

# CURRICULUM VITAE

## MING LIU, Ph.D.

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## EDUCATION BACKGROUND

2005-2010, Ph.D.,	Fisheries Science, Ocean University of China
2007-2008, Joint Ph.D. Program,	Fisheries Science, Hokkaido University, Japan
2001-2005, B.S.,	Fisheries Science, Ocean University of China

## PROFESSIONAL POSITION

2024.9 – present,	Senior Scientist, PEARL, Morgan State University
2017.8 – 2024.9,	Oyster Genomics Researcher, PEARL, Morgan State University
2013.8 – 2017.7,	Postdoc, Haskin Shellfish Research Lab, Rutgers University
2010.7 – 2013.8,	Assistant Professor, Marine Biology Institute of Shandong, China

## PUBLICATIONS

1. Puritz, J.B., Guo, X., Hare, M., He, Y., Hillier, L.W., Jin, S., **Liu, M.**, Lotterhos, K.E., Minx, P., Modak, T. and Proestou, D., 2024. A second unveiling: Haplotig masking of the eastern oyster genome improves population-level inference. *Molecular Ecology Resources*, 24(1), p.e13801.
2. Guo, X., Puritz, J.B., Wang, Z., Proestou, D., Allen Jr, S., Small, J., Verbyla, K., Zhao, H., Haggard, J., Chriss, N., Zeng, D., Lundgren, K., Allam, B., Bushek, D., Gomez-Chiarri, M., Hare, M., Hollenbeck, C., La Peyre, J., **Liu, M.**, Lotterhos, K., Plough, L., Rawson, P., Rikard, S., Saillant, E., Varney, R., Wikfors, G., and Wilbur., A. 2023. Development and evaluation of high-density SNP arrays for the Eastern oyster *Crassostrea virginica*. *Marine Biotechnology*, 25(1), pp.174-191.
3. Brianik, C.J., Espinosa, E.P., **Liu, M.**, Topping, P., Rivara, G., Guo, X., Proestou, D. and Allam, B., 2025. Triploid eastern oysters (*Crassostrea virginica*) display high susceptibility to microbial infections but only during early ontogenetic stages. *Aquaculture*, 595, p.741613.
4. Borsum, S., Parsaeimehr, A., Fuoco, M., **Liu, M.**, Guo, X., Gaffney, P. and Ozbay, G., 2024. Population Genetics of Delaware Inland Bays Oysters: A Case Study on Hatchery-Stocked Oyster Gardening. *Journal of Shellfish Research*, 43(2), pp.229-237.
5. **Liu, M.**, Ge, S., Bhandari, S., Fan, C., Jiao, Y., Gai, C., Wang, Y. and Liu, H., 2022. Genome characterization and comparative analysis among three swimming crab species. *Frontiers in Marine Science*, 9, p.895119.
6. Bhatt, S., Fan, C., **Liu, M.** and Wolfe-Bryant, B., 2023. Effect of High-Density Polyethylene Microplastics on the Survival and Development of Eastern Oyster (*Crassostrea virginica*) Larvae. *International Journal of Environmental Research and Public Health*, 20(12), p.6142.

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7. Wang, L., Song, J., Bi, H., Gray, M., Fan, C., **Liu, M.** and Mao, X.Z., 2020. Adaptive feeding in the American oyster *Crassostrea virginica*: Complex impacts of pulsatile flow during pseudofecal ejection events. *Limnology and Oceanography*, 65(9), pp.2010-2023.
8. Jiao, Y., Cao, Y., Zheng, Z., **Liu, M.** and Guo, X., 2019. Massive expansion and diversity of nicotinic acetylcholine receptors in lophotrochozoans. *BMC genomics*, 20, pp.1-15.
9. Thongda, W., Zhao, H., Zhang, D., Jescovitch, L.N., **Liu, M.**, Guo, X., Schrandt, M., Powers, S.P. and Peatman, E., 2018. Development of SNP panels as a new tool to assess the genetic diversity, population structure, and parentage analysis of the eastern oyster (*Crassostrea virginica*). *Marine biotechnology*, 20, pp.385-395.
10. **Liu, M.**, and Guo, X. 2017. A novel and stress adaptive alternative oxidase derived from alternative splicing of duplicated exon in oyster *Crassostrea virginica*. *Scientific Reports*, 7(1), 10785.
11. Song, N., **Liu, M.**, Yanagimoto, T., Sakurai, Y., Han, Z., and Gao, T. 2016. Restricted Gene Flow for *Gadus macrocephalus* from Yellow Sea Based on Microsatellite Markers: Geographic Block of Tsushima Current. *International journal of molecular sciences*, 17(4), 467.
12. Liu, Y., Yu, D., Wang, Q., Liu, H., Guan, S., and **Liu, M.** 2016. Isolation and characterization of novel polymorphic microsatellite loci in *Perinereis aibuhitensis*. *Genetics and molecular research: GMR*, 15(1).
13. Tu, Z., **Liu, M.**, Wang, Y., Xu, S., Song, N., Gao, T., and Han, Z. 2016. The low mitochondrial diversities in lizardfish *Saurida elongate*: Recent population expansion and selection. *Biochemical systematics and ecology*, 68, 44-50.
14. Zhang, Z., Zhang, N., **Liu, M.**, and Gao, T. 2016. The complete mitochondrial genome of *Coilia grayii* (Clupeiformes: Engraulidae). *Mitochondrial DNA Part A*, 27(5), 3175-3176.
15. **Liu, M.**, Lin, L., Gao, T., Yanagimoto, T., Sakurai, Y., & Grant, W. S. 2012. What maintains the central North Pacific genetic discontinuity in Pacific herring? *PLoS One*, 7(12), e50340.
16. Grant, W. S., **Liu, M.**, Gao, T., and Yanagimoto, T. 2012. Limits of Bayesian skyline plot analysis of mtDNA sequences to infer historical demographies in Pacific herring (and other species). *Molecular phylogenetics and evolution*, 65(1), 203-212.
17. Liu, H., **Liu, M.**, Ge, S., Wang, Q., Yu, D., and Guan, S. 2012. Population structuring and historical demography of a common clam worm *Perinereis aibuhitensis* near the coasts of Shandong Peninsula. *Biochemical systematics and ecology*, 44, 70-78.
18. **Liu, M.**, Lu, Z., Gao, T., Yanagimoto, T., and Sakurai, Y. 2010. Remarkably low mtDNA control-region diversity and shallow population structure in Pacific cod *Gadus macrocephalus*. *Journal of fish biology*, 77(5), 1071-1082.
19. **Liu, M.**, Gao, T., Sakurai, Y., Jia, N., Zhao, L., Du, X., Jiang, Q., and Lu, Z. 2011. Mitochondrial DNA control region diversity and population structure of Pacific herring (*Clupea pallasii*) in the Yellow Sea and the Sea of Japan. *Chinese Journal of Oceanology and Limnology*, 29(2), 317-325.
20. Yu, D., Wu, H., Zhang, Zhi., Chi, Wen., Liu, K., **Liu, M.**, Wang M., & Song, J. (2021) First observation of conjoined twins in *Oryzias melastigma*. *Journal of Fish Diseases*. <https://doi.org/10.1111/jfd.13365>

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21. **Liu, M.**, Liu, H., Wang, Q., Guan, S., & Ge, S. (2012) Phylogenetic relationships of twenty-one nereids species inferring two different evolutionary origins? *Aquatic Science and Technology*, 1(1), 167-180.
22. Guan, S., Liu, H., Zheng, Y., Yu, D., Nie, A., & **Liu, M.** (2014). Inference of phylogenetics and evolution of *Epinephelus septemfasciatus* and 48 other species of *Epinephelus* Genus using mitochondrial CO1 fragment sequences. *Pakistan Journal of Zoology*, 46(1), 67-74.
23. Gao, C., Guan, S., **Liu, M.**, & Liu, B. (2017) Investigation and Study on the Effect of Underground Water Resources Farmed Flounder in Shandong Province. *Open Journal of Fisheries Research*, 4(3), 107. *(Chinese with English abstracts)*
24. Liu, Y., **Liu, M.**, Yu, C., Song, J., Guan, S., Xu, T., & Yu, D. (2016). Effect of a nucleotide-enriched diet on the growth and lysozyme in juvenile turbo. *Journal of Guangxi Academy of Science*, 32(2), 116-121. *(Chinese with English abstracts)*
25. Yu, C., **Liu, M.**, Liu, Y., Zhou, J., Song, J., Ge, S., Xu, T., & Yu, D. (2016). Research progress in sex pheromones of *Nereid polychaete*. *Journal of Guangxi Academy of Science*, 32(2): 129-135. *(Chinese with English abstracts)*
26. Han, L., Liu, Q., Yu, D., Guan, S., Ji, L., Wang, W., **Liu, M.**, Wen, H. & Li, J. (2014). Cryopreservation and ultrastructure of *Gadus macrocephalus* sperm. *Oceanologia et Limnologia Sinica* 45(4), 789-797. *(Chinese with English abstracts)*
27. Yu, D., **Liu, M.**, Liu, H., Jiang, Y. & Guan, S. (2014). The embryonic development of *Gadus macrocephalus* Tilesius. *Marine Sciences*, 38(3), 80-86. *(Chinese with English abstracts)*
28. Deng, Y., Song, N., **Liu, M.** & Gao T. (2014) Population genetic analysis of *Perinereis aibuhitensis* based on the mitochondrial DNA cyt b. *Acta Hydrobiologica Sinica*, 38(3), 603-606. *(Chinese with English abstracts)*
29. Song, F., Wang, Q. X., **Liu, M.**, Ge, S., Liu, H. J., & Tang, X. (2012). Morphological variation analysis of *Scapharca subcrenata* populations in China. *Periodical of Ocean University of China*, 42(11), 40-45. *(Chinese with English abstracts)*
30. **Liu, M.** (2010) Population genetics of Pacific herring and Pacific cod. Doctoral dissertation. Ocean University of China, Qingdao. *(Chinese with English abstracts)*
31. **Liu, M.**, You, K. & Gao, T. (2009). Progress in artificial breeding and releasing of Pacific herring. *Journal of Modern Fisheries Information*, 5: 3-5. *(Chinese)*
32. **Liu, M.**, Wang, Y., Gao, T., Yanagimoto, T., Zhuang, Z., & Sakurai, Y. (2007). Morphological comparison of Pacific herring *Clupea pallasii* in China and Japan. *Journal of Ocean University of China*, 37(4S), 131-136. *(Chinese with English abstracts)*
33. Liu, H., Guan, S., Guan, J., Yu, D., **Liu, M.** & Zheng, Y. Healthy culture technique of halibuts. China Ocean University Press, Qingdao, 2013. *(Chinese)*
34. Liu, M., Wang, Q., **Liu, M.**, Zhou, J., Gao, X. & Guan, S. Study on the suitability for aquaculture of bottom organisms in offshore area of Shandong Province. Ocean Press, Beijing, 2011. *(Chinese)*
35. Zhou, J., Liu, M., **Liu, M.**, & Ge, S. Evaluation System for Suitability of Sea Cucumber's Living Environment V1.0. Software work. National Copyright Administration of China. Register Number: 2016SR123124. January 12, 2016.

*In preparation*

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1. **Liu, M.**, Wolfe-Bryant, B., Farrington, J., & Wolfe-Bryant, L. Genomic selection models for the eastern oyster's growth and survival traits in low salinity water.
2. **Liu, M.**, Beal, B., Pepperman, K., & Wolfe-Bryant, B. Genomic selection for growth traits of the Eastern oysters in east Maine.
3. **Liu, M.**, Bhadari, S., Purnell, D., Yeboah, K., & Butt, P., Gene expression differences across ploidies and life stages in Eastern oysters.

### **CONFERENCE ORAL PRESENTATION**

1. **Liu, M.**, Wolfe-Bryant, B., Farrington, J., Wolfe-Bryant, L. & Knoche, S. Development of genetic breeding to improve the eastern oysters' growth and survival in Maryland low-salinity waters. Aquaculture America 2024, San Antonio, Feb 18 - 21, 2024.
2. Beal, B., **Liu, M.\***, Pepperman, K., & Wolfe-Bryant, B. Genomic selection for growth traits of the Eastern oysters in east Maine. Shellfisheries Association 116th Annual Meeting, Charlotte, March 17 – 21, 2024.
3. **Liu, M.**, Wolfe-Bryant, B., Farrington, J., Wolfe-Bryant, L. & Knoche, S. Development of the soft-shell clam aquaculture in Maryland waters. National Shellfisheries Association 116th Annual Meeting, Charlotte, March 17 – 21, 2024.
4. **Liu, M.**, Wolfe-Bryant, B., Farrington, J., & Wolfe-Bryant, L. Genomic selection models for the eastern oyster's growth and survival traits in low salinity water. National Shellfisheries Association 115th Annual meeting, Baltimore, March 26 – 30, 2023.
5. **Liu, M.**, Guo, X., Yang, H., Wilbur, A., Varney, R., Casas-Liste, S., & La Peyre, J. Whole-genome resequencing reveals genetic variations and selection signatures in eastern oyster populations from Atlantic coast and Gulf of Mexico. National Shellfisheries Association 114th Annual Meeting, online, March 22-25, 2022.
6. **Liu, M.** & Guo, X. Identification of candidate disease-resistance genes in the eastern oyster utilizing genomic resources from the pacific oyster. National Shellfisheries Association 109<sup>th</sup> Annual Meeting, Knoxville, TN. March 26-30, 2017.
7. **Liu, M.**, Li, C., Wang, G. & Guo, X. Identification of disease-resistance markers by next-generation sequencing in the eastern oyster. World Aquaculture Society, Aquaculture 2016, Las Vegas, NV. Feb 22-26, 2016.
8. **Liu, M.**, Ford, S., Bushek, D. & Guo, X. Genetic variation in eastern oyster's susceptibility to *Perkinsus marinus*. National Shellfisheries Association 107<sup>th</sup> Annual Meeting, Monterey, CA. March 22-26, 2015.
9. **Liu, M.** & Guo, X. Characterization of an alternative oxidase gene in the eastern oyster *Crassostrea virginica* and its response to air exposure. National Shellfisheries Association 106<sup>th</sup> Annual Meeting, Jacksonville, FL. March 29-Apr 2, 2014.
10. **Liu, M.**, Gao, T., Yanagimoto, T. & Sakurai, Y. Genetic divergence and demographic history of the Pacific herring *Clupea pallasii* in North Pacific. The Third Japan-China-Korea Joint GLOBEC Symposium, Hakodate, Japan. Dec 13-15, 2007.
11. **Liu, M.**, Gao, T., Yanagimoto, T. & Sakurai, Y. The morphological and genetic variation of Pacific herring. The autumn meeting of Japanese Society of Fisheries Science. Hakodate, Japan. Sep 25-28, 2007.

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### RESEARCH GRANTS

#### *Current*

1. Development of Genetic Breeding in Soft-Shell Clams (*Mya Arenaria*) to Advance a Potential New Aquaculture Species in Maryland. Maryland Sea Grant, **Principal Investigator**, 2024 – 2026, **\$180K**.
2. Development of Triploids to Advance the Soft-shell Clam Aquaculture in the Northeastern Coasts. USDA NRAC Aquaculture program, **Principal Investigator**, 2024 – 2027, **\$160K**.
3. From Sequence to Consequence: Genomic Selection to Expand and Improve Selective Breeding for the Eastern Oyster. Atlantic States Marine Fisheries Commission Regional Shellfish Aquaculture Research Consortia. **Principal Investigator of MSU**, subaward with Rutgers University, 2020-2025, **\$103K**.
4. Diversification of Maryland Shellfish Aquaculture: Development and Assessment of a Subtidal Grow-out Method for Culture of Soft-shell Clams (*Mya arenaria*). Maryland Sea Grant. **Principal Investigator**, 2022 -2025, **\$140K**.
5. Development of Heat-tolerant Soft-shell Clams. Phase II. MSU I-GAP grant. **Principal Investigator**, 2024-2025, **15K**.
6. Morgan State University's PEARL Lab Student Research Enhancements. Federal Earmark. **Co-Principal Investigator**, 2023-2026, \$1M (**\$250K** for Aquaculture).
7. Applied Research and Development to Foster Economic Growth in Maine's Oyster Aquaculture Industry. Maine Economic Improvement Fund. **Principal Investigator of MSU**, subaward with Downeast Institute, 2022-2025, **\$21K**.

#### *Past*

1. Development of Triploid and Tetraploid Eastern Oysters for Maryland Aquaculture. Maryland Sea Grant. **Principal Investigator**, 2020-2023, **\$140K**.
2. The Chesapeake PEARL Oyster Lines. MSU I-GAP grant. **Principal Investigator**, 2018 - 2023, **\$50K**.
3. Mark Street Ventures/PEARL Algae Project. **Maryland Industrial Partnerships (MIPS)**. **Principal Investigator**, 2021-2023, **\$100K**.
4. Development of Heat-tolerant Soft-shell Clams. Phase I. MSU I-GAP grant. **Principal Investigator**, 2022-2023, **15K**.
5. Polyculture Method of Soft-shell Clams. MSU I-GAP grant. **Principal Investigator**, 2022-2023, **12K**.
6. Maryland Sea Grant Fellowship. **Principal Investigator**, 2020-2022, **\$57K**.
7. Enhancing Research and Education Infrastructure of the Bioenvironmental Science PhD Program at Morgan State University: Microplastics in Estuarine Ecosystem. NSF, Research Infrastructure for Science and Engineering. **Co-Principal Investigator**. 2021-2024, **\$1M**.
8. Comparing the Performance of Diploid and Triploid Eastern Oysters in the Northeast. USDA NRAC Aquaculture Program. **Principal Investigator of MSU**, subaward with Stony Brook University, 2019-2022, **\$8K**.

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9. Validation of an innovative aquaculture biofouling management device. F3 Tech accelerator program. **Co-Principal Investigator**, subaward with Solar Oyster Company, 2020, **\$3K**.
10. Transcriptome Study to Identify Candidate Genes Associated with Low Salinity in Eastern Oysters. MSU ASCEND Program. 2019, **\$5K**.
11. Validation of markers and marker-assisted selection of hard clam for resistance to QPX disease. NIFA/USDA Aquaculture Program. **Post-doc**, 2016-2018.
12. Advancing eastern oyster aquaculture through marker-assisted selection. New Jersey Sea Grant. **Post-doc**, 2014-2016.
13. Development of a theoretical basis for modeling disease processes in marine invertebrates. NSF, Ecology and Evolution of Infectious Diseases Program. **Post-doc**, 2012 – 2016.
14. Molecular phylogeography of *Perinereis aibuhitensis*. Science and Technology Project of Shandong Provincial Oceanic and Fishery Administrative Department, China. **Principal Investigator**, 2012-2013.
15. Molecular phylogeography of Pacific herring. Open Foundation from Ocean Fishery Science and Technology in the Most Important Subjects of Zhejiang Province, China. **Principal Investigator**, 2012.
16. Pacific cod broodstock breeding techniques. Science and Technology Development Program of Shandong Province, China. **co-Principal Investigator**, 2012-2013.

### *Pending*

1. NSF: Collaborative Research: EDGE FGT: Acquiring Functional Genomic and Genetic Tools for the American Oyster. **Principal Investigator of MSU**, 2025-2029, **\$287K**.
2. Culture Practice for an Alternative Shellfish Species in Maryland. USDA SARE. **Principal Investigator of MSU**, 2025-2026, **\$30K**.

## **PATENTS**

1. **Liu, M.** MSU low-salinity Eastern oyster lines. Provisional patent application filed.
2. **Liu, M.** MSU heat-tolerant soft-shell clam lines. Provisional patent application filed.
3. **Liu, M.** Polyculture method of soft-shell clams. Publication number US-2023-00404045-A1
4. **Liu, M.**, Yu, D., Liu, H. & Guan, S. A simple adjustable aquaculture drainage device. Publication Number: CN204014790U.
5. Yu, D., Jiang, Y., Guan, S., Liu, H. & **Liu, M.** Large-scale indoor breeding technique for the Yellow Sea stock of Pacific cod. Publication Number: CN104067973B.

## **PROFESSIONAL SERVICES**

### *Technical Committee:*

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1. NECC1901 Multistate Coordinating Committee: Integrating Genomics and Breeding for Improved Aquaculture Production of Molluscan Shellfish, 2020 – present.
2. Eastern Oyster Breeding Consortium, 2019 – present.
3. Technical Advisory Committee for Maryland Sea Grant Extension, 2020 - 2023

### *Grant review:*

1. Genome Canada's Genomic Applications Partnership Program, 2024, 2022 and 2018
2. New York Sea Grant, 2021
3. American Association for the Advancement of Science (AAAS) Research Competitiveness Program, 2020
4. Maryland Industrial Partnerships Project, 2020
5. NOAA Saltonstall-Kennedy Grant, 2017

### *Peer Journals Review:*

BMC Genomics, Heredity, Fish & Shellfish Immunology, Marine Ecology Progress Series, Molecular Genetics and Genomics, Marine Biotechnology, Scientific Reports, Marine Genomics, Journal of the World Aquaculture Society, Biochemical Systematics and Ecology, Journal of the Marine Biological Association of the United Kingdom, Invertebrate Survival Journal, Mitochondrial DNA, Frontiers in Marine Science, Chinese Journal of Oceanology and Limnology, Pakistan Journal of Zoology, Molecular Biology Reports, Bioscience Reports, Fisheries Research, Marine and Freshwater Research, Journal of Ocean University of China, Biodiversitas Journal of Biological Diversity, Marine Life Science & Technology, Diversity and Distributions

### *Dissertation committee:*

1. 2024 – present, Tameka Taylor, Morgan State University – Bioenvironment Science PhD Program.
2. 2023 – present, Hannah Brunelle, University of Maryland – Marine Estuarine Environmental Sciences Graduate Program.
3. 2021 – 2024, Shivish Bhandari, Morgan State University – Bioenvironment Science PhD Program.

### *Mentor:*

Scholar mentor. Morgan State University ASCEND (A Student-Centered, Entrepreneurship Development Training Model to Increase Diversity in the Biomedical Research Workforce) Program, 2018 - present

## **STUDENT ADVISORS**

### *PhD students*

1. Shivish Bhandari, 2021 – 2024. MSU Bioenvironment Science PhD Program.  
Research project: Genetic breeding to improve oyster cultures for low salinity.

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2. Xuetao Li, 2024 - present. MSU Bioenvironment Science PhD Program.  
Research project: Improvement of heat-tolerance in soft-shell clams through marker-assisted selection.

### *Undergraduate students*

1. Shelby Dittman, 2024 summer, St. Mary College  
Research project: From Spat to Spectacular: Egg Quality Assessment and Probiotic Intervention in Oyster Larvae.
2. Jack Hartsig, 2024 summer, University of North Carolina Wilmington  
Research project: Subtidal Solutions: Investigations of the Subtidal Culture Methods of Soft Shell Clams
3. Thomas White, 2024 summer, Eckerd College  
Research project: Analyzing Mortality Patterns in Soft Shell Clams Under Thermal Stress
4. Dwight Stephens, 2024 spring, 2023 spring, College of Southern Maryland  
Research project: Soft-shell clam breeding
5. Tanya Sharma, 2024 spring, College of Southern Maryland  
Research project: Soft-shell clam breeding
6. Paul Johns, 2023 summer, Morgan State University  
Research project: Study of heat tolerance among different ages of soft-shell clams (*Mya arenaria*)
7. Nayeve Pumphrey, 2023 summer, St. Mary College  
Research project: The Impacts of Algae Diet on the Growth & Survival Rate of Eastern Oyster Larvae
8. Tyler Smith, 2023 summer, College of Southern Maryland  
Research project: Investigation of the heat tolerance of the soft-shell clam seed
9. Mya Sharp, 2022 summer and fall, Morgan State University  
Research project: Using PCR assay to detect Dermo disease in Eastern oysters in Maryland waterways.
10. Jessica Baniak, 2022 summer, University of Maryland Baltimore County  
Research projects: (1) An efficient way to sedate oysters for sampling; and (2) heat tolerance investigation in soft-shell clams.
11. Elissa Tuten, 2021 March – November, College of Southern Maryland  
Research projects: (1) Comparisons of Three Algae Diets for Eastern Oyster Production; and (2) Genomic selection for low-salinity tolerance trait in Eastern Oysters: construction of training population through low salinity challenge experiment.
12. Kyle Wood, 2021 summer and 2020 summer, College of Southern Maryland  
Research projects: (1) Comparisons of Three Algae Diets for Eastern Oyster Production (2021); and (2) Diploid and triploid oyster breeding (2020).
13. Kyle Edwards, 2021 summer, Coastal Carolina University  
Research project: A Pilot Study of Softshell Clam Culture in Subtidal Maryland Waters
14. Zophia Galvan Lam, 2020 summer, College of Southern Maryland  
Research project: Diploid and triploid oyster breeding.
15. Maya Purnell, 2019 summer, Morgan State University



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Research project: Identify Candidate Genes Associated with Low Salinity in Eastern Oysters.

16. Kojo Yeboah, 2019 summer, Morgan State University

Research project: Identify Candidate Genes Associated with Low Salinity in Eastern Oysters.

### **TEACHING**

1. MSU, CSTL 303 – Aquaculture, Instructor, course opens in 2026
2. MSU, CSTL 304 - National and International Coastal Systems, Instructor, course opens in 2026
3. MSU, BIOL 209 - Principles of Animal Physiology, Guest instructor, 2021
4. Rutgers University, 11:628:317 - Aquaculture, Instructor assistant, 2016

### **INVITED TALKS**

1. "Genetic Breeding to Advance Aquaculture". Chesapeake Oyster Science Symposium. 9/26/2022
2. "Using R packages to construct genomic selection models and genome-wide association analysis". Eastern Oyster Breeding Consortium, Genomic Selection Workshop. 9/23/2022
3. "How oyster aquaculture can benefit from genomics studies". Morgan State University, Seminar, 11/8/2018
4. "Progress in developing disease resistant oyster through a genomic approach", Institute of Marine and Environmental Technology, the University of Maryland. Seminar, 3/28/2018
5. "Improved selective breeding to achieve an expedited production of superior oyster through markers assisted selection." Chesapeake Biological Laboratory, the University of Maryland Center for Environmental Science. Seminar, 2/14/2018