo resistance in the Eastern oyster *Crassostrea virginica*: Production and laboratory testing of F1 generation. Journal of Shellfish Research 44(1): 75-87. doi: 10.2983/035.044.0108.
29. **Tarnecki, A.M.**, N.P. Brennan, L. Guttman, K.L. Main. 2025. Variability in prokaryotic and eukaryotic periphyton communities in marine recirculating integrated multi-trophic aquaculture systems. Aquaculture 600: 742210. doi: 10.1016/j.aquaculture.2025.742210.
28. Walsh, C.J., T.A. Sherwood, **A.M. Tarnecki**, K.L. Main, J. Restivo, N.R. Rhody. 2025. Challenges in cellular agriculture: lessons from Pacific white shrimp, *Litopenaeus vannamei*. In Vitro Cellular & Developmental Biology – Animal 61: 525-547. doi: 10.1007/s11626-024-01011-0.
27. Walsh, C.J., N.R. Rhody, K.L. Main, J. Restivo, **A.M. Tarnecki**. 2024. Advances in development of long-term embryonic stem cell-like cultures from a marine fish, *Sciaenops ocellatus*. Current Research in Food Science 9: 100841. doi: 10.1016/j.crfs.2024.100841.
26. Tackett, V.M., J.A. Stoeckel, F.S. Rikard, **A.M. Tarnecki**, I.A.E. Butts. 2024. Impact of seasonality on the reproductive physiology of diploid and tetraploid Eastern oyster, *Crassostrea virginica*. Aquaculture 593: 741276. doi: j.aquaculture.2024.741276.
25. Tackett, V.M., H.R. Montague, J.A. Stoeckel, F.S. Rikard, **A.M. Tarnecki**, I.A.E. Butts. 2024. Salinity impacts gamete quality in Eastern oyster, *Crassostrea virginica*. Aquaculture 589: 740869. doi: 10.1016/j.aquaculture.2024.740869.
24. **Tarnecki, A.M.**, A. Cleveland, M. Capps, F.S. Rikard. 2024. Growth of oyster (*Crassostrea virginica*) larvae in small-scale systems using an algae concentrate food source. Aquaculture Research 2024: 1890826. doi: 10.1155/2024/1890826.
23. **Tarnecki, A.M.**, K. Landry, S. Rikard. 2023. Nursery upweller type has minimal impact on subsequent grow-out of Eastern oysters (*Crassostrea virginica*). Frontiers in Aquaculture 2: 1236346. doi: 10.3389/faquc.2023.1236346.
22. **Tarnecki, A.M.**, C. Miller, T.A. Sherwood, R.J. Griffitt, R.W. Schloesser, and D. Wetzel. 2022. Dispersed oil induces dysbiosis in the fish external microbiome. Microbiology Spectrum 10: e00587-21. doi: 10.1128/spectrum.00587-21.
21. Sherwood, T.A., M.L. Rodgers, **A.M. Tarnecki**, R.J. Griffitt, and D.L. Wetzel. 2021. Characterization of the differential expressed genes and transcriptomic pathway analysis in the liver of sub-adult red drum (*Sciaenops ocellatus*) exposed to *Deepwater Horizon* chemically dispersed oil. Ecotoxicology and Environmental Safety 214: 112098. doi: 10.1016/j.ecoenv.2021112098.
20. **Tarnecki, A.M.**, N. Levi, M. Resley, and K. Main. 2021. Effects of copper sulfate on the external microbiome of common snook (*Centropomus undecimalis*). Animal Microbiome 3: 21. doi: 10.1186/s42523-021-00085-5.
19. Rodgers, M.L., T.A. Sherwood, **A.M. Tarnecki**, R.J. Griffitt, and D.L. Wetzel. 2021. Characterizing transcriptomic responses and transcriptional pathways of southern flounder

(*Paralichthys lethostigma*) chronically exposed to *Deepwater Horizon* oiled sediments. Aquatic Toxicology 230: 105716. doi: 10.1016/j.aquatox.2020.105716.

18. Sherwood, T., R. Medvecky, C. Miller, **A.Tarnecki**, R. Schloesser, K. Main, C. Mitchelmore, and D. Wetzel. 2019. Non-lethal biomarkers of oxidative stress in oiled sediment exposed southern flounder (*Paralichthys lethostigma*): Utility for field-base monitoring exposure and potential recovery. Environmental Science & Technology 53(24): 14734-14743. doi: 10.1021/acs.est.9b05930.
17. Patrick, G., **A.M. Tarnecki**, N. Rhody, R. Schloesser, K. Main, R. Yanong, and R. Francis-Floyd. 2019. Disinfection of almaco jack (*Seriola rivoliana* Valenciennes) eggs: evaluation of three chemicals. Aquaculture Research 50: 3793-3801. doi: 10.1111/are.14342.
16. Guttman, L., A. Neori, S.E. Boxman, R. Barkan, B. Shahar, **A.M. Tarnecki**, N.P. Brennan, K.L. Main, and M. Shpigel. 2019. An integrated *Ulva*-periphyton biofilter for mariculture effluents: multiple nitrogen removal kinetics. Algal Research 42: 101586. doi: 10.1016/j.algal.2019.101586.
15. **Tarnecki, A.M.**, M. Wafapoor, R.N. Phillips, and N.R. Rhody. 2019. Benefits of a *Bacillus* probiotic to larval fish survival and transport stress resistance. Scientific Reports 9: 4892. doi: 10.1038/s41598-019-39316-w.
14. **Tarnecki, A.M.**, N.R. Rhody, and C.J. Walsh. 2018. Health parameters and blood bacterial assemblages of healthy captive red drum *Sciaenops ocellatus*: implications for aquaculture and fish health management. Journal of Aquatic Animal Health 30(4): 339-353. doi: 10.1002/aah.10047.
13. **Tarnecki, A.M.**, N.P. Brennan, R.W. Schloesser, and N.R. Rhody. 2018. Shifts in the skin-associated microbiota of hatchery-reared common snook *Centropomus undecimalis* during acclimation to the wild. Microbial Ecology. 77(3): 770-781. doi: 10.1007/s00248-018-1252-7.
12. **Tarnecki, A.M.,** and N.R. Rhody. 2017. Microbiota of common snook *Centropomus undecimalis* larvae exhibiting high mortality. Aquaculture Research 48: 5693-5698. doi: 10.1111/are.13377.
11. **Tarnecki, A.M.**, F.A. Burgos, C.L. Ray, and C.R. Arias. 2017. Fish intestinal microbiome: diversity and symbiosis unraveled by metagenomics. Journal of Applied Microbiology 123: 2-17. doi: 10.1111/jam.13415.
10. Ray, C., N. Bujan, **A. Tarnecki**, D.A. Davis, C. Browdy, and C.R. Arias. 2017. Analysis of the gut microbiome of Nile tilapia *Oreochromis niloticus* L. fed diets supplemented with Previda® and Saponin. Journal of Fisheries Sciences 11: 036-045.
09. **Tarnecki, A.M.,** W.F. Patterson III, and C.R. Arias. 2016. Microbiota of wild-caught Red Snapper *Lutjanus campechanus*. BMC Microbiology 16: 245. doi: 10.1186/s12866-016-0864-7.
08. **Larsen, A.M.,** M.R. Womble, S.A. Bullard, and C.R. Arias. 2015. Community structure of skin microbiome of Gulf killifish, *Fundulus grandis*, is driven by seasonality and not exposure to oiled sediments in a Louisiana saltmarsh. Microbial Ecology 70(2): 534-544. doi: 10.1007/s00248-015-0578-7.
07. **Larsen, A.M.**, H.H. Mohammed, and C.R. Arias. 2014. Comparison of DNA extraction protocols for the analysis of gut microbiota in fishes. FEMS Microbiology Letters [*Published online 4 Dec 2014*]. doi: 10.1093/femsle/fnu031.
06. **Larsen, A.M.**, F.S. Rikard, W.C. Walton, and C.R. Arias. 2014. Temperature effect on high salinity depuration of *Vibrio vulnificus* and *V. parahaemolyticus* from the Eastern oyster

(*Crassostrea virginica*). International Journal of Food Microbiology 192: 66-71. doi: 10.1016/j.ijfoodmicro.2014.09.025

05. **Larsen, A.M.**, H.H. Mohammed, and C.R. Arias. 2014. Characterization of the gut microbiota of commercially valuable warmwater fish species. Journal of Applied Microbiology 116: 1396-1404. doi: 10.1111/jam.12475.
04. Arias, C.R., **A.M. Larsen**, and K. Koenders. 2013. Predominant bacteria associated with red snapper *Lutjanus campechanus* (Poey, 1860) from the northern Gulf of Mexico. Journal of Aquatic Animal Health 25(4): 281-289. doi: 10.1080/08997659.2013.847872.
03. **Larsen, A.M.**, Z. Tao, S.A. Bullard, and C.R. Arias. 2013. Diversity of the skin microbiota of fishes: evidence for host species specificity. FEMS Microbiology Ecology 85: 483-494. doi: 10.1111/1574-6941.12136.
02. **Larsen, A.M.**, F.S. Rikard, W.C. Walton, and C.R. Arias. 2013. Effective reduction of *Vibrio vulnificus* in the Eastern oyster (*Crassostrea virginica*) using high salinity depuration. Food Microbiology 34(1): 118-122.
01. Tao, Z., **A. Larsen**, S.A. Bullard, A.C. Wright, and C.R. Arias. 2012. Prevalence and population structure of *Vibrio vulnificus* on recreational fishes from the northern Gulf of Mexico. Applied and Environmental Microbiology 78(21):7611-7618.

Manuscripts Under Review (2)

01. Guttman, L., D.T.T.T. Nguyen, O. Ovadia, M. Masasa, **A. Tarnecki**, N. Brennan, N. Rhody, K. Main. Microbial dynamics along nutrient flow and removal in an integrated multitrophic aquaculture system. Frontiers in Microbiology (submitted 06 Jan 2026).
02. Matvey, L., **A.M. Tarnecki**. Seabird diversity and deterrence on floating oyster cages in coastal Alabama. Aquaculture Research (submitted 05 Sept 2025).

Book Chapters (2)

02. **Tarnecki, A.M.**, F. Burgos. Shellfish probiotics: a decade in review. In: The Microbiome: Finfish and Shellfish. ISBN-13: 978-9819908516. p225-254.
01. **Tarnecki, A.M.**, Microbial metagenomics and the shellfish microbiome. In: The Microbiome: Finfish and Shellfish. ISBN-13: 978-9819908516. p203-224.

Manuscripts in Preparation (11)

11. **Tarnecki, A.M.**, M. Capps, S. Rikard, S. Spellman, and G. Chaplin. A comparison of triploid eastern oyster *Crassostrea virginica* performance in varying salinity environments. TBD [in prep]
10. Capps, M., S. Rikard, S. Spellman, G. Chaplin, and **A.M. Tarnecki**. Survival and growth of tetraploid eastern oysters *Crassostrea virginica* in response to different salinity environments. TBD [in prep]
09. Boyd, K., C. LoBuglio, C. Golightly, M. Capps, S. Rikard, and **A.M. Tarnecki**. Adapting aquaculture techniques to enhance oyster populations, *Crassostrea virginica*, in reef restoration. TBD [in prep]

08. Boyd, K., H. Abdelrahman, S. Rikard, **A.M. Tarnecki**, W. Walton, and J.A. Stoeckel. Differences in sensitivity to thermal stress between diploid and triploid eastern oysters (*Crassostrea virginica*) from the Northern Gulf of Mexico. Aquaculture [in prep]
07. Jacob, N., and **A.M. Tarnecki**. Identification of *Vibrio* from recirculating aquaculture systems and interactions with *Bacillus* spp. FEMS Microbiology Ecology [In prep].
06. Main, K., T. Waldrop, N. Brennan, **A.M. Tarnecki**, and N. Boggis. Improving sustainable seafood production: Development of a sustainable fish feed for marine and freshwater aquaculture. Aquaculture [In prep].
05. **Tarnecki, A.M.**, T. Waldrop, N. Brennan, N. Boggis, and K. Main. Impacts of mullet-based diet on the gut microbiota of Siberian sturgeon *Acipenser baerii* and red drum *Sciaenops ocellatus*. Aquaculture Research [In prep]
04. **Tarnecki, A.M.**, E. Barker, P.S. Hejmadi, C.J. Walsh. Effects of sub-lethal *Karenia brevis* exposure on sheepshead minnows. Harmful Algae [In prep]
03. **Tarnecki, A.M.**, C.J. Walsh. A description of the external microbiota of the Florida manatee, *Trichechus manatus latirostris*, in western Florida. Marine Mammal Science [In prep]
02. **Tarnecki, A.M.**, M.A. Drake. Exploring the unculturable diversity of the fish microbiota. TBD [In prep]
01. **Tarnecki, A.M.**, E. Mueller. Potential link between the coral microbiota and susceptibility to Stony Coral Tissue Loss Disease (SCTLD). Coral Reefs [In prep]

Peer-Reviewed Extension Publications (1)

01. **A.M. Tarnecki**, R. Grice. 2024. Seabird interactions with floating oyster aquaculture gear. Alabama Cooperative Extension System. ANR-3093.

Other Extension Publications (15)

15. **Tarnecki, A.M.** 2025. The Commercial Oyster Aquaculture Sector Training (COAST) Program. In: Auburn on the Coast: A Fisheries Extension Newsletter, 4(2): 6-7.
14. **Tarnecki, A.M.** 2025. Farmer-run test kits to improve oyster safety. In: Auburn on the Coast: A Fisheries Extension Newsletter, 3(1): 4-5.
13. Grice, R., **A. Tarnecki**. 2025. Shellfish Seed Suppliers for the Gulf of America. ANR-2584.
12. **A. Tarnecki**. 2025. It takes a village to understand oyster mortalities. Mississippi-Alabama Sea Grant Blog. 05 Sept 2025. https://masgc.org/article/it-takes-a-village-to-understand-oyster-mortalities
11. R. Grice, **A. Tarnecki**. 2024. Estimating number of oyster seed in an order. https://www.aces.edu/blog/topics/coastal-programs/estimating-number-of-oyster-seed-in-an-order/
10. **A. Tarnecki**. 2024. From a childhood love of aquatic creatures to the MASGC engagement team. Mississippi-Alabama Sea Grant Blog. 12 Jun 2024. https://masgc.org/news/article/from-a-childhood-love-of-aquatic-creatues-to-the-masgc-engagement-team
09. **Tarnecki, A.M.** Can oysters take probiotics? In: Auburn on the Coast: A Fisheries Extension Newsletter, 2(2): 5-6.
08. Grice, R., **A. Tarnecki**. 2024. Shellfish Seed Suppliers for the Gulf of Mexico. ANR-2584.

07. **Tarnecki, A.M.** 2024. Birds and floating oyster aquaculture gear. In: Auburn on the Coast: A Fisheries Extension Newsletter. Spring 2024 2(1): 6-7.
06. Grice, R., **A. Tarnecki**. 2023. Shellfish Seed Suppliers for the Gulf of Mexico. ANR-2584.
05. **Tarnecki, A.M.** 2023. The Auburn University Shellfish Lab. In: Auburn on the Coast: A Fisheries Extension Newsletter. Spring 1(1):8.
04. Grice, R., **A. Tarnecki**. 2023. Alabama Shellfish Aquaculture Situation & Outlook Report. Production Year 2023. ANR-2997.
03. Grice, R., **A. Tarnecki**. 2022. Alabama Shellfish Aquaculture Situation & Outlook Report: Production Year 2022. ANR-2997. https://www.aces.edu/blog/topics/aquaculture/alabama-shellfish-aquaculture-situation-outlook-report-production-year-2022/
02. Waldrop, T., K.L. Main, **A. Tarnecki**, N. Brennan, and E. Boggis. 2019. Mullet-based diets show promise as aquafeed ingredient. Global Aquaculture Advocate 194, 12 Aug 2019. https://www.aquaculturealliance.org/advocate/mullet-based-diets-show-promise-as-aquafeed-ingredient/
01. **Larsen, A.M.**, and C.R. Arias. 2014. More than mucus: the hidden world of the fish microbiota. Fisheries 39(4): 154

Other Publications (1)

01. **Tarnecki, A.M.**, L. Guttman. 2023. Editorial: Microbial diversity as a prerequisite for resilience in sustainable aquaculture. Frontiers in Marine Science 10:1227795. doi: 10.3389/fmars.2023.1227795.

AWARDS & HONORS

14. SRAC Travel Grant. 2022. Provides funds to travel to Aquaculture American meeting in 2023.
13. Mote Graduate Student Summer Funding Awardee. 2020. A competitive award providing research funds to support a summer graduate student.
12. Mote Scholarly and Service Award. 2020. A competitive award providing 25% salary support to researchers for the purpose of conducting scholarly and service activities that further the mission of Mote.
11. Mo Bio Microbiome Award. 2016.
10. Auburn University Graduate School's outstanding doctoral student award. 2014.
09. Auburn University School of Fisheries' Swingle Award for outstanding doctoral student. 2013.
08. Travel award granted by the Southeastern Branch of the American Society for Microbiology to attend its annual meeting in Auburn, AL. 2013.
07. Travel award sponsored by the International Science and Education program USDA to conduct a short stay (~6 weeks) at the Spanish Type Culture Collection, University of Valencia, Spain. 2013.
06. Selected to present in Graduate Scholars Symposium at Research Week in Auburn, AL. 2013.
05. Travel award granted by the National Shellfisheries Association to attend its annual meeting in Nashville, TN. 2013.
04. Travel award granted by the Southeastern Branch of the American Society for Microbiology to attend its annual meeting in Athens, GA. 2012.

03. Summer Cell and Molecular Biology Research Fellowship, Auburn University. 2012.
02. Best student paper at the Alabama Academy of Sciences Annual Meeting. Tuskegee, AL. 2012.
01. Travel award granted by the Southeastern Branch of the American Society for Microbiology to attend its annual meeting in Gainesville, FL. 2011.

GRANTS AND FELLOWSHIPS

Total $10,717,729; External $10,278,081. Tarnecki's role and the lead PI are listed for each project.

Current Support

2026-2028 Mississippi-Alabama Sea Grant Consortium. Understanding Sudden Unusual Mortality Syndrome in oysters. $229,072 (Linhoss, PI; Tarnecki, co-PI).

2026-2028 Mississippi-Alabama Sea Grant Consortium. Reducing mortality and increasing oyster farm productivity through water grading techniques. $205,110 (Tarnecki, PI).

2026-2028 Mississippi-Alabama Sea Grant Consortium. Microbial biomarkers as an early warning system for sudden unusual mortality syndrome (SUMS) in oysters. $244,012 (Tarnecki, PI).

2025-2026 NOAA Sea Grant. Experiential learning of New Zealand aquaculture production by Sea Grant extension agents and commercial shellfish farmers to facilitate aquaculture growth in the US. $110,446 (Bliss, PI; Tarnecki, co-PI; AU subaward $12,468)

2025-2026 NOAA Saltonstall-Kennedy. A FARMS approach to address oyster mortality and improve production in the south's emergent off-bottom oyster aquaculture industry. $499,198 (Walton, PI; Tarnecki, co-PI; AU subaward $15,000).

2025-2028 NOAA Sea Grant. Improving the genomic toolbox for polyploid oysters. $713,697 (Hollenbeck, PI; Tarnecki, co-PI; AU subaward $180,689).

2025-2027 NOAA Sea Grant. Commercial Oyster Aquaculture Sector Training (COAST) Program: Phase II. $298,023 (Tarnecki, PI).

2024-2025 USDA APHIS. Bird deterrents to reduce zoonotic bacterial contamination in shellfish. $40,000 (Tarnecki, PI).

2024-2028 NOAA Sea Grant. MS-AL Sea Grant Consortium Integrated Engagement and Education Program. $2,492,638 (Sparks, PI; Tarnecki, co-PI; AU subaward $457,918).

2024-2026 NOAA Saltonstall-Kennedy. A FARMS approach to address oyster mortality and improve production in the South's emergent off-bottom oyster aquaculture industry. $499,198 (Oyster South, PI; Tarnecki, co-PI; Auburn subaward $15,000).

2024-2028 USDA. Advances in novel food development through cultured seafood with cell lines derived from embryonic stem cells of commercially relevant species. $597,995 (Walsh PI, Tarnecki co-PI; Auburn subaward $85,079).

2024-2026 Mississippi-Alabama Sea Grant. Creating resilient oysters for reef restoration and assessing disease infection rates. $303,226 (Belgrad, PI; Tarnecki, co-PI; Auburn subaward $60,679)

2023-2026 NOAA Saltonstall-Kennedy. Development and optimization of farmer-run tests to improve oyster safety. $298,701 (Tarnecki, PI)

2023-2026 NOAA Sea Grant. Commercial Oyster Aquaculture Sector Training (COAST) Program. 2023/02-2025/01. $112,308 (Tarnecki, PI)

2022-2026 AAES-ARES – AgR SEED Grant Program. Identification of egg quality biomarkers in oyster aquaculture. 2022/10-2024/09. $49,900 (Tarnecki, PI)

Previous Support

2023-2024 Bacterial dynamics of newly identified dermatitis in green turtles (*Chelonia mydas*) on Florida's gulf coast. $18,099 (Lasala, PI; Tarnecki, co-PI)

2022-2025 United States – Israel Binational Agricultural Research and Development Fund (BARD). Utilization of periphyton biofilter for water treatment and recovery of waste nutrients in recirculation aquaculture systems for intensive production of marine fish. 2022/06-2025/05. $310,000 (Guttman, PI; Tarnecki, co-PI, received while at Mote)

2021-2022 NSF. REU site: Mote Marine Laboratory Research Experience for Undergraduates in Estuarine and Coastal Sciences. 2021/05-2024-04. $433,268 (Walsh, PI; Tarnecki, co-PI, removed upon job transfer 2022)

2021-2022 Protect Our Reefs. Mining Beneficial Microorganisms for Corals (BMCs) to enhance survival of *Pseudodiploria clivosa*. 2021/07-2022/06. $14,671 (Tarnecki, PI)

2021 Mote Marine Laboratory's Graduate Student Funding Award. Influence of harmful algal blooms on human pathogenic *Vibrio*. 2021/06-2021/08. $15,000 (Tarnecki, PI)

2021-2022 Florida Red Tide Initiative. Natural products for mitigation of red tide blooms. 2021/06-2022/05. $135,000 (Wetzel, PI; Tarnecki, co-PI)

2020-2021 Florida Red Tide Initiative. Biological control and mitigation for red tide blooms: the third pillar. 2020/09-2021/08. $150,000 (Wetzel, PI; Tarnecki, co-PI)

2020 Mote Marine Laboratory's Graduate Student Funding Award. Exploring the 'unculturable' diversity of the fish microbiome. 2020/06-2020/08. $15,000 (Tarnecki, PI)

2020-2021 Good Food Institute. Producing Clean Seafood: Identifying species, developing methodology & creating a cell line repository for optimal marine species. 2020/02-2021/01. $268,020 (Walsh, PI; Tarnecki, co-PI)

2017-2021 Binational Agricultural Research and Development. Use of plant based biofilters to create sustainable mariculture systems. 2017/06-2021/05. $310,000 (Guttman, PI: Tarnecki, collaborating investigator, major contributor to project design, writing, and lead all microbial aspects of the project, but was still a postdoc at time of submission and could not be listed as co-PI)

2017-2019 Private donation. Identification of antibiotic compounds produced by environmental marine bacteria. 2017/12-2019/12. $98,748 (Tarnecki, PI)

2016-2017 Mo Bio Laboratories, Inc. Bacterial biomarkers of fish health and stress. 2016/09-2017/09. $2,000 (Tarnecki, PI)

2016-2018 Florida Sea Grant. Manipulating microbes to improve aquaculture efficiency. 2016/02-2018/01. $109,959 (Tarnecki, PI)

2014-2016 Mote Postdoctoral Research Fellowship. 2014/08-2016/08. $261,000 (Tarnecki, PI)

PROPOSALS UNDER REVIEW

PI USDA NIFA. Detection and characterization of Campylobacter to support risk assessment in oyster aquaculture $650,000 (AU is lead).
PI NOAA Saltonstall-Kennedy. Bird interactions with off-bottom oyster aquaculture in the Gulf of Mexico. $500,000 (AU is lead).

INVITED TALKS (12)

13. **Tarnecki, A.M.** 2025. Shellfish training in Alabama and Mississippi: The COAST program. Shellfish Training Showcase presented by the Aquaculture Information Exchange. Presenter and panel member. 21 May 2025. Virtual via Zoom.
12. **Tarnecki, A.M.** 2024. Oyster mortality research at AUSL. Spring/Summer Sudden Unexplained Unusual Mortality in Oysters (S^3U^2Ms): A Collaborative Working Group. Jan 22-23, Virginia Institute of Marine Science, Gloucester Point, VA.
11. **Tarnecki, A.M.** 2023. Oysters and Shrimp: From Sea to Gumbo. The Royal Order of Gumbo, Gumbo Tasting and Music Fest. Nov 19. Mobile, AL.
10. **Tarnecki, A.M.** 2023. Shellfish Production in Alabama. Mobile County Ag Leadership. Oct 03.
09. **Tarnecki, A.M.** 2023. Oysters: Biology & Farming. Alabama Species Initiative. May 11.
08. **Tarnecki, A.M.** 2023. A Tale of Two Tarneckis: When Life Has Other Plans. Sigma Alpha. Apr 12.
07. **Tarnecki, A.M.** 2023. Oyster Research at the Auburn University Shellfish Lab. Gulf Coast Collaborative. Feb 11.
06. **Tarnecki, A.M.** 2022. Oysters: Biology & Farming. Alabama Species Initiative. May 12.
05. **Tarnecki, A.M.** 2021. Unraveling the mysterious marine microbiota. Dauphin Island Sea Lab University Programs Seminars. Jan 22.
04. **Tarnecki, A.M.** 2017. Mote, microbes, and mariculture. Rotary Club of Sarasota Bay. May 15.
03. **Tarnecki, A.M.** 2017. The importance of aquaculture and a stable bacterial community. TED^X Salon Sarasota. February 16.
02. **Larsen, A.M.** 2015. The fish microbiome: small organisms, giant benefits. Yale Club of the Suncoast. December 8.
01. **Larsen, A.M.** 2015. Probiotics: potential for fish production. Tampa Bay Medical Library Network. September 18.

CONFERENCE PARTICIPATION

Panels/Workshops/Seminars Organized (4)

04. ADPH/AMRD Webinar – AL Oyster Farming. A webinar to provide oyster farmers with the opportunity to ask questions to state regulators. 20 January 2026. Virtual.
03. Three-minute tech talks. Oyster South Symposium. 21 March 2025. St. Augustine, FL.
02. Three-minute tech talks. Oyster South Symposium. 02 March 2024. New Orleans, LA.
01. Three-minute tech talks. Oyster South Symposium. 10 March 2023. Savannah, GA.

Session Moderator (1)
01. The Oyster is Your World. Bays and Bayous 2024. 19 November 2024. Biloxi, MS.

Papers Presented (74)
74. DePaola, A., T. Kim, **A. Tarnecki**, J. Wilson, W. Dewey. User friendly assays empowering oyster industry to manage Vibrio risk. 2025. Gulf and South Atlantic States Shellfish Conference. 3-5 June, 2025.
73. Saillant, E., **A. Tarnecki**, J.A. Stoeckel, S. Rikard, H. Yang, L. Sturmer, C. Hollenbeck, J. Stannard, M. Gima, K. Lucas, S. Akter, B. Buckmaster, P. McDonald, E. Robinson. Development of a breeding program for Gulf of Mexico eastern oyster using communal rearing of families and marker-based pedigree reconstruction. International Symposium on Genetics in Aquaculture. 11-17 May, 2025.
72. **Tarnecki, A.M.**, K. Boyd, F.S. Rikard. Cold and crowded: impacts of refrigeration and larval density on oyster seed. Oyster South Symposium. 20-33 March 2025. St. Augustine, FL.
71. Hess, A. †, A. DePaola, T. Kim, W. Dewey, **A.M. Tarnecki**. Expanding the use of farmer-run biphasic *Vibrio* tests to monitor seafood safety. Aquaculture 2025. 6-10 March 2025. New Orleans, LA.
70. Williams, M.L. †, S. Rikard, S. Casas, J. Ngo, J. La Peyre, Z. Wang, X. Guo, **A. Tarnecki**, D. Bushek. Production and field evaluation of eastern oysters *Crassostrea virginica* genomically selected for enhanced growth and dermo resilience for coastal breakwater restoration. Aquaculture 2025. 6-10 March 2025. New Orleans, LA.
69. Wang, Z. †, S. Casas, J. La Peyre, M.L. Williams, **A. Tarnecki**, S. Rikard, D. Bushek, X. Guo. 2025. Improvement in dermo resistance of the eastern oyster *Crassostrea virginica* after two generations of genomic selection. Aquaculture 2025. 6-10 March 2025. New Orleans, LA.
68. King, H. †, H. Yang, L. Sturmer, C. Hollenbeck, J. Stoeckel, S. Rikard, M. Gima, J. Stannard, K. Lucas, **A. Tarnecki**, E. Saillant. 2025. Second generation selection response of Gulf of Mexico eastern oyster (*Crassostrea virginica*) bred for performance in low and high salinity environments. Aquaculture 2025. 6-10 March 2025. New Orleans, LA.
67. Bell, A. †, S. Ergas, K. Main, N. Rhody, L. Guttman, **A. Tarnecki**. 2025. Marine biofilter combinations in recirculating aquaculture systems. Aquaculture 2025. 6-10 March 2025. New Orleans, LA.
66. DePaola, A., A.K. Bej, N. Mojib, **A. Tarnecki**. Microbiome comparison of sediments collected from catchments beneath oyster aquaculture equipment with intertidal bottom sediments around wild oyster communities in coastal Alabama. Aquaculture 2025. 6-10 March 2025. New Orleans, LA.
65. Matvey, L. †, **A. Tarnecki**, S. Rikard. Seabird interactions with floating oyster gear and *Campylobacter* prevalence at oyster farm sites. Aquaculture 2025. 6-10 March 2025. New Orleans, LA.

64. Irwin, J.C. †, F.S. Rikard, **A. Tarnecki**, J. Stoeckel. Thermal tolerance of oysters, *Crassostrea virginica*, selected for increased growth and tolerance to dermo disease. Aquaculture 2025. 6-10 March 2025. New Orleans, LA.
63. Galvan, Z.A. †, I.A.E. Butts, **A.M. Tarnecki**, F.S. Rikard. Maternal effects and egg quality biomarkers in Eastern oyster *Crassostrea virginica.* Aquaculture 2025. 6-10 March 2025. New Orleans, LA.
62. **Tarnecki, A.M.**, R. Grice. The Commercial Oyster Aquaculture Sector Training (COAST) program: Phase I. Aquaculture 2025. 6-10 March 2025. New Orleans, LA.
61. **Tarnecki, A.M.**, F.S. Rikard. Applied shellfish research at the Auburn University Shellfish Laboratory, Dauphin Island, Alabama. Aquaculture 2025. 6-10 March 2025. New Orleans, LA.
60. Humphrey, M.L. †, D. Comba, M.M. Baustian, **A. Tarnecki**, S. Rikard, M.P. Sanderson, J.L. Smith, M.K. La Peyre. Examining the effects of environmental conditions and phycotoxins on *Crassostrea virginica* within a northern Gulf of Mexico estuary. Gulf Estuarine Research Society Meeting. 5-7 December 2024. Fairhope, AL.
59. **Tarnecki, A.**, R. Grice. The Commercial Oyster Aquaculture Sector Training (COAST) Program. Bays and Bayous Symposium. 19-20 November 2024. Biloxi, MS.
58. Galvan, Z. †, **A. Tarnecki**. Effect of probiotics on Eastern oyster, *Crassostrea virginica*, larvae grown in small-scale systems. Bays and Bayous Symposium. 19-20 November 2024. Biloxi, MS.
57. Bell, A. †, S. Ergas, K. Main, N. Rhody, L. Guttman, **A. Tarnecki**. 2024. Pathogens reservoirs found in recirculating aquaculture system marine biofilter combinations. Latin American & Caribbean Aquaculture 2024. 24-27 September. Medellín, Colombia.
56. Williams, M.L. †, S. Rikard, S. Casas, J. Ngo, J. La Peyre, Z. Wang, X. Guo, D. Bushek, **A. Tarnecki**. Production and field evaluation of eastern oysters (*Crassostrea virginica*) selected for increased growth and dermo survival for restoration. The International Conference on Shellfish Restoration ICSR2024. 15-18 September 2024. Jekyll Island, GA.
55. Capps, M., S. Rikard, S. Spellman, G. Chaplin, **A. Tarnecki**. Growth and survival of tetraploid oysters, *Crassostrea virginica*, in different salinity environments in the Gulf of Mexico. National Shellfisheries Association. 17-21 March 2024. Charlotte, NC.
54. King, H. †, W. Walton, H. Yang, L. Sturmer, C. Hollenbeck, J. Stoeckel, S. Rikard, M. Gima, J. Stannard, K. Lucas, **A. Tarnecki**, E. Saillant. Genetics parameters for growth traits in Gulf of Mexico eastern oyster families reared in high and low salinity environments. National Shellfisheries Association. 17-21 March 2024. Charlotte, NC.
53. **Tarnecki, A.M.**, J. Land, Z. Galvan, C. Reuter, S. Rikard. Probiotic supplementation increases setters in Eastern oyster *Crassostrea virginica* larvae. National Shellfisheries Association. 17-21 March 2024. Charlotte, NC.
52. DePaola, A., T. Kim, **A. Tarnecki**, B. Dewey. Expanding industry applications of biphasic assays for *Vibrio* enumeration in oysters. National Shellfisheries Association. 17-21 March 2024. Charlotte, NC.
51. Boyd, K. †, H. Abdelrahman, S. Rikard, **A. Tarnecki**, J. Stoeckel. Differences in tolerance and responses to thermal stress between diploid and triploid Eastern oysters (*Crassostrea virginica*) from the northern Gulf of Mexico. National Shellfisheries Association. 17-21 March 2024. Charlotte, NC.
50. King, H. †, H. Yang, L. Sturmer, C. Hollenbeck, J. Stoeckel, S. Rikard, M. Gima, J. Stannard, K. Lucas, B. Buckmaster, S. Akter, **A. Tarnecki**, E. Saillant. Selection response of Gulf of

Mexico Eastern oyster (*Crassostrea virginica*) in low salinity environments. National Shellfisheries Association. 17-21 March 2024. Charlotte, NC.

49. Matvey, L. †, S. Rikard, **A. Tarnecki**. Seabirds, *Campylobacter*, and off-bottom oyster aquaculture. National Shellfisheries Association. 17-21 March 2024. Charlotte, NC.
48. Williams, M.L. †, S. Rikard, J. La Peyre, S. Casas, J. Ngo, Z. Wang, X. Guo, D. Bushek, **A. Tarnecki**. Production and field evaluation of Eastern oysters (*Crassostrea virginica*) selected for dermo tolerance. National Shellfisheries Association. 17-21 March 2024. Charlotte, NC.
47. **Tarnecki, A.M.**, R. Grice. A Year in Review: The Commercial Oyster Aquaculture Sector Training (COAST) Program. National Shellfisheries Association. 17-21 March 2024. Charlotte, NC.
46. Wang, Z. †, S. Casas, J. La Peyre, M.L. Williams, **A. Tarnecki**, S. Rikard, D. Bushek, X. Guo. Genomics selection for dermo resistance in the Eastern oyster (*Crassostrea virginica*). National Shellfisheries Association. 17-21 March 2024. Charlotte, NC.
45. Capps, M., S. Rikard, S. Spellman, G. Chaplin, **A. Tarnecki**. Performance of Gulf of Mexico tetraploid lines in different salinity environments. Oyster South Symposium. 01-02 March 2024. New Orleans, LA.
44. Matvey, L. †, S. Rikard, **A. Tarnecki**. Seabirds and off-bottom oyster aquaculture. Oyster South Symposium. 01-02 March 2024. New Orleans, LA.
43. King, H. †, H. Yang, L. Sturmer, C. Hollenbeck, J. Stoeckel, S. Rikard, M. Gima, J. Stannard, K. Lucas, **A. Tarnecki**, B. Buckmaster, S. Akter, E. Saillant. Development of a breeding program for Gulf of Mexico Eastern oyster using communal rearing of families. Oyster South Symposium. 01-02 March 2024. New Orleans, LA.
42. King, H. †, H. Yang, L. Sturmer, C. Hollenbeck, J. Scarpa, J. Stoeckel, S. Rikard, M. Gima, J. Stannard, K. Lucas, B. Buckmaster, S. Akter, **A. Tarnecki**, E. Saillant. Selection response of Gulf of Mexico Eastern oyster (*Crassostrea virginica*) bred for performance in low salinity environments. Aquaculture America. 18-21 February 2024. San Antonio, TX.
41. King. H. †, W. Walton, H. Yang, L. Sturmer, C. Hollenbeck, J. Scarpa, B. Callam, J. Stoeckel, S. Rikard, M. Gima, J. Stannard, K. Lucas, **A. Tarnecki**, E. Saillant. Genetic parameters for growth traits in Gulf of Mexico Eastern oyster families reared in high and low salinity environments. Aquaculture America. 18-21 February 2024. San Antonio, TX.
40. Matvey, L. †, **A. Tarnecki**, S. Rikard. *Campylobacter*, seabirds, and off-bottom oyster aquaculture. Aquaculture America. 18-21 February 2024. San Antonio, TX.
39. **Tarnecki, A.M.**, R. Grice. The Commercial Oyster Aquaculture Sector Training (COAST) Program. Aquaculture America. 18-21 February 2024. San Antonio, TX.
38. **Tarnecki, A.M.**, R. Grice. The Commercial Oyster Aquaculture Sector Training (COAST) Program. Alabama Water Resources Conference. 6-8 September 2023. Orange Beach, AL.
37. Matvey, L.†, **A.M. Tarnecki**. *Campylobacter* prevalence in seabirds associated with floating oyster gear. Alabama Water Resources Conference. 6-8 September 2023. Orange Beach, AL.
36. **Tarnecki, A.M.**, S. Rikard, R. Grice, and W. Walton. The Auburn University Shellfish Lab: Twenty years of industry-driven research. National Shellfisheries Association. 27-30 March 2023. Baltimore, MD.
35. Chase, M.A.† and **A. Tarnecki**. Characterization of a green sea turtle (*Chelonia mydas*) carapacial dermatitis. USF Undergraduate Research Conference. 7 April 2023. Tampa, FL.
34. C. Walsh, K. Main, N. Rhody, T. Sherwood, and **A. Tarnecki**. Cell culture of embryonic stem cells from marine species. Good Food Institute. 3 March 2023. (Virtual)

33. **Tarnecki, A.M.**, A. Cleveland, L. Matvey, H. King, and F.S. Rikard. Small-scale Eastern oyster *Crassostrea virginica* larval production using algae concentrate. Aquaculture America 2023. 23-26 February 2023. New Orleans, LA.
32. **Tarnecki, A.M.**, A. Cleveland, K. Landry, and F.S. Rikard. Impact of upweller type on subsequent growth of Eastern oyster *Crassostrea virginica*. Aquaculture America 2023. 23-26 February 2023. New Orleans, LA.
31. **Tarnecki, A.M.**, C.K. Faulk, and L.A. Fuiman. Parental and temporal influences on the larval red drum *Sciaenops ocellatus* microbiota. Aquaculture America 2023. 23-26 February 2023. New Orleans, LA.
30. Tackett, V.M. †, H.R. Montague, J.A. Stoeckel, S. Rikard**, Tarnecki, A.M.**, and I.A.E. Butts. Broodstock conditioning salinity impacts sperm quality in Eastern oyster *Crassostrea virginica*. Aquaculture America 2023. 23-26 February 2023. New Orleans, LA.
29. **Tarnecki, A.M.**, A.S. Clark, and M.V. Diaz Marino. Mining beneficial microorganisms for corals to enhance survival of *Pseudodiploria clivosa*. Protect Our Reefs. 5 May 2022. Sarasota, FL (Virtual).
28. Nguyen, D.T., K.L. Main, **A.M. Tarnecki**, N.P. Brennan, and L. Guttman. Microbial succession in marine periphyton: one step closer to understanding health aspect of cost effective biofilter in marine IMTA system. Proceedings of the 2nd Webinar on Advancements and Innovations in Aquaculture and Fisheries. 9-10 November 2020. (Virtual)
27. Bomkamp, C., C.J. Walsh, **A.M. Tarnecki**, N.R. Rhody, K.L. Main, J. Lamy, and L. Specht. A new cell line repository to accelerate cultivated meat and seafood research. 2020 World Congress on In Vitro Biology. 6-10 June 2020. San Diego, CA.
26. **Tarnecki, A.M.**, M. Nystrom, N.P. Brennan, L. Guttman, and K.L. Main. Periphyton community dynamics within an integrated multi-trophic aquaculture system. Aquaculture America 2020. 9-12 February 2020. Honolulu, HI.
25. Jacob, N.K. †, and **A.M. Tarnecki**. Identification of *Vibrio* species from recirculating aquaculture systems and interactions with *Bacillus* spp. Aquaculture America 2020. 9-12 February 2020. Honolulu, HI.
24. **Tarnecki, A.M.**, C. Miller, T. Sherwood, R. Medvecky, and D. Wetzel. Investigating the immunosuppressive effects of oil exposure on the dermal microbiome of red snapper (*Lutjanus campechanus*). Gulf of Mexico Oil Spill & Ecosystem Science. 3-7 February 2020. Tampa, FL.
23. Philips, R. †, M. Wafapoor, N.R. Rhody, and **A.M. Tarnecki**. Probiotics for the sustainable production of common snook. Aquaculture 2019. 8-11 March 2019. New Orleans, LA.
22. Patrick, G. †, **A.M. Tarnecki**, N. Rhody, S. Stang, R. Schloesser, and K. Main. Evaluating efficacy of several disinfectants on hatchability in Almaco jack *Seriola rivoliana* eggs. Aquaculture 2019. 8-11 March 2019. New Orleans, LA.
21. **Tarnecki, A.M.**, N. Levi, N. Rhody, M. Resley, and K. Main. The effect of copper sulfate treatment on the microbiome of common snook *Centropomus undecimalis*. Aquaculture 2019. 8-11 March 2019. New Orleans, LA.
20. Stephen Stang†, G. Patrick, N. Rhody, and **A. Tarnecki**. Effect of several disinfectants on hatch rates and bacterial loads of Almaco jack (*Seriola rivoliana*) eggs. Southern Division - American Fisheries Society. 24-27 January 2019. Galveston, TX.
19. **Tarnecki, A.M.**, M. Wafapoor, K. Main, and N.R. Rhody. Unraveling the mechanism behind probiotic benefits in recirculating aquaculture systems. Aquaculture America 2018. 19-22 February 2018. Las Vegas, NV.

18. **Tarnecki, A.M.**, K. Main, R. Medvecky, C. Miller, and D. Wetzel. Intestinal microbiota of Red Drum *Sciaenops ocellatus* following exposure to South Louisiana crude oil-contaminated feeds. Gulf of Mexico Oil Spill & Ecosystem Science Conference. 5-8 February 2018. New Orleans, LA.
17. **Tarnecki, A.M.,** and N.R. Rhody. Microbes and mariculture: using probiotics to grow healthier fish. The 103rd Annual Southeastern Branch American Society for Microbiology Meeting. 10-12 November 2017. St. Petersburg, FL.
16. **Tarnecki, A.M.**, and N.R. Rhody. Acclimation of captively reared juvenile common snook to the wild: effects on microbiota and innate immunity. Aquaculture America 2017. 20-22 February 2017. San Antonio, TX.
15. **Tarnecki, A.M.**, Rhody, N.R., Hans, R., and K.L. Main. Effect of a mixed *Bacillus* probiotic on survival, growth, and microbiota of common snook *Centropomus undecimalis* larvae. Aquaculture 2016. 22-26 February 2016. Las Vegas, NV.
14. **Larsen, A.M.,** W.F. Patterson III, and C.R. Arias. Bacterial communities of red snapper *Lutjanus campechanus*: implications for fish health. 39th Eastern Fish Health Workshop. 28 April – 2 May 2014. Shepherdstown, WV.
13. **Larsen, A.M.,** K. Koenders, and C.R. Arias. Predominant bacteria associated with red snapper *Lutjanus campechanus* (Poey, 1860) from the northern Gulf of Mexico. 99th Annual Meeting of the Southeastern Branch of the American Society for Microbiology. 7-9 November 2013. Auburn, AL.
12. **Larsen, A.M.**, F.S. Rikard, W.C. Walton, and C.R. Arias. The effects of temperature on the efficacy of high salinity depuration of *Vibrio vulnificus* from the Eastern oyster *Crassostrea virginica*. Aquaculture 2013. 21-25 February 2013. Nashville, TN.
11. **Larsen, A.M.**, M. Mohammed, and C.R. Arias. Comparison of DNA extraction protocols for the analysis of gut microbiota in fishes. 98th Annual Meeting of the Southeastern Branch of the American Society for Microbiology. 25-27 October 2012. Athens, GA.
10. Arias, C.R. and **A.M. Larsen**. A comparison of the bacterial communities associated with fish species in the Gulf of Mexico using ribosomal intergenic spacer analysis (RISA). Aquaculture America 2012. 29 February – 2 March 2012. Las Vegas, NV.
09. **Larsen, A.M.**, S.A. Bullard, and C.R. Arias. Effects of the *Deepwater Horizon* oil spill on the bacterial communities of the Gulf killifish (*Fundulus grandis*). 112th General Meeting of the American Society for Microbiology. 16-19 June 2012. San Francisco, CA.
08. **Larsen, A.M.**, S.A. Bullard, and C.R. Arias. Effects of the *Deepwater Horizon* oil spill on the bacterial communities of the Gulf killifish (*Fundulus grandis*). 89th Annual Meeting of the Alabama Academy of Sciences. 24 February 2012. Tuskegee, AL.
07. **Larsen, A.M.**, F.S. Rikard, W.C. Walton, and C.R. Arias. Improving oyster safety using high salinity depuration. 20th Meeting Alabama Fisheries Association. 8-10 February 2012. Columbiana, AL.
06. Tao, Z., **A.M. Larsen**, and C.R. Arias. A preliminary study of the genetic variation in *Vibrio vulnificus* isolated from wild sporting fishes in the Gulf of Mexico, USA. The 4th International Conference on the Biology of Vibrios. 1-4 November 2011. Santiago de Compostela, Spain.
05. **Larsen, A.M.**, and C.R. Arias. A comparison of bacterial communities associated with fish species in the Gulf of Mexico using ribosomal intergenic spacer analysis (RISA). 97th Annual Meeting of the Southeastern Branch of the American Society for Microbiology. 20-22 October 2011. Gainesville, FL.

04. Tao, Z. **A.M. Larsen**, and C.R. Arias. Be careful when you fish: presence of *Vibrio vulnificus* in bait shrimp and fish from the Gulf of Mexico. Vibrios in the Environment 2010. 7-12 November 2010. Biloxi, MS.
03. **Larsen, A.M.**, Z. Tao, and C.R. Arias. Use of ribosomal intergenic spacer analysis (RISA) to study bacterial communities associated to marine fish. Vibrios in the Environment 2010. 7-12 November 2010. Biloxi, MS.
02. Tao, Z., **A.M. Larsen**, and C.R. Arias. Prevalence of *Vibrio vulnificus* associated with sport fishing in the Gulf of Mexico. 96th Meeting of the Southeastern Branch of the American Society for Microbiology. 4-6 November 2010. Montgomery, AL.
01. **Larsen, A.M.**, Z. Tao, and C.R. Arias. Use of ribosomal intergenic spacer analysis (RISA) to study bacterial communities associated with marine fish. 96th Meeting of the Southeastern Branch of the American Society for Microbiology. 4-6 November 2010. Montgomery, AL.

[†]Student presenter

CAMPUS TALKS (16)

16. Shellfish Opportunities. Guest lecture for Auburn University FISH1110 Dimensions of Fisheries, Aquaculture and Aquatic Sciences. 23 April 2024. Auburn, AL (virtual).
15. Seafood Safety. Guest lecture for Auburn University FISH7270 Crustacean and Molluscan Aquaculture. 26 Feb 2024. Auburn, AL (virtual).
14. Mining Marine Microbes. Mote Marine Laboratory's Coffee with a Scientist. 17 March 2021. Sarasota, FL (virtual).
13. The importance of the microbiome in aquatic animal health. 17 July 2020. Sarasota, FL.
12. Microbes at Mote: An overview of bacterial research at Mote Marine Lab. 11 June 2019. Sarasota, FL.
11. Itsy-bitsy allies: bacterial 'helpers' for humans and fish. Boca Grande Science Café. 12 April 2016. Boca Grande, FL.
10. How can bacteria feed the world? Presented to the Mote Marine Laboratory Volunteer Board. 7 April 2016. Sarasota, FL.
09. Probiotics in aquaculture: tiny organisms and their giant impacts. Presented at Mote Marine Laboratory's Special Lecture Series. 14 March 2016. Sarasota, FL.
08. Probiotics in aquaculture: identifying bacterial species to improve aquaculture production and sustainability. Presented to World Partnerships International Visitor Leadership Program from China on wildlife conservation in the US. 20 July 2015. Sarasota, FL.
07. The fish microbiome: a "tail" of complex relationships. NSF REU summer seminar series at Mote Marine Laboratory. 14 July 2015. Sarasota, FL.
06. Manipulating microbes: exploiting beneficial bacteria to improve fish health. Florida Teen Science Café. 29 April 2015. Sarasota, FL.
05. Host-microbe interactions: exploiting bacteria to improve fish health. Presented to the Ivy League Club. 17 April 2015. Sarasota, FL.
04. Host-microbe interactions: exploiting bacteria to improve fish health. Presented to the Mote Marine Laboratory Research Committee. 10 April 2015. Sarasota, FL.
03. Host-microbe interactions: exploiting beneficial bacteria to improve host health. Mote Marine Laboratory Annual Legislative Reception. 11 March 2015. Tallahassee, FL.
02. Gut bacterial community composition of recreational freshwater fishes. Auburn University Research Week. 2-3 April 2013. Auburn, AL.

01. Gut bacterial community composition of recreational freshwater fishes. 23rd Annual Graduate Scholars Forum. 26-28 February 2013. Auburn, AL.

TEACHING & MENTORSHIP EXPERIENCE

Current Graduate Students – Chair or co-Chair (3 M.Sc. and 2 Ph.D. in progress)

05. Doster, Korie. M.Sc. *in progress (expected 2028)*. Thesis topic: Cryopreservation of eastern oyster gametes.
04. Hooper, Laura. M.Sc. *in progress (expected 2027)*. Thesis topic: Bird deterrents to reduce zoonotic bacterial contamination in shellfish.
03. Matvey, Luke. Ph.D. *in progress (expected 2028)*. Dissertation topic: Sources of *Campylobacter* in the northern Gulf of Mexico.
02. Hess, Alec. M.Sc. *in progress (expected 2026)*. Thesis topic: Biphasic assays for on-farm human pathogenic *Vibrio* monitoring.
01. Williams, Mason. M.Sc. *in progress (expected 2026)*. Thesis topic: Performance of oyster genetic lines in varying environmental conditions.

Completed Graduate Students (as Chair or co-Chair)

02. Galvan Lam, Zophia. M.Sc. May 2025. Utilization of egg quality biomarkers and probiotics for the improvement of eastern oyster (*Crassostrea virginica*) larviculture.
01. Matvey, Luke. M.Sc. August 2024. Seabird mitigation and the prevalence of *Campylobacter* spp. at oyster farms in the northern Gulf of Mexico.

Student Honors and Awards

2025 *Sea Grant Student Oral Presentation Award.* Aquaculture 2025, New Orleans, Louisiana. $1000. (**Luke Matvey**).
2025 *Travel Award*. Visionary Opportunities in Aquaculture Genomics, Aquaculture 2025, New Orleans, LA. $1900 (**Heather King**).
2024 *3rd Place Oral Presentation*. Gulf Coast Graduate Student Symposium, Mobile, Alabama (**Luke Matvey**).
2024 *US Aquaculture Society Student Spotlight Presentation 1st place*. Aquaculture America 2024, San Antonio, Texas. $500 (**Heather King**).
2024 *US Aquaculture Society Student Best Abstract (3rd place)*. Aquaculture America 2024, San Antonio, Texas. $870 (**Heather King**).
2023 *3 Minute Thesis Finalist* (top 10). Auburn University, Auburn, Alabama (**Heather King**)
2023 *Best Poster Award*. Alabama Water Resources Conference, Orange Beach, Alabama. $400 (**Luke Matvey**).

Graduate Committee Service (4)

05. Ali Maleski (current), Auburn University, Ph.D.
04. Ashley Dalleske (current), University of South Alabama, M.Sc.
03. Mims, Marlee (current), University of South Alabama, Ph.D.
02. Wilson, Charlsie (current), University of Southern Mississippi, M.Sc.
01. Hilliker, Jessica (current), University of South Alabama, Ph.D.

Completed (4)

04. Sower, Jillian, Auburn University, Ph.D. 2025.
03. Jack Irwin, Auburn University, M.Sc. 2025.
02. Boyd, Kayla. Auburn University, Ph.D. 2024.
01. Tackett, Victoria 'Mackenzie', Auburn University, M.Sc. 2023.

Teaching

2025	Auburn University, Special Problems in Oyster Restoration research (graduate)
2024	Auburn University, Special Problems in Grant Writing (graduate)
2024	Auburn University, Special Problems in Oyster Immunology (graduate)
2023	Auburn University, Directed Studies in Oyster Probiotics (undergraduate)
2023	Auburn University, Special Problems in Algae of Oyster Hatcheries (graduate)
2023	Auburn University, Special Problems in Oyster Aquaculture Extension (graduate)
2022	Auburn University, Special Problems in Oyster Hatchery Techniques (graduate)
2017-2021	Adjunct Faculty (Co-instructor), University of South Florida Sarasota-Manatee (General Microbiology & General Microbiology Lab)
2017-2021	Adjunct Faculty, Southern Technical College (Microbiology with Lab)
2017	Adjunct Faculty (Co-instructor), University of South Florida Sarasota-Manatee (Principles of Immunology)
2016	Adjunct Faculty (Co-instructor), University of South Florida Sarasota-Manatee (Principles of Biology for Non-Majors)
2009	Graduate Teaching Assistant, Middle Tennessee State University, Department of Biology (General Biology Lab)

Other Students Mentored

Undergraduate (25)

25. Laci Land, Auburn University, 2023.
24. Alexes Cleveland, Alabama State University, NSF REU Program. 2022.
23. Michael Chase, University of South Florida, Mote REU Program. 2021.
22. Luke Matvey, Eckerd College, NSF REU Program. 2021.
21. Hordrice Graham, State College of Florida, LSAMP: MarSci-LACE Program. 2021.
20. Caitlin Bhagwandeen, Stetson University, Mote REU Program. 2020.
19. Elyse Barker, University of West Florida, NSF REU Program. 2020.
18. Jennifer Hesser, University of Oregon, Mote REU Program. 2019.
17. Nicholas Jacob, University of Minnesota Twin Cities, NSF REU Program. 2019.
16. Madison Koch, University of South Florida Sarasota-Manatee, Mote REU Program. 2019.
15. Alec Lemus, State College of Florida, Mote College Intern Program. 2019.
14. Nicole Rothmeyer, University of Tampa, Mote College Intern Program. 2019.
13. Stephen Stang, Virginia Tech, NSF REU Program. 2018.
12. Stacy Leonard, Hillsborough Community College, Mote REU. 2017.
11. Remy Phillips, University of Florida, funded by FL Sea Grant. 2017.
10. Daniel Kemp, University of Virginia, NSF REU Program. 2017.
09. Lisa Kuhn, University of South Florida Sarasota-Manatee, USFSM-Mote REU. 2017.
08. Jordan Han, University of South Florida Sarasota-Manatee, USFSM-Mote REU. 2016.
07. Marzie Wafapoor, Northwestern University, funded by FL Sea Grant. 2016.
06. Bryn Austin, University of South Florida Sarasota-Manatee, USFSM-Mote REU. 2016.

05. Noah Levi, Wabash College, NSF REU Program. 2016.
04. Molly Jones, University of South Florida Sarasota-Manatee, USFSM-Mote REU. 2015.
03. Lian Valera, University of Vermont, LEAF Undergraduate Program. 2015.
02. Megan Orlando, State College of Florida, NSF REU Program. 2015.
01. Timothy Polk, University of South Florida Sarasota-Manatee. 2015.

Post-Baccalaureate (1)
01. Greer Hadley, NSF RaMP Biological Opportunities and Training in Sciences Program. 2025.

Graduate (6)
06. Allison Moczynski, Masters, Auburn University. 2023.
05. Trupti Patdukhe, Masters, University of West Florida. 2021.
04. Marissa Drake, Masters, University of Florida. 2020.
03. Genevieve Patrick, Masters, University of Florida. 2018-2020.
02. Marzie Wafapoor, Masters, Northwestern University. 2017.
01. Ned Poulos-Boggis, Masters, University of Florida. 2015-2017.

Other Mentorship

2023-present	National Shellfisheries Association Mentor/Mentee Breakfast, provides an informal platform for students to connect with professionals in their field of interest
2019-present	Aquaculture America Student/Mentor Breakfast, provides an informal platform for mentors to share their experiences with students
2018	Mentor at SMARTgirl Leadership and Mentorship Summit, arranged by SRQ MEDIA for middle school girls

SERVICE TO PROFESSION

2022-2023 Research Topic Editor, Microbial Diversity as a Prerequisite for Resilience and Resistance in Sustainable Aquaculture, Frontiers in Marine Science https://www.frontiersin.org/research-topics/37803/microbial-diversity-as-a-prerequisite-for-resilience-and-resistance-in-sustainable-aquaculture

Reviewer (Web of Science ResearcherID JKH-6125-2023)

Applied and Environmental Microbiology (2); Aquaculture Research (1); FEMS Microbiology Ecology (2); FEMS Microbiology Letters (1); Gulf and Caribbean Research (1); Journal of Aquatic Animal Health (1); Journal of Ocean University of China (1); Letters in Applied Microbiology (1); Marine Ecology Progress Series (1); PeerJ (1); PLOS One (1); Probiotics and Antimicrobial Proteins (1); Scientific Reports (2); Waterbirds: The International Journal of Waterbird Biology (1)

2017 - Maine Sea Grant research proposal reviewer (1)
2025 - Maryland Sea Grant research proposal reviewer (1)
2025 - Massachusetts Sea Grant research proposal reviewer (2)
2025 - Outside dissertation reviewer, University of Auckland (1)

2018-present Judge for student abstracts/presentations at professional conferences (see membership information below).

MEDIA COVERAGE AND OUTREACH

22. Shellfish Training in Alabama and Mississippi: The COAST Program. In: Shellfish Training Showcase, Aquaculture Information Exchange. 21 May 2025. https://www.youtube.com/watch?v=Sbnjw-VwtR4
21. Why are so many farmed oysters dying? Scientists mystified. By: Eliza Noe. The Virginian-Pilot. 29 September 2024. https://www.pilotonline.com/2024/09/29/why-are-so-many-farmed-oysters-dying-scientists-mystified/
20. Dauphin Island Sea Lab: Discovery Day 2024. By: Joe Emer. FOX10 News WALA. 2 April 2024. https://www.fox10tv.com/2024/04/02/dauphin-island-sea-lab-discovery-day-2024/
19. The State of Alabama's Oysters. Consumer Demand Drives Growth of Oyster Industry. By: Jennifer Kornegay. Alabama Living. 1 September 2023. https://alabamaliving.coop/articles/the-state-of-alabamas-oysters/
18. How Alabama Extension restores Dauphin Island Oysters. By: Samuel Stettheimer. Alabama Political Reporter. 10 July 2023. https://www.alreporter.com/2023/07/10/how-alabama-extension-restores-dauphin-island-oysters/
18. Faces of ACES: Profile of Andrea Tarnecki, Assistant Extension Professor. By: Alabama Extension. 29 June 2023. https://www.youtube.com/watch?v=fAay85GXoPU&t=2s
17. Extension Research Helps Restore Alabama's Oyster Reefs. By: Cole Sikes. Alabama Cooperative Extension System blog. 28 June 2023. https://www.aces.edu/blog/topics/fish-water/extension-research-helps-restore-alabamas-oyster-reefs/
16. Interview for the U.S. Aquaculture Society. By Stephen Pinna, Edited by Carla Schubiger. 13 June 2023. https://www.usaquaculture.org/news/dauphin-island-shellfish-lab-assistant-extension-professor-and-director-andrea-tarnecki
15. Little Dauphin Bay: Restoring Alabama's Oyster Reefs. By: Meghan Capps. Lagniappe Mobile. 26 April – 2 May 2023. p3.
14. An Alabama Oyster's Journey. By: This is Alabama with Alabama NewsCenter. 26 Feb 2023. https://fb.watch/i_8yiZHZ8n/
13. Bivalve Bites: Oyster Aquaculture Research Round-Up. By: Jennifer Kornegay. November 2022. https://www.aces.edu/go/3098
12. Cell-Based Seafood. Mote Magazine, Spring 2021. p19-20.
11. Coffee with a Scientist presentation. 17 Mar 2021. https://www.youtube.com/watch?v=aNCCsgNOYNc
10. Dauphin Island Sea Lab 2021 University Programs Seminar series. 22 Jan 2021. https://www.youtube.com/watch?v=WW8Ph_u4yww&list=PLdrZ71BTGCwwF0DqJI6dBGm-MJ3sd_9mR
09. Press coverage of results from probiotics in common snook larvae. 19 Apr 2019.
    FOX13: Probiotics help boost snook population devastated by red tide. http://www.fox13news.com/news/local-news/probiotics-help-boost-snook-population-devastated-by-red-tide
    ABC Action News: Mote scientists help restore Florida's snook population. https://www.abcactionnews.com/news/region-sarasota-manatee/mote-scientists-help-restore-floridas-snook-population

SNN: Mote Marine Lab shares new snook study. https://www.snntv.com/story/40337005/mote-marine-lab-shares-new-snook-study

08. 'Activia' for healthy fish? Mote Magazine, Fall 2017. p4-5.
07. Featured on PBS. *WEDU Quest Episode 311*. September 2017. http://video.wedu.org/video/3004401110/
06. Fish and Their Billions of "Friends". *Mote Podcast: Two Sea Fans*. January 2017. https://mote.org/podcasts/item/fish-and-their-billions-of-friends
05. April 12th Mote Science Café in Boca Grande Focuses on Beneficial Bacteria. *Charlotte Harbor water atlas*. April 2016. http://www.chnep.wateratlas.usf.edu/news/details/15561
04. Fish Microbiota, Dysbiosis, and Disease Prevention. *CPALMS Expert Perspectives Video*. April 2016. http://www.cpalms.org/Public/PreviewResourcePrespectiveVideo/Preview/152485
03. Fish and Bacteria Symbiosis. *CPALMS Expert Perspectives Video*. April 2016. http://www.cpalms.org/Public/PreviewResourcePrespectiveVideo/Preview/152464
02. USF Sarasota-Manatee/Mote Partnership Helping Students to Achieve. *Rich Shopes, USFSM*. April 2016. https://smcampus.usf.edu/blog/usf-sarasota-manateemote-partnership-helping-students-to-achieve/
01. Fish Bacteria. *SRQ Magaz*ine. November 2015. https://www.srqmagazine.com/articles/200/Fish-Bacteria

PROFESSIONAL MEMBERSHIPS

2023-present Gulf Shellfish Farmers Association
2023-present Interstate Shellfish Sanitation Committee
2023-present National Shellfisheries Association
2022-present Oyster South (Marine Advisory Board member)
2016-present Aquaculture America
2012-present World Aquaculture Society
2010-present American Society for Microbiology, Southeastern branch

*Last name changed to Tarnecki from Larsen in 2015