

Ri-Qing Yu, Ph. D.
Associate Professor, Department of Biology
The University of Texas at Tyler
3900 University Blvd., Tyler, TX 75799
E-mail: ryu@uttyler.edu. Tel: (903) 566-7257



=====

Education and Postdoctoral Study:

Postdoctoral Associate: Chemical and Biomolecular Engineering. University of Delaware, Newark. 2014.
Postdoctoral Associate: School of Civil and Environmental Engineering. Georgia Institute of Technology, Atlanta. 2012-2013.
Postdoctoral Associate: Dept. Biochemistry & Microbiology. Rutgers University, New Brunswick, NJ. 2011-2012.
Ph.D.: Environmental Microbiology. Dept. Biochemistry & Microbiology, Rutgers University, New Brunswick, NJ. 2005-2011.
M.Sc.: Biological Sciences. Louisiana State University, Baton Rouge, LA. 2002-2004.
M.Phil.: Biology. Hong Kong University of Science and Technology, HK. 2000-2002.

Employment:

2020–Present: Associate Professor. Department of Biology. UT Tyler. Texas, USA.
2014–2020: Assistant Professor. Department of Biology. UT Tyler. Tyler, TX, USA.
1998–2000: Associate Professor. Institute of Environmental Sciences, Sun Yat-sen University. Guangzhou.
1992–1998: Lecturer. Institute of Environmental Sciences, Sun Yat-sen University. Guangzhou.

Peer Reviewed Publications: (Current Google Scholar i10-index: 51, h-index: 26)

1. Zhou X Q, Chen K H, **Yu R Q**, Yang M, Liu Q, Hao Y Y, Li J, Liu H W, Feng J, Tan W, Huang Q, Gu B., Liu Y R. 2025. Unraveling microbial potential to mitigate neurotoxic methylmercury accumulation in farmlands and rice. *Nature Communications* (under review).
2. Zhong H, Tang W, Li Z, Sonne C, Lam S S, Zhang X, Kwon S Y, Rinklebe J, Nunes L M, **Yu R Q**, Gu B, Hintelmann H, Tsui M, Zhao J, Zhou X Q, Wu M, Liu B, Hao Y, Chen L, Zhang B, Tan W, Zhang X X, Ren H, Liu Y R. 2024. Soil *Geobacteraceae* are the key predictors of neurotoxic methylmercury bioaccumulation in rice. *Nature Food* 5: 301-311. (Impact factor: 23.6).
3. Purcell M, DuPont J, Somenahally A, McLawrence J F, Case C L, Gowda P, King N, Rouquette M J, **Yu R Q***. 2024. Long-term grazing and nitrogen management impacted methane emission potential and soil microbial community in grazing pastures. *Environment & Health*. DOI: 10.1021/envhealth.4c00138. (*corresponding author).
4. Li C, **Yu R Q**, Zhong H. 2024. Embracing digital mindsets to ensure a sustainable future. *Frontiers of Environmental Science & Engineering* 18(3): 39. (Impact factor: 5.7).
5. Liu F, Qiang Xie Q, **Yu R Q**, Xie Z., Wu J, Zhang X, Wu Y. 2023. Fatty acids as bioindicators of organohalogen exposure in marine fish from a highly polluted

- estuary: First insight into small-scale regional differences. *Journal of Hazardous Materials* 452: 131337. (Impact factor: 14.224).
6. Li C, Gao P, **Yu R Q**, Zhong H, Wu M, Lam S S, Sonn C. 2023. Vinyl chloride accident unleashes a toxic legacy. *Environmental Science and Ecotechnology* 14: 100259. DOI: 10.1016/j.ese.2023.100259. (Impact factor: 12.20).
 7. Lei P, **Yu R Q**, Kong Y, Vertilsson S, Tsui MTK, Jiang T, Zhao J, Liu Y, Joerg R, Zhong H. 2023. Properly interpret metabolic inhibition results to identify primary mercury methylating microbes. *Critical Reviews in Environmental Science and Technology* 53(19): 1757-1773. (Impact factor: 13.12).
 8. Zhang X, Luo D, **Yu R Q**, Wu Y. 2023. Multilocus DNA metabarcoding diet analyses of small cetaceans: A case study on highly vulnerable humpback dolphins and finless porpoises from the Pearl River Estuary, China. *Integrative Zoology* 18(1): 183-198. (Impact factor: 2.654).
 9. **Yu R Q***, Barkay T. 2022. Microbial mercury transformation: Molecules, functions and organisms. *Advances in Applied Microbiology* 118: 31-90. <https://doi.org/10.1016/bs.aambs.2022.03.001>. (Impact factor: 5.086).
 10. Zhang X, **Yu R**, Xie Y, **Yu R Q**, Wu Y. 2022. Organotins remain a serious threat to the Indo-Pacific humpback dolphins in the Pearl River Estuary. *Environmental Science and Technology* 56(8): 5037-5048. (Impact factor: 7.864).
 11. Guo L, Luo D, **Yu R Q**, Zeng C, Huang N, Wu Y. 2022. Habitat decline of the world's largest Indo-Pacific humpback dolphin (*Sousa chinensis*) population in poorly protected areas and the hypoxic zone. *Front. Mar. Sci.* 9: 1048959. doi: 10.3389/fmars.2022.1048959.
 12. Guo Y, **Yu R Q**, Liang Y, Liu Z, Sun X, Wu Y. 2022. Cross-generational impacts of diet shift on bisphenol analogue loads in Indo-Pacific humpback dolphins (*Sousa chinensis*). *Environmental Science & Technology* 56(15): 10764-10774.
 13. Zhang X, Xie Q, **Yu R Q**, Wu Y. 2022. Temporal residue changes of alternative halogenated flame retardants (AHFRs) and their relations with diet shifts in Indo-Pacific Humpback dolphins from the South China Sea. *Environmental Science and Technology* 56(8): 5037-5048.
 14. Sun X, Luo D, **Yu R Q**, Yu X, Liang Y, Liu Z, Guo L, Wu Y. 2022. Long-term increase in mortality of Indo-Pacific humpback dolphin (*Sousa chinensis*) in the Pearl River Estuary following anthropic activities: evidence from the stranded dolphin mortality analyses from 2003 to 2017. *Environmental Pollution* 307: 119526 (Impact factor: 6.792).
 15. Xie Q, **Yu R Q**, Yu R, Zhang X, Wu Y. 2021. Historic changes of polychlorinated biphenyls (PCBs) in juvenile and adult cetaceans from the Pearl River Estuary from 2003 to 2020. *Science of The Total Environment* 800: 149512. (Impact factor: 6.551).
 16. Guo L, Zhang X, Luo D, **Yu R Q**, Xie Q, Wu Y. 2021. Population-level effects of polychlorinated biphenyl (PCB) exposure on highly vulnerable Indo-Pacific humpback dolphins from their largest habitat. *Environmental Pollution* 286(1): 117544.
 17. Zhang X, Zhan F, **Yu R Q**, Sun X, Wu Y. 2021. Bioaccumulation of legacy organic contaminants in pregnant Indo-Pacific humpback dolphins (*Sousa chinensis*): Unique features on the transplacental transfer. *Science of the Total Environment* 785: 147287.
 18. Zhang X, Luo D, **Yu R Q**, Xie Z, He L, Wu Y. 2021. Microplastics in the endangered Indo-Pacific humpback dolphins (*Sousa chinensis*) from the Pearl River Estuary, China. *Environmental Pollution* 270: 116057.

19. Sun X, Zhan F, **Yu R Q**, Chen L, Wu Y. 2020. Bioaccumulation of organic contaminants in Indo-Pacific humpback dolphins: Preliminary unique features of the brain and testes. *Environmental Pollution* 267: 115511.
20. Zhang X, Ning X, He X, Sun X, Yu X, Cheng Y, **Yu R Q***, Wu Y*. 2020. Fatty acid composition analyses of commercially important fish species from the Pearl River Estuary, China. *Plos One* 15(1), e0228276. (Impact factor: 2.766).
21. **Yu R Q**, Kurt Z, He F, Spain J C. 2019. Degradation of the allelopathic chemical pterostilbene by a *Sphingobium* sp. strain from the peanut rhizosphere. *Applied and Environmental Microbiology* 85(5): e02154-18. (Impact factor: 3.960).
22. Yu X, **Yu R Q**, Zhang X, Zhan F, Sun X, Wu Y. 2019. DDT exposure induces cell cycle arrest and apoptosis of skin fibroblasts from Indo-Pacific humpback dolphin via mitochondria dysfunction. *Aquatic Toxicology* 213: 105229. (Impact factor: 3.884).
23. Zhan F, Yu X, Zhang X, Chen L, Sun X, **Yu R Q**, Wu Y. 2019. Tissue distribution of organic contaminants in stranded pregnant sperm whale (*Physeter macrocephalus*) from the Huizhou coast of the South China Sea. *Marine Pollution Bulletin* 144: 181-188. (Impact factor: 3.241).
24. Zhang X, **Yu R Q**, Lin W, Gui D, Sun X, Yu X, Guo L, Cheng Y, Ren H, Wu Y. 2019. Stable isotope analyses reveal anthropogenically driven spatial and trophic changes to Indo-Pacific humpback dolphins in the Pearl River Estuary, China. *Science of the Total Environment* 651: 1029-1037. (Impact factor: 6.551).
25. **Yu R Q***, Reinfelder J, Hines M E, Barkay T. 2018. Syntrophic pathways for the methylation of mercury. *The ISME Journal* 12(7):1826-1835. doi: 10.1038/s41396-018-0106-0. (Impact factor: 9.520).
26. Yu X, **Yu R Q**, Gui D, Zhang X, Zhan F, Sun X, Wu Y. 2018. Hexavalent chromium induces oxidative stress and mitochondria-mediated apoptosis in isolated skin fibroblasts of Indo-Pacific humpback dolphin. *Aquatic Toxicology* 203: 179-186. (Impact factor: 3.884).
27. Ha J, Zhao X, **Yu R Q**, Barkay T, Yee N. 2017. Hg(II) reduction by siderite (FeCO₃). *Applied Geochemistry* 78: 211-218. (Impact factor: 3.088).
28. He H, Li W C, **Yu R Q**, Ye Z. 2017. Illumina-based analysis of bulk and rhizosphere soil bacterial communities in paddy fields under mixed heavy metal contamination. *Pedosphere* 27(3): 569-578. (Impact factor: 2.430).
29. Boyd E S, **Yu R Q**, Barkay T, Hamilton T L, Baxter B K, Naftz D L, and Marvin DiPasquale M. 2017. Effect of salinity on mercury methylating benthic microbes and their activities in Great Salt Lake, Utah. *Science of the Total Environment* 581-582: 495-506.
30. Zhang X, Lin W, **Yu R Q**, Sun X, Ding Y, Chen H, Chen X, Wu Y. 2017. Tissue partition and risk assessments of trace elements in Indo-Pacific finless porpoises (*Neophocaena phocaenoides*) from the Pearl River Estuary coast, China. *Chemosphere* 185: 1197-1207. (Impact factor: 5.778).
31. Sun X, **Yu R Q**, Zhang M, Ding Y, Wu Y. 2017. Correlation of trace element concentrations between epidermis and internal organ tissues in Indo-Pacific humpback dolphins (*Sousa chinensis*). *Science of the Total Environment* 605-606: 238-245.
32. Gui D, **Yu R Q**, Ding Y, Zhang H, Sun Y, Zhang M, and Wu Y. 2017. Spatial-temporal trends of heavy metals in Indo-Pacific humpback dolphins (*Sousa chinensis*) from the western Pearl River Estuary, China. *Environmental Science and Technology* 51(3): 1848-1858.

33. Graham EB, Knelman JE, Schindlbacher A, Siciliano S, Breulmann M, Yannarell A, Beman J, Abell G, Philippot L, Prosser J, Foulquier A, Yuste J, Glanville H, Jones D, Angel R, Salminen J, Newton RJ, Bürgmann H, Ingram LJ, Hamer U, Siljanen HM, Peltoniemi K, Potthast K, Bañeras L, Hartmann M, Banerjee S, **Yu R Q**, Nogaro G, Richter A, Koranda M, Castle S, Goberna M, Song B, Chatterjee A, Nunes OC, Lopes AR, Cao Y, Kaisermann A, Hallin S, Strickland MS, Garcia-pausas J, Barba J, Kang H, Isobe K, Papaspyrou S, Pastorelli R, Lagomarsino A, Lindström E, Basiliko N and Nemergut DR. 2016. Microbes as engines of ecosystem function: when does community structure enhance predictions of ecosystem processes? *Frontiers in Microbiology* 7: 214. doi:10.3389/fmicb.2016.00214. (Impact factor: 4.019).
34. Cabral L, **Yu R Q**, Crane S, Giovanella P, Barkay T, Camargo F A. 2016. Methylmercury degradation by *Pseudomonas putida* V1. *Ecotoxicology and Environmental Safety* 130: 37-42. (Impact factor: 3.974).
35. Gui D, Karczmarski L, **Yu R Q**, Plön S, Chen L, Tu Q, Cliff G, and Wu Y. 2016. Profiling and spatial variation analysis of persistent organic pollutants in South African delphinids. *Environmental Science and Technology* 50: 4008-4017.
36. Liu Y R, **Yu R Q**, Zheng Y M et al. 2014. Analysis of the microbial community structure by monitoring an Hg methylation gene (*hgcA*) in paddy soils along an Hg gradient. *Applied and Environmental Microbiology* 80(9): 2874-2879.
37. Gui D, **Yu R Q**, Sun Y et al. 2014. Mercury and selenium in stranded Indo-Pacific Humpback dolphins and implications for their trophic transfer by food chains. *Plos One* 9(10): e110336. (Impact factor: 2.766).
38. Gui D, **Yu R Q**, He X et al. 2014. Bioaccumulation and biomagnification of persistent organic pollutants in Indo-Pacific humpback dolphins (*Sousa chinensis*) from the Pearl River Estuary, China. *Chemosphere* 114: 106-113. (Impact factor: 5.778).
39. Gui D, **Yu R Q**, He X, Tu Q, Wu Y. 2014. Tissue distribution and fate of persistent organic pollutants in the Indo-Pacific humpback dolphins from the Pearl River Estuary, China. *Marine Pollution Bulletin* 86: 266-273. (Impact factor: 3.241).
40. **Yu R Q***, Reinfelder J, Hines M E, Barkay T. 2013. Mercury methylation by the methanogen *Methanospirillum hungatei*. *Applied and Environmental Microbiology* 79(20): 6325-6330.
41. **Yu R Q**, Flanders J R, Mack E E, Turner R, Mirza M B, and Barkay T. 2012. Contribution of coexisting sulfate and iron reducing bacteria to methylmercury production in freshwater river sediments. *Environmental Science and Technology* 46: 2684-2691.
42. **Yu R Q**, Adatto I, Montesdeoca M R, Driscoll C T, Hines M E, and Barkay T. 2010. Mercury methylation in *Sphagnum* moss mats and its association with sulfate-reducing bacteria in an acidic Adirondack forest lake wetland. *FEMS Microbiology Ecology* 74: 655-668. (Impact factor: 3.495).
43. **Yu R Q**. 2008. Marine and freshwater fishes in wetland ecosystems along the coastal areas in Guangdong and Macau, China. In: Chen J Q & Chen G Z (eds.), *Wetlands of Guangdong and Macau*. Macau Youth News Press.
44. **Yu R Q**, Fleeger J W. 2006. The effects of nutrient enrichment, depuration substrate and body size on the trophic transfer of cadmium associated with microalgae to the benthic amphipod *Leptocheirus plumulosus*. *Environmental Toxicology and Chemistry* 25(11): 3065-3072. (Impact factor: 3.179).
45. Zeng L X, Chen G Z, Wu H H, Zhang Q Y, **Yu R Q**. 2006. Bioaccumulation and elimination under low concentration of cadmium from Asian Clam (*Corbicula fluminea*) at the presence of humic acids. *Ecological Sciences* 25(3): 240-242.

46. **Yu R Q**, Wang W-X. 2004. Biological uptake of Cd, Se(IV), and Zn in *Chlamydomonas reinhardtii* in response to phosphate and nitrate additions. *Aquatic Microbial Ecology* 35: 163-173. (Impact factor: 2.024).
47. **Yu R Q**, Wang W-X. 2004. Biokinetics of trace elements in a freshwater alga and *Daphnia magna* under different phosphorus and nitrogen conditions. *Environmental Pollution* 129: 443-456.
48. Zeng L X, Chen G Z. **Yu R Q**, Li Y C, Lu J. 2003. Review of biological monitoring on aquatic heavy metal pollution. *The Administration and Technique of Environmental Monitoring* 3: 12-15.
49. **Yu R Q**, Wang W-X. 2002. Kinetic uptake of bioavailable metals by *Daphnia magna*. *Environmental Toxicology and Chemistry* 21(11): 2348-2355.
50. **Yu R Q**, Wang W-X. 2002. Trace metal assimilation and release budget in *Daphnia magna*. *Limnology and Oceanography* 47(2): 495-504. (Impact factor: 4.325).
51. Liu Y, **Yu R Q**, and Chen G Z. 2001. Abundance and biomass of mangrove diatoms and their relationships with benthos. *Marine Environmental Science* 20(3): 24-28.
52. **Yu R Q**, Liu Y H, Huang R M. 1998. Microbial degradation of organophosphorus pesticide (Dimethoate) wastewater. In: Chen X G et al (eds.), *Environmental Science Research and Application*. Chinese Environment Science Press. Peking. 101-103.
53. Liu Y H, Li S B, Liu F, Zhong Y C and **Yu R Q**. 1998. Degradation of organophosphate pesticide dimethoate by *Aspergillus sp.* L8. *Shanghai Environmental Sciences* 17(8): 20-21.
54. **Yu R Q**, Xie J M, Yang G X et al. 1998. Quality and pollutant accumulation in the seafood in Zhanjiang Harbor Bay. *Marine Environmental Science* 17(2): 45-49.
55. **Yu R Q**, Yang G X, Chen X G et al., 1998. The quality and pollutant accumulation status of aquatic products from inner estuarine regions of the Pearl River. *Acta Scientiarum Naturalium Universitatis Sunyatseni* 37(S1): 99-103. (Impact factor: 1.009).
56. **Yu R Q** and Li S Y. 1998. Marine ecological effects of navigation channel dredging and quantitative analysis of fishery resource loss in the Pearl River Estuary. *Acta Scientiarum Naturalium Universitatis Sunyatseni* 37(S2): 180-185.
57. **Yu R Q**, Mai Z Q, Chen G Z, Hu W F. 1998. Ecological succession of aquatic animal communities in Cattail wetland purification systems from the Pb/Zn mine. In: Lang H.Q., P. Lin and J.J. Lu (eds.), *Conservation & research of wetlands in China*. East China Normal University Press, Shanghai. P. 286-293.
58. **Yu R Q**, Chen G Z, Yuk-Shan Wong et al. 1997. Benthic macrofauna of the mangrove swamp treated with municipal wastewater. *Hydrobiologia* 347: 127-137. (Impact factor: 2.165).
59. **Yu R Q**, Chen G Z, Zhang J H et al. 1997. Effects of discharging wastewater on seasonal fluctuation of benthic macrofauna in a mangrove swamp. *China Environmental Science* 17(6): 497-500. (Impact factor: 1.918).
60. Yang G X, **Yu R Q**, and Zhong Y Q. 1997. Distribution of aromatic hydrocarbons in fish tissues. *Journal of Agro-Environment Science* 16(6): 257-278. (Impact factor: 2.218).
61. **Yu R Q**, Chen G Z, Wong Y S et al. 1996. Spatial zonation of benthic macrofauna and possible effects of sewage discharge on it in Futian Mangrove Swamp, Shenzhen. *Acta Ecologica Sinica* 16(3): 283-288. (Impact factor: 2.321).
62. **Yu R Q**, Chen X G, Wang J S, Wu Q H. 1996. Study on ecological planning and effects of Donghai Island Industrializing Zone construction on the surrounding bay in

Zhangjiang Harbor. *Acta Scientiarum Naturalium Universitatis Sunyatsen* 35 (Suppl.): 275-280.

63. Yu R Q, Chen G Z, Lan C Y et al. 1995. A study on species composition of the benthic macrofauna in Futian Mangroves, Shenzhen. In: Fan H Q & Liang S C (eds.), *Research and management on China mangroves*. Science Press. Peking. 130-135.
 64. Bai Q S, Xu R L, Yu R Q, Meng J S. 1995. Study on the zooplanktonic community structure in Xinfeng Jiang Reservoir, China. *Supplement to the Journal of Sun Yatsen University* 1, the symposium of biology (3): 135-141.
 65. Yu R Q, Li C H. 1993. Ecological effects of Bohe Liantou crude oil pier project on marine animal communities. *Acta Scientiarum Naturalium Universitatis Sunyatseni* 32(Suppl.): 124-129.
 66. Yu R Q, He X Q. 1992. Effects of low pH on blood acid-base balance in grass carp (*Ctenopharyngodon idellus*). *Acta Scientiae Circumstantiae* 12(1): 112-118. (Impact factor: 1.497).
 67. Yu R Q, He X Q. 1992. The effects of low pH on respiratory activity and oxygen consumption metabolism of grass carp (*Ctenopharyngodon idellus*). *Acta Scientiae Circumstantiae* 12(1): 105-111. (Impact factor: 1.497).
- (Yu's Google Scholar citations: <https://scholar.google.com/citations?user=CtjQU3oAAAAJ&hl=en>)

Grants:

Pending- Funded in Progress -

- 2025-2028. NSF Equipment Grant: MRI: Track #1 acquisition of Fourier transform infrared microscopy for multidisciplinary materials research and education. Co-PI. \$398,790. Pending.
- 2021-2025. NSF. Acquisition of Tekran mercury speciation system for mercury biotransformation and ecotoxicology research and training at UT-Tyler. PI. \$112,576.00. Current.

Completed -

- 2020-2021. University of Texas at Tyler Research Council Grant. Genome and ecological role characterization of one stilbene-degrading bacterium in the fungus-peanut plant interaction. PI. \$ 3,750. Completed.
- 2019-2020. University of Texas at Tyler Research Council Grant. East Texas Research Grants. Mercury contamination in east Texas lakes: Detection by microbial mercury methylation genes. PI. \$10,000.
- 2019. Texas Commission on Environmental Quality (TCEQ). Water quality data collection for indicator pathogen bacteria in the Neches River watershed. \$40,000.
- 2018. US Army Research, Development and Engineering Command, Army Research Office. The metabolism and genomics of industrial vs. wild strains of *Clostridium acetobutylicum* in biofuel butanol synthesis. \$20,000.
- 2017. University of Texas at Tyler Research Council Grant. Interplay of methylmercury and methane synthesis by syntrophs and methanogens in a southern forest lake wetland. PI. \$9,500.
- 2017. Co-curricular funds of the College of Art and Science at UT Tyler. PI. \$1,200.
- 2016. Co-curricular funds of the College of Art and Science at UT Tyler. PI. \$1,500.

2007. New Jersey Water Research Resource Institute Graduate Student Grant. Using assimilated ¹³C-DNA to fingerprint active microorganisms in methylmercury demethylation by stable-isotope probing. PI. \$5,000.
2003. National Sigma Xi Grant-in-Aid of Research. Sigma Xi, The Scientific Research Society Research Triangle Park, NC, USA. PI. \$500.
2003. J. Bennett Johnston Science Foundation (graduate students). Environmental Research Consortium of Louisiana, USA. PI. \$5,000.
2000. Natural Science Fund of Guangdong Province, China. PI. RMB 50,000.

Teaching and Mentoring:

- BIOL 4300 Microbiology (Spring 2015–Spring 2025; Teaching Evaluation 4.0–4.5/5)
- BIOL 4101 Microbiology Laboratory (Spring 2015–Spring 2025)
- BIOL 5336 Environmental Microbiology (Fall 2015, Spring 2018, 2020, 2022, 2024; Teaching Evaluation (TE) 4.5–4.6/5)
- BIOL 5334 Ecotoxicology (Spring 2017, 2019, 2021, 2023, 2025; TE 4.1–4.7/5.0)
- BIOL 1106 General Biology I Lab (Fall 2014, Fall 2015, Spring 2017, Fall 2017)
- BIOL 1107 General Biology II Lab (Fall 2014, Spring 2014, Spring 2018).
- New Course Development: Environmental Microbiology and Ecotoxicology.

Master's Graduate Students Advising - University of Texas at Tyler

- Graduate students: Maura Purcell (2015-2017); Nevada King (2017-2019); Brandi Ballard (2019-2022); Stephan Joseph (2021-2023, now at Biochemistry PhD program at Rice Univ.); Sharon Schmidt at current MS Biology Program.
- Mentoring over 30 undergraduate students for short term experiments in the lab during the pasting 10 yrs. At least 15 students attending medical or dental schools, and five attending graduate schools.

Awards & Medium Coverage:

Awards -

2024. Excellent Editor Award in Year 2023 Service in the Elsevier Journal Eco-Environment & Health (Mar 27, 2024).
2018. First undergraduate poster presentation award by Priya Patel in ASM-TX Branch Spring Meeting (New Braunfels, Texas. March 2018) as the advisor. The genomic and physiological characterization of *Sphingobium yanoikuyae* JS1018 in plant stilbenoid allelopathy.
2017. Third undergraduate poster presentation award by Nevada King in ASM-TX Branch Spring Meeting (March 2017) as the advisor. Microbial mercury methylation and methane synthesis in Caddo Lake.
2016. Second graduate poster presentation award by Maura Purcell in ASM-TX Branch Fall Meeting as the advisor. CH₄ emission in East Texas grassland soils.
2007. New Jersey Water Research Resource Institute Graduate Student Grant. Using assimilated ¹³C-DNA to fingerprint active microorganisms in methylmercury demethylation by stable-isotope probing. \$5,000.
2003. National Sigma Xi Grant-in-Aid of Research. Sigma Xi, The Scientific Research Society Research Triangle Park, NC, USA. \$500.
2003. J. Bennett Johnston Science Foundation (graduate students). Environmental Research Consortium of Louisiana, USA. \$5,000.

2000. The Science and Technology Advancement in Guangdong Province, China. The Third Prize.

Medium Coverage -

1. CBS19: Scientists, vets warning pet owners to be aware of algae in wake of viral stories. August 14, 2019. Algal toxin interview by Tim Wolf. <https://www.cbs19.tv/article/news/local/scientists-vets-warning-pet-owners-to-be-aware-of-algae-in-wake-of-viral-stories/501-2f7c4600-c3a0-4f2e-a82a-4612e58e4e81>.
2. UT Tyler News: The University of Texas at Tyler student researcher earns state conference award (by Hannah Buchanan). April 17, 2017. Nevada King's poster award. <https://www.uttyler.edu/news/pressrelease/2017/04172017.php>
3. US Army News: Army Research Laboratory initiative lends hand to economical waste-to-energy production (By Jenna Brady). Feb. 18, 2016. Biofuel project with Drs. Banda and Hertweck: <https://www.arl.army.mil/www/default.cfm?article=2678>
4. UT Tyler News: Patriot spotlight: Biology graduate students and faculty (by Hannah Buchanan). January 29, 2016. Student experimental activities from Bullard High School with Dr. Azghani: <https://www.uttyler.edu/news/announcements/2016/01292016.php>

Professional Service:

Editor and Reviewer for Books, Proposals, and Journal Papers-

Editorial board member of Elsevier journal *Eco-Environment & Health*

(<https://www.sciencedirect.com/journal/eco-environment-and-health/about/editorial-board>).

Review editor for marine pollution assessments and solution of *Frontiers in Ocean Sustainability* (<https://loop.frontiersin.org/people/1959167/overview>).

Topic editor for the journal *Diversity* (https://www.mdpi.com/journal/diversity/topic_editors), impact factor: 1.402; and guest editor for special issue 'Microbial Metagenomics and Bioinformatics' (ISSN 1424-2818). https://www.mdpi.com/journal/diversity/special_issues/microbial_metagenomics.

Invited reviewer of book chapters: Ecotoxicology (by Welbourn, Wright, Hodson, and Campbell. Cambridge University Press. 2020).

Invited reviewer of book chapters: Brock Biology of Microorganisms (15th Edition, 2016) (one of the classic Microbiology textbooks).

Ad-hoc proposal reviewer for NSF; U. S. Army Corps of Engineers Engineer Research and Development Center (ERDC); DoD: Strategic Environmental Research and Development Program (SERDP); Louisiana Sea Grant (FY 2020-21).

Ad-hoc reviewer for journals: *Environmental Science and Technology*; *Environmental International*; *Scientific Reports*; *Applied and Environmental Microbiology*; *FEMS Microbiology Ecology*; *Environmental Pollution*; *Chemosphere*; *Journal of Proteome Research*; *Biodegradation*; *Microbial Ecology*; *Journal of Environmental Quality*; *Nature Communications Biology*.

Institutional and Departmental Service Activities -

2021 - 2023	Dept. of Biology -Award Committee member, Faculty Hire Committee
2015 - 2020	Dept. of Biology - Course & Curriculum Committee member
2020 - 2021	Dept. of Biology -Tenure Evaluation, Faculty Hire Committee member

	Dept. of Biology – Director of Space and Facilities Committee
2019 – 2020	Dept. of Biology – Graduate Affairs, and Award Committee member
2018 – 2019	Dept. of Biology – Space and Facilities Committee member
2017 – 2018	Dept. of Biology – Space and Facilities Committee member
2016 – 2017	Dept. of Biology – Core Curriculum Committee member
2016 – 2017	Dept. of Biology – Course & Curriculum Committee member
2016 – 2017	Dept. of Biology – Space and Facilities Committee member

Invited Seminars and Professional Meetings –

2024	Keynote Speaker. SETAC Asia-Pacific 14th Biennial Meeting, Tianjin, China on Sept. 21-25 th , 2024.
2024	Spring 2024 East Texas Research Conference. Tyler, TX.
2023	Fall 2023 Texas Branch ASM Meeting. Tarleton State Univ. in Stephenville, TX.
2023	American Society of Microbiology (ASM) Microbe 2023. Houston, TX.
2022-2023	Elsevier Journal Eco-Environment & Health Zoom (to international audience). The 1st International Conference on Eco-Environment & Health, Haikou.
2019	East Texas Research Conference Tyler, Texas
2018	Sam Houston State University Huntsville, Texas
2018	Spring 2018 ASM-Texas Branch Meeting New Braunfels, Texas
2017	Spring 2017 ASM-Texas Branch Meeting New Braunfels, Texas
2016	Fall 2016 ASM-Texas Branch Meeting. Dallas, Texas
2015	ASM General Meeting New Orleans, LA

Memberships of Professional Society –

American Society for Microbiology; ASM-Texas Branch.
Society of Environmental Toxicology and Chemistry (SETAC), USA.

Civil Service Activities:

UT Tyler Faculty and Staff Basketball PE Team. Team leader. 2019–2025.
UT Tyler Biology Summer camp for middle and high school students. 2023.
Algal toxin interview by CBS19 (Tim Wolf). 2019. Scientists, vets warning pet owners to be aware of algae in wake of viral stories. August 14, 2019.
Algal toxin analysis on University Lake with Brandis Ballard from Environmental Health and Safety (EH&S) at UT Tyler. Summer 2019.
Chinese teaching for local community students every Sunday in Tyler Chinese School as a volunteer (<http://tylerchineseschool.org/index.php>). Spring 2019.
Bacterial assay setup and demonstration on hands and teeth of Gifted Talent Class Students by using agar plate culturing for Brown Elementary School, Whitehouse, TX. Spring 2016.
High school student guiding of Tyler-Bullard ISD on Spaceflight Experiment Program (SSEP) student projects: Bacterial spaceflight experiment design for NASA (Led by Dr. Azghani). Fall 2015.