

Curriculum Vitae

Chunlei Fan, Ph.D

Professor

Biology Department

Patuxent Environmental & Aquatic Research Laboratory

Morgan State University

Baltimore, MD 21251

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PROFESSIONAL PREPARATION

INSTITUTION	Major	Degree/YR.
Shandong University	Environmental Sciences	BS 1991
Institute of Oceanography, Chinese Academy of Sciences	Oceanography	MS 1994
University of Maryland Eastern Shore	Computer Sciences	MS 2001
University of Maryland at College Park	Environmental Sciences	Ph.D 2002

APPOINTMENTS

2016-Present	Director, Bio-Environmental Science Ph.D program, Morgan State University, Baltimore, MD.
2020-Present	Professor, Department of Biology, Patuxent Environmental and Aquatic Research Laboratory, Morgan State University, Baltimore, MD
2009-2020	Associate Professor, Department of Biology, Patuxent Environmental and Aquatic Research Laboratory, Morgan State University, Baltimore, MD.
2004-2009	Assistant Professor, Department of Biology, Patuxent Environmental and Aquatic Research Laboratory, Morgan State University, Baltimore, MD.
2002-2004	Research Associate, Department of Natural Resources, Delaware State University, Dover, DE.

1995-2002 Research Assistant, Horn Point Laboratory, University of Maryland
Center for Environmental Science, Cambridge, MD.

PROFESSIONAL AFFILIATION

Member, American Society of Limnology and Oceanography (ASLO)

Member, American Geophysical Union (AGU)

Member, Estuarine Research Foundation (ERF)

PROFESSIONAL HONORS and AWARDS

- Provost's Travel Award for faculty development (2019-2020). Morgan State University.
- Faculty development Award. (2006). US Department of Defense, administrated by UNCFSP.
- Center For School Change: Excellence in Teaching and Professional Development award. (2004). Delaware State University.
- Horn Point Laboratory Fellowship (1996 to 2000) University of Maryland Center for Environmental Science, Cambridge, Maryland

REFERED JOURNAL PUBLICATIONS

1. Liu, M., Ge, S., Bhandari, S., **Fan, C.**, Jiao, Y., Gai, C., ... & Liu, H. (2022). Genome characterization and comparative analysis among three swimming crab species. *Frontiers in Marine Science*, 9.
2. Smith, C., **C.Fan**, N. Drichko, S. Pramanik (2021). The occurrence of microplastics in *Chrysaora chesapeakei* in the Patuxent River, Maryland. *Marine Pollution Bulletin* (MPB-D-21-02531) Sumbitted.
3. **C, Fan**, K. Clark, N. Mclean, M. Bundy (2020). The impacts of recycled concrete aggregate on epifaunal community structure and eastern oyster recruitment: Implication of using RCA as bottom conditioning material for oyster restoration and aquaculture. *Current Research in Environmental Sustainability* 2 <https://doi.org/10.1016/j.crsust.2020.100012>.
4. Huo, Y., Q. Liu, F. Zhang, C. Li, Z. Tao, H. Bi, **C. Fan**, J. Zhang, and S. Sun, (2020). Biomass and estimated production, and feeding pressure on zooplankton chaetognaths in the Yellow Sea, China. *Terr. Atmos. Ocean. Sci.*, 31, 61-75, doi: 10.3319/TAO.2019.06.26.01
5. Junting Song, Hongsheng Bi, Zhonghua Cai, Xuemin Cheng, Yonghong He, Mark C. Benfield, **Chunlei Fan**. (2020) Early warning of *Noctiluca scintillans* blooms using in-situ plankton imaging system: An example from Dapeng Bay, P.R. China. *Ecological Indicators*, Volume 112, <https://doi.org/10.1016/j.ecolind.2020.106123>

5. Katelynn M. Lankowicz, Hongsheng Bi, Dong Liang, **Chunlei Fan**. (2020) Sonar imaging surveys fill data gaps in forage fish populations in shallow estuarine tributaries. *Fisheries Research*, Volume 226. <https://doi.org/10.1016/j.fishres.2020.105520>
6. 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. *Limnol Oceanogr*, 65: 2010-2023. <https://doi.org/10.1002/lno.11433>
7. Shahrestani, S., Bi, H., Liang, D., Lankowicz, K., and **Fan, C.** (2020), Multi-scale spatial dynamics of the Chesapeake Bay nettle, *Chrysaora chesapeakei*. *Ecosphere* 11(5):e03128. 10.1002/ecs2.3128
8. Z Wei, Y Huo, Q Liu, F Yang, L Long, H Bi, **C Fan** (2019). A field scale evaluation of *Gracilaria lemaneiformis* co-cultured with *Crassostrea gigas* as a nutrient bioextraction strategy in Yantian Bay, China. *Algal research*. 2019 v.38 pp. 101407. <https://doi.org/10.1016/j.algal.2019.101407>
9. OF Oseji, **C Fan**, P Chigbu (2019). Composition and Dynamics of Phytoplankton in the Coastal Bays of Maryland, USA, Revealed by Microscopic Counts and Diagnostic Pigments Analyses. *Water*. 11(2) pp.368.
10. Y Huo, H Shi, J Zhang, Q Liu, Y Duan, Q He, K Yu, H Bi, **C Fan** and P He (2019). Spatio-temporal variability of phytoplankton assemblages and its controlling factors in spring and summer in the Subei Shoal of Yellow Sea, *China*. *Acta Oceanologica Sinica*. <https://doi.org/10.1007/s13131-019-1345-2>
11. Lankowicz K, Bi H, Liang D, **Fan C**, (2019) Use of sonar imaging surveys to fill data gaps in forage fish populations in the Chesapeake Bay, *Fisheries Research* submitted.
12. Sharestani, Suzan; Bi, Hongsheng; Zhang, Libin; Lankowicz, Katie; **Fan, Chunlei**; Liang, Dong (2018). Source-sink patterns and dispersal of sea nettle in a Chesapeake Bay Waterscape. *Ecology*. Submitted.
13. Gulnihal Ozbay, **Chunlei Fan** and Zhiming Yang (2017). Relationship between Land Use and Water Quality and its Assessment Using Hyperspectral Remote Sensing in Mid- Atlantic Estuaries, *Water Quality*, Prof. Hlanganani Tutu (Ed.), InTech, DOI: 10.5772/66620.
14. Najat Ziyadi, Kelton Clark, **Chunlei Fan** and Asamoah Nkwanta (2016). Local and Global Sensitivity Analysis of a Nutrients-Phytoplankton-Oysters Mathematical Model of a Bay Ecosystem. *International Journal of Biomathematics and Systems Biology*. 2(2).

15. Hongsheng Bi, Z. Guo, M. Benfield, **C. Fan**, M. Ford, S. Shahrestani, J. Sieracki (2015) A semi-automated image analysis procedure for in situ plankton imaging systems. *PLOS one*, 10(5).
16. **Fan, C.**, and R. Warner. (2014). Characterization of Water Reflectance Spectra Variability: Implications for Hyperspectral Remote Sensing in Estuarine Waters. *Marine Science* (4)1, pp 1-9
17. **Fan, C.**, and R. Warner (2014). Multi-variants analysis of water reflectance spectra: implications on water quality monitoring by hyperspectral remote sensing. *International Journal of Environmental Science and Development*, Vol. 4, No. 2, pp 94-98.
18. Cannon A, Lalor P, Sriharan S, **Fan C** and Ozbay G. (2014). A Case Study on Climate Change Response and Adaptation: Fictional Aysese Islands in the South Pacific. *American Journal of Climate Change* 3:455-473.
<http://dx.doi.org/10.4236/ajcc.2014.35040>
19. G Ozbay, S Sriharan, **C Fan**, A Prakash, F San Juan (2014). Application of geographic information system (gis) in environmental science and sustainable agriculture education. *EDULEARN14 Proceedings*. pp 415-424.
20. Warner, R., and **C. Fan** (2013) Optical Spectra of Phytoplankton Cultures for Remote Sensing Applications: Focus on Harmful Algal Blooms. *International Journal of Environmental Science and Development*, 4(2). Pp 113-119
21. Davenport E., **C. Fan**, and J.J. Jovoni (2012). Description and Application of a NPZD Model to Forecast Hurricane Impacts to Secondary Production in Coastal Ecosystems. *Procedia Environmental Sciences* 13 1569 – 1584.
22. **Fan, C.**, A. Wilbon, and M. Reiter. (2008). An ecological conceptual model for Monie Bay NERR Site: a case study on watershed ecosystem management. *J. Environ. Monit. Restor.* 6:1-10.
23. Reiter, M. A., G. R. Parsons, R. W. Scarborough, **C. Fan**, and S. M. Thur. (2007). An interdisciplinary conceptual metamodel for the St. Jones River watershed, Delaware: Development, results, and implications. *J. Environ. Monit. Restor.* 2:38-50.
24. CA. Heil, PM. Glibert and **C. Fan**, (2006). *Prorocentrum minimum* (Pavillard) Schiller – A harmful algal bloom species of growing worldwide importance. *Harmful Algae* 4, 449-470.
25. **Fan, C.**, Glibert, P.M. (2005). The effects of light on nitrogen and carbon uptake in two natural dinoflagellate blooms. *Harmful Algae* 4, 629-641.

26. Z Wang, Q Lin, R Hu, **C Fan**, B Han (2004). Pollution by blue--green algae (Cyanophyte) in reservoirs of Guangdong Province and water quality evaluation. *Journal of Tropical and Subtropical Botany* 12(2), 117-123.
27. **Fan, C.**, Glibert, P.M. Burkholder, J.M., (2003). Characterization of the affinity for nitrogen, uptake kinetics, and environmental relationships for *Prorocentrum minimum* in natural blooms and laboratory cultures. *Harmful Algae* 2, 283-299.
28. **Fan, C.**, Glibert, P.M. Lomas, M.W., (2003) Characterization of urease activity in three marine phytoplankton species. *Marine Biology*. 142, 949-958.
29. **Fan, C.**, Gilbert, P.M., (2003). The importance of reduced nitrogen in a *Prorocentrum minimum* bloom – a model approach. *Ecologic Science* 22, 199-204.
30. Glibert, P.M., Magnien, R., Lomas, M.W., Alexander, J., **C. Fan**, Haramoto, E., Trice, M., Kana, T.M., (2001). Harmful algal blooms in the Chesapeake and coastal Bays of Maryland, USA: Comparison of 1997, 1998, and 1999 events. *Estuaries* 24, 875-883.
31. Emma J. Rochelle-Newall, Thomas R. Fisher, **C. Fan** and Patricia M. Glibert. (1999). Dynamics of Chromospheric Dissolved Organic Matter and Dissolved Organic Carbon in Experimental Mesocosms. *International Journal of Remote Sensing*. 20(3):627-641
32. Rong Wang, **C. Fan** (1997). The grazing of mesozooplankton in the East China Sea and its contribution to the carbon flux. *Limn.Oceanog (chinese)*. Vol 27(4), pp 65-74.

PROFESSIONAL REPORT

1. **Fan, Chunlei**, Kelton Clark (2014). Phase II Evaluation of Waste Concrete Road Materials for Use in Oyster Aquaculture – Field Test. Report to Maryland State Highway Administration. 47pp.

PROFESSIONAL CONFERNECE ABSTRACT

1. N. Mclean, **C. Fan** (2019). Long-term Population dynamics of the Atlantic Bay Nettle *Chrysaora Chesapeakei* in the Patuxent River and Adjacent creeks. Delaware State University Summer Research Symposium, Dover DE, July 25, 2019.
2. Dong Hee Kang, Kelton L. Clark, James G. Hunter, **Chunlei Fan**, Anastasia E. M. Chirnside, Andrew Z. Farkas, Mark M. Bundy. (2019) Evaluation of recycled concrete aggregate for oyster aquaculture. World Environmental & Water Resources Congress 2019. Pittsburgh, PA. May 19-23.

3. Erin McPhillips, Suzan Sharestani, **Chunlei Fan**. (2018). Impact of Salinity on Population Dynamics of Atlantic Sea Nettle (*Chrysaora quinquecirrha*) in the Patuxent River and Adjunct Creeks. Delaware State University Summer Research Symposium, Dover DE, July 26, 2018.
4. Katie Lankowicz, Hongsheng Bi, Suzan Shahrestani, Dong Liang and **Chunlei Fan** (2018). Use of Sonar Imaging to Quantify Juvenile Forage Fish Abundance in the Patuxent River. 148th Annual Meeting of the American Fisheries Society. Atlantic City, NJ. August, 2018.
5. Mclean, Nikelene; Sharestani, Suzan; **Fan, Chunlei** (2018). Characterization of Spatial Distribution Patterns of the Atlantic Sea Nettle in the Patuxent River and adjunct creeks using Adaptive Resolution Imaging Sonar (ARIS). ATLANTIC ESTUARINE RESEARCH SOCIETY meeting, Rehoboth Beach, DE. April 4-6, 2018.
6. Hongsheng Bi, Katie Lankowicz, Suzan Shahrestani, Libin Zhang and **Chunlei Fan** (2017). Habitat Utilization of Juvenile Atlantic Menhaden in the Patuxent River Watershed. 147th Annual Meeting of the American Fisheries Society Meeting. Tampa, FL. August, 2018.
7. Zhang, L., Yang, Y., Bi, H., Shahrestani, S., **Fan, C.**, (2017) SELF-ORGANIZED FISH SCHOOLING: FROM INDIVIDUAL VARIABILITY TO SYNCHRONY. ASLO 2017 AQUATIC SCIENCES MEETING, Honolulu, Hawaii, Feb. 2017
8. Hirtle, N. O., Lankowicz, K., Shahrestani, S., Bi, H., **Fan, C.**, (2017) SPATIAL AND TEMPORAL ABUNDANCE OF FORAGE FISH IN THE PATUXENT RIVER. ASLO 2017 AQUATIC SCIENCES MEETING, Honolulu, Hawaii, Feb. 2017
9. Bi, H.; Cai, Z.; Cheng, X.; He, Y.; Benfield, M. C.; **Fan, C.**; (2017) TRANSITIONING FROM MONITORING TO FORECASTING POTENTIAL HARMFUL ALGAL BLOOM: AN EXAMPLE FROM SHENZHEN BAY, P.R. CHINA. ASLO 2017 AQUATIC SCIENCES MEETING, Honolulu, Hawaii, Feb. 2017
10. Lankowicz, K. M., Bi, H., Shahrestani, S., Zhang, L., **Fan, C.**, (2017) A NOVEL APPROACH TO OBSERVING MYSIDAE DISTRIBUTION IN THE CHESAPEAKE BAY. ASLO 2017 AQUATIC SCIENCES MEETING, Honolulu, Hawaii, Feb. 2017
11. Ozbay, G.; Sriharan, S.; **Fan, C.**; Adolf, J. (2015) Chesapeake Bay Climate Study Partnership: Undergraduate Student Experiential Learning on Microclimates at the University of Hawai'i, Hilo. American Geophysical Union, Fall Meeting 2015
12. **Fan, C.**, (2014) Spectral Analysis of Water Reflectance for Hyperspectral Remote Sensing of Water Quality in Estuarine Water. Conference on Environmental Pollution and Public Health (EPPH 2014). Shanghai, China. April 2015

13. Ozbay, G.; Sriharan, S.; **Fan, C.** (2014) Collaborative Education in Climate Change Sciences and Adaptation through Interactive Learning. American Geophysical Union, Fall Meeting 2014
14. Ozbay G, Sriharan S and **Fan C.** (2014) Enhancing Environmental Science Curriculum: Climate Change and Adaptation Studies through Effective Communications via Videoconferencing, E-Learning, and International Experience in Australia. INTED2014 Conference, March 10-12, 2014, Valencia, Spain.
15. Prakash, A.; Sriharan, S.; Ozbay, G.; SanJuan, F.; **Fan, C.**; David, V. (2013) Enhancing GIS Instruction at 1890 Institutions and HBCUs through Collaboration with the University of Alaska Fairbanks. American Geophysical Union, Fall Meeting 2013
16. Warner, R., **Fan. C.**, (2013). Optical Spectra of Phytoplankton Cultures for Remote Sensing Applications: Focus on Harmful Algal Blooms. International Conference on Environmental Science and Technology. Macau, China. April 2013
17. **Fan, C.**, Sriharan, S., (2012) Temporal and Spatial distribution pattern of TSS (Total Suspended Solid) and CDOM in the Chesapeake Bay. 23rd Annual Environment Virginia Symposium. Richmond, Virginia. April 2012
18. Davenport, E., **Fan, C.**, (2011) Description and application of a NPZD model to forecast hurricane impacts to secondary production in Coastal Ecosystems. 18th International Conference on Ecological Modelling. Beijing, China. October, 2011
19. Warner, Robert A.; **Fan, Chunlei**; Hartsig, Ann Marie; Lacouture, Richard V. (2009) Characterization of Reflectance Spectra of Phytoplankton Cultures: Implication of Remote Sensing of HABs. 20th Biennial Conference of the Coastal and Estuarine Research Federation. Portland, Oregon. November 2009
20. **Fan, C.** (2009). An ecological conceptual model for Monie Bay NERR Site: a case study on watershed ecosystem management. 2008 National Conference on Agriculture & Natural Resources Conservation & Management. Dover, DE. April 2008.
21. Davenport, E., **C. Fan**, J. Anderson (2008). Ichthyoplankton Structure after Passage of Hurricanes in the Gulf of Mexico. The 15th Annual Morgan State University Undergraduate and Graduate Research Symposium. Baltimore, MD. April 2008.
22. **Fan, C.**, J. Schalles. (2007) Characterization of hyperspectral reflectance spectra in Estuarine Waters. 19th Biennial Conference of the Estuarine Research Federation. Providence, RI. Nov. 2007.

23. Oluwakemi, F, **C. Fan**, (2006) A Wilbon. Optical Characterization of phytoplankton assemblages in Patuxent River, Maryland. NOAA 4th EPP meeting, Tallahassee, FL. Nov, 2006.
24. **Fan, C.** (2006) Water Quality Monitoring by Hyperspectral Remote Sensing in Estuarine Waters: Preliminary results and implications. Invited seminar talk at Smithsonian Environmental Research Center. Edgewater, Maryland.
25. **Fan, C. M. Reiter**, (2004). Using Hyperspectral Remote Sensing to detect the expansion of *Phragmites australis* in the St. Jones River Watershed, Delaware, NOAA 3rd EPP meeting, New York, Nov, 2004.
26. **Fan, C.**, Gilbert, P.M., (2002). The importance of reduced nitrogen in a *Prorocentrum minimum* bloom – a model approach. PICES 11th annual meeting, Qingdao, China. Oct. 2002.
27. M. W. Lomas, Patricia M Glibert, Deborah Bronk, **C. Fan**. (2000) Temporal and Spatial Variability of Dissolved Organic Nitrogen Pools in Chesapeake Bay. 2000 Ocean Sciences Meeting. January 24-28 San Antonio, Texas.
28. Glibert, P.M. Robert Magnien, Micheal Lomas, **C. Fan**, Erin Haramoto, Mark Trice. (2000). Harmful Algal Blooms in The Chesapeake Bay, USA: Comparison of Events. 2000 International Conference on Harmful Algal Blooms. Feb 7-11, Tasmania, Australia
29. **C. Fan**, M. W. Lomas, Glibert, P.M. (1999) Nitrogen and carbon uptake kinetics of a *porocentrum minimum* bloom in Chesapeake Bay, USA. 1999 American Society of Limnology and Oceanography Meeting. Feb 1-7, Santa Fe, New Mexico
30. Glibert. P.M, Terlizzi, D.E., Lomas, M.W., **C. Fan**. (1999) Co-occurrence of dinoflagellate blooms and elevated levels of Urea under highly eutrophic-condition. 1999 American Society of Limnology and Oceanography Meeting. Feb 1-7, Santa Fe, New Mexico
31. P.M. Glibert, G. M. Berg and **C. Fan** (1998). Relationship between the quality of nitrogen and the Microbial food web. 1998 Ocean Sciences Meeting. Feb 9-13, San Diego, California

RESEARCH and EDUCATION GRANTS (current and past)

1. 2021-2024 Principal Investigator “**HBCU-RISE: Enhancing research and education infrastructure at Morgan State University: Microplastics in the estuarine ecosystem**” Supported by National Science Foundation, Budget: \$999,999

2. 2021-2022 Principal Investigator “**Acquisition of IRTracer with AIM-9000 FTIR Microscope for Microplastic Research and education at Morgan State University**” Supported by Shimadzu Scientific Instruments, Budget: \$55,900
3. 2010-2020 Principal Investigator (subcontract to Morgan State University from University of Maryland Eastern Shore) “**CREST Center for the Integrated Study of Coastal Ecosystem Processes and Dynamics in the Mid-Atlantic Region**” Supported by National Science Foundation, Budget: \$185,000
4. 2018-2019 Principal Investigator ASCEND Course development grant “**Implementation of BIOL 203 Introduction to Environmental Science**” NIH ASECND, Budget \$13,348
5. 2017-2020 Principal Investigator (subcontract from to Morgan State University from Virginia State University) “**Collaborative Efforts to Enhance Climate Change Curricula for underrepresented College and High School Students**” Supported by USDA, Budget: \$42,072
6. 2017-2020 Principal Investigator (subcontract from to Morgan State University from Delaware State University) “**Multi-institutional Student Experiential Learning with Outreach Training on Water, Climate, Food Security, and Sustainable Agriculture**” Supported by USDA, Budget: \$68,250.
7. 2015-2018. Principal Investigator “**Power Plant Environmental Training Center: Predicting Environmental Induced Outages at Nuclear Power Plants**”. Supported by NRC, Budget: \$466,418.
8. 2013-2016 Principal Investigator “**Evaluation of Waste Concrete Road Materials for Use in Oyster Aquaculture**” Supported by Maryland High Way Administration, Budget \$130,000.
9. 2013 -2018 Co-Principal Investigator (subcontract from to Morgan State University from Virginia State University) “**Chesapeake Bay Climate Study for Sustainable Agriculture**” Supported by USDA, Budget \$44,000
10. 2009-2013 Principal Investigator “**Track 1: Hyperspectral remote sensing in coastal waters**” Supported by National Science Foundation. Budget: \$192,312
11. 2011-2015 Principal Investigator (subcontract from to Morgan State University from Virginia State University) “**Climate Change and Adaptation: Curriculum Design, International Experiences for Students and Faculty in Australia, and Precollege Awareness**” Supported by USDA, Budget \$50,000
12. 2006-2009 Principal Investigator “**Using Hyperspectral Remote Sensing to Monitor Eutrophication in Chesapeake Bay**” Supported by US Department of Defense. Budget: \$10,000.

13. 2006-2011 Co-Principal Investigator (subcontract to Morgan State University from Florida A&M University) **“NOAA –Environmental Cooperative Sciences Center”** Supported by NOAA (#NA06OAR4810164). Budget: \$1,014,008.
14. 2006-2007 Principal Investigator **“Using Hyperspectral Remote Sensing to Monitor Eutrophication in Chesapeake Bay”** Supported by US Department of Defense. Budget: \$10,000.
15. 2004-2006 Co-Principal Investigator (subcontract to Morgan State University) NOAA –**“Regional studies in sustainable management of coastal and marine habitats for decision making”** Supported by NOAA (#NA17AE1624) Budget: \$496,000.

PROFESSIONAL DEVELOPMENT

1. 2/2019 Center for Excellence in Teaching & Learning: Center for Excellence in Teaching and Learning (CETL) Workshop – classroom student response tools.
2. 8/2018 Mobile Summer Institutes (MoSIs) for scientific teaching
3. 10/2017 Center for Excellence in Teaching & Learning: Center for Excellence in Teaching and Learning (CETL) Workshop
4. 6/2015 American Meteorological Society School of Ice workshop for MSI faculty
5. 10/2014 NASA HyspIRI Science and Applications Workshop
6. 5/2013 NASA HyspIRI Products Symposium
7. 7/2013 Bioenergy and Bioproducts Education Programs (BBEP) Teaching Partner Workshop
8. 5/2012 AMS Climate Studies Diversity Project faculty course implementation workshop
9. 4/2011 Quality Education for Minorities (QEM) Network Workshop for NSF MRI program
10. 7/2009 Morgan State University Online Course Design workshop on Blackboard

STUDENT MENTORING

Eric Davenport	Ph.D advisor	2007 – 2015
Nikelene Mclean	Ph.D advisor	2018 –

Ozuem F. Oseji	Ph.D committee member	2010 – 2015
Sulakshana Bhatt	Ph.D committee member	2016 –
K. Roeske,	M.S. committee member	2013 -- 2015
B. Bronk,	M.S. committee member	2004 – 2007
M. W. Baker,	M.S. committee member	2011 – 2014
Rujia Bi	M.S. committee member	2016 --
Barbara Murray	M.S. committee member	2003 -- 2006

Undergraduate Research Mentoring: Established a summer research internship program at MSU PEARL and trained more than 100 students from 2006 – 2019.

Nikelene Mclean	Graduate Research Mentor	5-8/2019
Erin McPhillips	Undergraduate Research Mentor	5-8/2018
Nikelene Mclean	Undergraduate Research Mentor	5-8/2017
Rujia Bi	Graduate Research Mentor	5-8/2016
Danielle J. Franklin	Undergraduate Research Mentor	5-8/2015
Emily Lovelace	Undergraduate Research Mentor	5-8/2013
Samuel Abbey	Undergraduate Research Mentor	5-8/2012
Chamir Lawson	Undergraduate Research Mentor	5-8/2011
Samantha Watters	Undergraduate Research Mentor	5-8/2010
Kirk Butler	Undergraduate Research Mentor	5-8/2009
Femi Ogunjinmi	Undergraduate Research Mentor	5-8/2008

UNIVERSITY SERVICE

- Director, Bio-Environmental Ph.D program. 2016 – current
- Graduate Council, School of Graduate Study. 2016 – current
- Provost’s workload committee 2019 -- current
- Chair of the PEARL search committee for oyster geneticist 2017
- Member of PEARL search committee for coastal resilience 2016
- Co-chair of Departmental graduate curriculum committee 2016 -- current
- Member of Departmental tenure and promotion committee 2017
- Member of Departmental Search committee 2016
- Member of Departmental senior comp exam committee 2004 – current
- Member of Departmental facility committee 2016 -- current
- Judge, Morgan State University Research Symposium
- Reviewer for academic Programs Proposals from the Maryland Higher Education Commission (MHEC) “Coastal and Watershed Studies concentration within B.A. Environmental Science and Policy major” by HOOD COLLEGE, 2014

- Reviewer for academic Programs Proposals from the Maryland Higher Education Commission (MHEC) “Bachelor of Science in Atmospheric and Ocean Science”, by University of Maryland College Park, 2011
- Reviewer for academic Programs Proposals from the Maryland Higher Education Commission (MHEC) “MS/Ph.D in Environmental Science and Technology”, by University of Maryland College Park. 2008
- Reviewer for academic Programs Proposals from the Maryland Higher Education Commission (MHEC) “New Concentration in Marine and Coastal Management with Bachelor of Science in Environmental Science and Policy”, by University of Maryland College Park. 2007

PUBLIC SERVICE

- High School speaker:2000 -2014 at W.E.B DuBois High School
- High School speaker:2017 at Anne Arundel County Public Schools- Environmental Science Events
- High School speaker:2014 -2017 at Calvert County Public Schools PLANS program
- High School Teacher workshop trainer : 2011 - 2013 at W.E.B DuBois High School
- High School Teacher workshop trainer: 2004, 2010, 2012, 2016, 2018, 2019 at Virginia State University GIS capacity building grants
- Instructor and trainer of Research Experience Undergraduate (REU) in Ocean and Marine Sciences: 2004, 2009, 2012 at Elizabeth City State University

OTHER PROFESSIONAL SERVICE

Editor of Ecological Science (ISSN 1008-8873) since 2006

Reviewer for Peer reviewed Journal

- | | |
|---|--------------|
| • Geosciences | 2019 |
| • Environmental Science & Technology | 2019 |
| • Bowman/Hacker's Ecology 5th Edition Review | 2019 |
| • Egyptian Journal of Aquatic Research | 2018, 2019 |
| • Virtual Biology Review- Oxford University Press | 2019 |
| • Ecology, Fourth Edition - Oxford University Press | 2019 |
| • Biotechnology Journal International | 2019 |
| • Review of Scientific Instruments | 2018, 2019 |
| • Marine Pollution Bulletin | 2016 -- 2018 |
| • Journal of Coastal Research | 2012 – 2017 |
| • Journal of Environmental Science Studies | 2018 |
| • Remote Sensing | 2017 2015 |

- Environmental Management and Sustainable Development 2016
- Journal of Hydrology 2016
- McGraw-Hill Education Ecology: Concepts & Applications 2016
- Journal of Ocean University of China 2015
- Journal of Geoscience and Environment Protection 2015
- Geophysical Research Letters 2015
- Marine and Freshwater Research 2013 2014
- OCEANOLOGIA 2013
- journal Environmental Monitoring and Assessment 2012
- Chinese Journal of Oceanology and Limnology 2011
- Journal of Interdisciplinary Environmental Review 2008
- Journal of Aquatic Microbial Ecology 2006

Reviewer/Panelist for funding Agency

- NSF HBCU CREST
- NSF Historically Black Colleges and Universities Undergraduate Program (HBCU-UP)
- NSF Graduate Research Fellowship Program (GRFP) competition
- NSF Water Sustainability and Climate program in Geoscience Division
- NOAA RESTORE Science Program
- Department of Defense National Defense Science and Engineering Graduate (NDSEG) Program
- Department of Defense the Science, Mathematics And Research for Transformation (SMART) program
- EPA's STAR Graduate Fellowship: Water Quality: Hydrogeology and Surface Water– Category H1
- NASA Global Climate Change Education: Research Experiences, Modeling & Data.
- NASA Motivating Undergraduates In Science and Technology program
- NASA Minority University Research and Education Project (MUREP) Institutional Research program
- NASA International Space Station National Lab Education project
- NASA MUREP Institutional Research Opportunity
- NASA STEM (EONS) project