

CURRICULUM VITAE – JANUARY 2024

Edward M. Mager

Department of Biological Sciences & Advanced Environmental Research Institute
University of North Texas, 1155 Union Circle #310559
Denton, TX 76203-5017

Office: (940) 369-8392 · Fax: (940) 565-4297

Email: Edward.Mager@unt.edu · Website: <http://biology.unt.edu/~mager/>

Google Scholar: <https://scholar.google.com/citations?hl=en&user=DR5bKb4AAAAJ>

EDUCATION

- 2010 Doctor of Philosophy, Marine Biology & Fisheries, University of Miami, Miami, FL
Dissertation: *Interaction between Water Chemistry and Waterborne Lead Exposure in Freshwater Organisms*. Major Advisor: Dr. Martin Grosell
- 1996 Master of Science, Biotechnology, Northwestern University, Evanston, IL
- 1995 Bachelor of Science, Biology, St. Louis University, St. Louis, MO

PROFESSIONAL APPOINTMENTS

- 2023 – Present Associate Professor, University of North Texas, Denton, TX
- 2016 – 2023 Assistant Professor, University of North Texas, Denton, TX
- 2015 – 2016 Assistant Scientist, University of Miami, RSMAS, Miami, FL
- 2010 – 2015 Postdoctoral Associate, University of Miami, RSMAS, Miami, FL
- 2005 – 2010 Graduate Assistant, University of Miami, RSMAS, Miami, FL
- 2001 – 2005 Senior Research Associate 3, University of Miami, Miller School of Medicine, Miami, FL
- 2000 – 2001 Senior Research Associate, Incyte Genomics, St. Louis, MO
- 1997 – 2000 Research Associate 3, University of California San Francisco, San Francisco, CA
- 1996 – 1997 Research Technician, Chiron Corporation, Emeryville, CA

FUNDED RESEARCH GRANTS

Extramural

- "Aiding Imperiled Fish and Mussel Conservation Using Swimming Performance Metrics to Inform the Design or Modification of Road Stream Crossings", Sponsored by Texas Department of Transportation (TxDOT) and Texas Parks and Wildlife Department's (TPWD) Interagency Team, PI: Mager; \$93,341 (September 1, 2023 – August 31, 2025).
- "Quantification of Physiological Performance and other Functional Traits of Plains Fishes in Support of Mechanistic Management and Conservation", Sponsored by U.S. Fish and Wildlife Service/Texas Parks and Wildlife Department, PI: Hoeinghaus, Co-PI: Mager; \$153,465 (January 1, 2023 – December 31, 2025).
- "Integrating Sensors, Controls, and Ecotoxicology with Decoupled Aquaponics Using Brackish Groundwater and Desalination Concentrate for Sustainable Food Production", Sponsored by United

States Department of Agriculture, PI: Acevedo, Co-PIs: Mager and Li; \$1,000,000 (October 15, 2022 – September 31, 2025).

- The Cristina and Charles Johnson Foundation, PI: Mager; \$50,000 (February 2021 – Undefined).
- "RECOVER 2," Sponsored by Gulf of Mexico Research Initiative, PI: Grosell, Co-PIs: Benetti, Esbaugh, Roberts, Burggren, Crossley, Mager, Schlenk, Paris-Limouzy and Lutcavage; \$1,113,292 consortium total (January 1, 2018 – December 31, 2019).
- "Assessing Fish Swimming Performance to Inform Stream Crossing Design and Barrier Prioritization", Sponsored by U.S. Fish and Wildlife Service/Texas Parks and Wildlife Department, PI: Mager; \$40,000 (January 1, 2020 – December 31, 2021).
- "Assessing Fish Swimming Performance to Inform Stream Crossing Design and Barrier Prioritization", Sponsored by U.S. Fish and Wildlife Service/Texas Parks and Wildlife Department, PI: Mager; \$33,860 (January 1, 2020 – December 31, 2021).
- "Genomics of Fathead Minnow Pb Toxicity in Different Water Chemistries", Sponsored by U.S. Environmental Protection Agency STAR Fellowship, Fellow: Mager; \$37,000 (September 2007 – August 2010).

Intramural

- "Using Brackish Groundwater and Desalination Concentrate for Food Production", Sponsored by the University of North Texas College of Engineering and College of Science, PI: Acevedo, Co-PI: Mager; \$10,000 (July 1, 2021 – March 31, 2022).
- "Physiological and Morphological Traits of North Texas Stream Fishes", Sponsored by AERI, University of North Texas, PI: Hoeinghaus, Co-PI: Mager; \$10,900 (June 1, 2019 – August 31, 2019).
- "Coping with Environmental Change: An Analysis of Inter-individual Variation in Metabolic Traits of Fish from the North Texas Watershed", Sponsored by Office of Research and Innovation, University of North Texas, PI: Mager; \$8,042 (May 2018 – August 2018).
- "Influences of Water Quality Changes in Natural and Aquaculture Systems on the Metabolic Performance of Naked Carp", Sponsored by UNT International, University of North Texas, PI: Mager; \$1,650 (April 2017 – August 2017).

RESEARCH PROPOSALS UNDER REVIEW

- "Physiological Tolerance, Life History and Community Assessments of Red River Fishes to Inform Conservation Plans for Imperiled Species", Sponsored by Texas Comptroller of Public Accounts, PI: Mager, Co-PI: Hoeinghaus; \$350,000 (September 1, 2024 – August 31, 2026).

UNFUNDED RESEARCH PROPOSALS

- "Development of Rapid responses for the Oil spill – food web NEXus (DRONE): Integrating eDNA Metabarcoding and Ecotoxicology with Aerial Onboard Sampling", Submitted to the Texas General Land Office, PI: Mager, Co-PI: Compson, Co-PI: Wei (CENG); \$245,025 (September 1, 2023 – August 31, 2025).
- "Phenotypic Effects of Developmental Hypoxia on Performance and Cardiac Function Across

Generations of Zebrafish”, Submitted to University of North Texas, AERI, PI: Crossley, Co-PI: Mager; \$10,000 (June 1, 2023 – August 31, 2023).

- "Fish Physiological Responses to Environmental Change: Effects of Acclimation History", Submitted to National Science Foundation, PI: Mager, Co-PI: Hoeinghaus; \$587,477 (September 1, 2022 – August 31, 2025).
- "Identifying Thermal Acclimation Approaches to Enhance Stocking Viability of Hatchery-Reared Guadalupe Bass", Submitted to US Fish and Wildlife Service/Texas Parks and Wildlife Department, PI: Mager; \$68,823 (September 1, 2022 – August 31, 2024).
- "Informing the Critical Parameters of Environmental Tolerance Associated with Climate Change for the Devil's River Minnow (*Dionda diaboli*)", Submitted to The Mohamed bin Zayed Species Conservation Fund, PI: Mager; \$20,333 (June 1, 2022 – May 31, 2023).
- "Influence of Acclimation History on Intraspecific Variation in Metabolic Rate and Thermal Tolerance Phenotypes of Fishes from Drought-Prone Streams", Submitted to National Science Foundation, PI: Mager, Co-PI: Hoeinghaus; \$530,211 (September 1, 2021 – August 31, 2024).
- "Assessing Thermal Acclimation Approaches to Enhance Climate Change Resistance and Stocking Viability of Hatchery-Reared Guadalupe Bass", Submitted to US Fish and Wildlife Service/Texas Parks and Wildlife Department, PI: Mager; \$80,400 (September 1, 2022 – August 31, 2024).
- "Informing the Efficacy of Chemical Countermeasures in Response to Oil Exposures Associated with Extreme Weather Events", Submitted to Texas General Land Office, PI: Mager, Co-PI: Roberts; \$236,924 (September 1, 2019 – August 31, 2021).
- "Oil Toxicity to Cold Water Fishes Following a Pipeline Spill", Submitted to State of Montana, PI: Roberts; Co-PIs: Morris, Mager and Crossley; \$350,000 (January 1, 2019 – June 30, 2021).
- "Understanding Risks to Human Health and Environmental Integrity along Inland Crude Oil Transportation Corridors from the Arctic to the Gulf of Mexico", Submitted to National Academy of Sciences, PI: Roberts, Co-PIs: Mager and Venables; \$450,000 (January 1, 2018 – December 31, 2020).
- "Gulf Research Program Early Career Research Fellowship", Submitted to National Academy of Sciences, PI: Mager; \$76,000 (September 1, 2018 – August 31, 2020).
- "Gulf Research Program Early Career Research Fellowship", Submitted to National Academy of Sciences, PI: Mager; \$76,000 (September 1, 2017 – August 31, 2019).

PEER-REVIEWED PUBLICATIONS (66 TOTAL)

Citation metrics as of 12/1/2023 (Google Scholar): h-index: 32; i10-index: 52; citations: 3745.

PUBLISHED WHILE AT UNT (32 OF 66 TOTAL):

**Indicates student author from Mager lab. †Indicates trainee from Mager lab or Mager as corresponding author.*

66. **Mager, E.** and C. Pasparakis. (2023) Crude Oil-induced Cardiotoxicity in Fishes. In *Encyclopedia of Fish Physiology* (ed. A. Esbaugh). Academic Press, United Kingdom. In press.
65. Olsen, L., M. Levy, J. Medley, H. Hassan, R. Alexander, E. Wilcock, K. Yi, L. Florens, S. McKinney, R. Peub, J. Persons, A. Kenzior, E. Maldonado, A. Gluesenkamp, **E. Mager**, D. Coughlin, N. Rohner. (2023)

- Metabolic Reprogramming Underlies Cavefish Muscular Endurance Despite Selective Loss of Muscle Mass and Contractility. *Proceedings of the National Academy of Sciences*. 120(5), e2204427120.
64. Bonatesta, F.*†, V. Messerschmidt, L. Schneider, J. Lee, A. Lund and **E. Mager**. (2023) Acute Exposure of Early Life Stage Zebrafish (*Danio rerio*) to *Deepwater Horizon* Crude Oil Impairs Glomerular Filtration and Renal Fluid Clearance Capacity. *Environmental Science and Pollution Research*. 30, 21990–21999.
63. Bonatesta, F.*†, A. Khursigara, K. Ackerly, A. Esbaugh, and **E. Mager**. (2022) Early Life-Stage *Deepwater Horizon* Crude Oil Exposure Induces Latent Osmoregulatory Defects in Larval Red Drum (*Sciaenops ocellatus*). *Comparative Biochemistry and Physiology, Part C*. 260, 109405.
62. Messerschmidt, V., U. Chintapula, F. Bonatesta*, S. Laboy-Segarra, A. Naderi, K. Nguyen, H. Cao, **E. Mager**, and J. Lee. (2022) *In vivo* Evaluation of Non-Viral NICD Plasmid-Loaded PLGA Nanoparticles in Developing Zebrafish to Improve Cardiac Functions. *Frontiers in Physiology*. 13, 819767.
61. Bonatesta, F.*†, C. Emadi*, E. Price, Y. Wang, J. Greer, E. Xu, D. Schlenck, M. Grosell, and **E. Mager**. (2022) The Developing Zebrafish Kidney is Impaired by *Deepwater Horizon* Crude Oil Early-Life Stage Exposure: A Molecular to Whole-Organism Perspective. *Science of the Total Environment*. 808:151988.
60. Price, E.†, F. Bonatesta*, V. McGruer, D. Schlenck, A. Roberts, and **E. Mager**. (2022) Exposure of Zebrafish Larvae to Water Accommodated Fractions of Weathered Crude Oil Alters Steroid Hormone Concentrations with Minimal Effect on Cholesterol. *Aquatic Toxicology*. 242:106045.
59. Cartolano, M., M. Alloy, E. Milton, A. Plotnikova, **E. Mager**, and D. McDonald. (2021) Exposure and Recovery from Environmentally Relevant Levels of Waterborne Polycyclic Aromatic Hydrocarbons from *Deepwater Horizon* Oil: Effects on the Gulf Toadfish Stress Axis. *Environmental Toxicology and Chemistry*. 40(4):1062–1074.
58. Yao, Z., K. Schauer, I. Ruhr, **E. Mager**, R. Heuer, and M. Grosell. (2021) A Marine Teleost, *Opsanus beta*, Compensates Acidosis in Hypersaline Water by H⁺ Excretion or Reduced HCO₃⁻ Excretion Rather than HCO₃⁻ Uptake. *Journal of Comparative Physiology B*. 191:85–98.
57. Bonatesta, F.*†, R. Leads, E. Price, A. Roberts, and **E. Mager**. (2020) Effects of Dissolved Organic Carbon, Ultraviolet Light and their Co-exposure on *Deepwater Horizon* Crude Oil Acute Toxicity to Larval Red Drum (*Sciaenops ocellatus*). *Environmental Toxicology and Chemistry*. 39(12):2509-2515.
56. Price, E.† and **E. Mager**. (2020) Respiratory Quotient: Effects of Fatty Acid Composition. *Journal of Experimental Zoology Part A*. 333, 613–618.
55. Price, E.†, and **E. Mager**. (2020) The Effects of Crude Oil and PAH Exposure on Fish Swim Bladder Development and Function. *Comparative Biochemistry and Physiology, Part C*. 238, 108853.
54. Reynolds Kirby, A., D. Crossley II, and **E. Mager**. (2020) The Metabolism and Swimming Performance of Sheepshead Minnows (*Cyprinodon variegatus*) Following Acute Thermal Acclimation or Acute Thermal Exposure. *Journal of Comparative Physiology B*. 190(5):557-568.
53. Ruhr, I., C. Wood, K. Schauer, Y. Wang, **E. Mager**, B. Stanton, and M. Grosell. (2020) Is Aquaporin AQP3 Involved in Water Permeability Changes in the Killifish during Hypoxia and Normoxic Recovery in Freshwater and Seawater? *Journal of Experimental Zoology Part A*. 333(7):511-525.
52. Grosell, M., R. Heuer, N. Wu, R. Cramp, Y. Wang, **E. Mager**, R. Dwyer, and C. Franklin. (2020) Salt-water Acclimation of the Estuarine Crocodile, *Crocodylus porosus*, Involves Enhanced Ion Transport Properties of the Urodaeum and Rectum. *Journal of Experimental Biology*. 223, jeb210732.
51. Schlenker, L., M. Welch, **E. Mager**, J. Stieglitz, D. Benetti, P. Munday, and M. Grosell. (2019) Exposure to Crude Oil from the *Deepwater Horizon* Impairs Oil Avoidance Behavior but Not Olfactory Physiology in Juvenile Mahi-mahi (*Coryphaena hippurus*). *Environmental Science & Technology*. 53(23):14001-14009.

50. Wood, C., I. Ruhr, K. Schauer, Y. Wang, **E. Mager**, D. McDonald, B. Stanton, and M. Grosell. (2019) The Osmorespiratory Compromise in the Euryhaline Killifish: Water Regulation during Hypoxia. *Journal of Experimental Biology*. 222, jeb204818.
49. Schlenker, L., M. Welch, T. Meredith, **E. Mager**, E. Lari, E. Babcock, G. Pyle, P. Munday, and M. Grosell. (2019) Damsels in Distress: The Effect of Oil Exposure on Behavior and Olfaction in Bicolor Damselfish (*Stegastes partitus*). *Environmental Science & Technology*. 53(18), 10993-11001.
48. Greer, J., N. Andrzejczyk, **E. Mager**, J. Stieglitz, D. Benetti, M. Grosell, and D. Schlenk. (2019) Whole-Transcriptome Sequencing of Epidermal Mucus as a Novel Method for Oil Exposure Assessment in Juvenile Mahi-Mahi (*Coryphaena hippurus*). *Environmental Science & Technology Letters*. 6, 538-544.
47. Heuer, R., G. Galli, H. Shiels, L. Fieber, G. Cox, **E. Mager**, J. Stieglitz, D. Benetti, M. Grosell, and D. Crossley. (2019) Impacts of Deepwater Horizon Crude Oil on Mahi-Mahi (*Coryphaena hippurus*) Heart Cell Function. *Environmental Science & Technology*. 53(16):9895-9904.
46. Greer, J., **E. Mager**, and L. Fieber. (2019) Altered Expression of Ionotropic L-Glutamate Receptors in Aged Sensory Neurons of *Aplysia californica*. *PLoS ONE*. 14(5), e0217300.
45. Perrichon, P., J. Stieglitz, E. Xu, J. Magnuson, C. Pasparakis, Y. Wang, **E. Mager**, D. Schlenk, D. Benetti, A. Roberts, M. Grosell, and W. Burggren. (2019) Mahi-Mahi (*Coryphaena hippurus*) Life Development: Morphological, Physiological, Behavioral and Molecular Phenotypes. *Developmental Dynamics*. 248(5), 337-350.
44. Wang, Y., C. Pasparakis, **E. Mager**, J. Stieglitz, D. Benetti and M. Grosell. (2019) Ontogeny of Urea and Ammonia Transporters in Mahi-Mahi (*Coryphaena hippurus*) Early Life Stages. *Comparative Biochemistry and Physiology, Part A*. 229, 18-24.
43. Xu, E., J. Magnuson, G. Diamante, **E. Mager**, C. Pasparakis, M. Grosell, A. Roberts and D. Schlenk. (2018) Changes in microRNA-mRNA Signatures Agree with Morphological, Physiological, and Behavioral Changes in Larval Mahi-Mahi Treated with Deepwater Horizon Oil. *Environmental Science & Technology*. 52(22), 13501-13510.
42. Perrichon, P., **E. Mager**, C. Pasparakis, J. Stieglitz, D. Benetti, M. Grosell, and W. Burggren. (2018) Combined Effects of Elevated Temperature and Deepwater Horizon Oil Exposure on the Cardiac Performance of Larval Mahi-Mahi, *Coryphaena hippurus*. *PLoS ONE*. 13(10), e0203949.
41. **Mager, E.†**, C. Pasparakis, J. Stieglitz, R. Hoenig, J. Morris, D. Benetti, and M. Grosell. (2018) Combined Effects of Hypoxia or Elevated Temperature and Deepwater Horizon Crude Oil Exposure on Juvenile Mahi-Mahi Swimming Performance. *Marine Environmental Research*. 139, 129-135.
40. Diamante, G., E. Xu, S. Chan, **E. Mager**, M. Grosell, and D. Schlenk. (2017) Differential Expression of MicroRNAs in Embryos and Larvae of Mahi-Mahi (*Coryphaena hippurus*) Exposed to Deepwater Horizon Oil. *Environmental Science & Technology Letters*. 4(12), 523-529.
39. Reddam, A., **E. Mager**, M. Grosell, and D. McDonald. (2017) The Impact of Acute PAH Exposure on the Toadfish Glucocorticoid Stress Response. *Aquatic Toxicology*. 192, 89-96.
38. Xu, E., **E. Mager**, M. Grosell, J. Stieglitz, E. Hazard, G. Hardiman, and D. Schlenk. (2017) Developmental Transcriptomic Analyses for Mechanistic Insights into Critical Pathways Involved in Embryogenesis of Pelagic Mahi-Mahi (*Coryphaena hippurus*). *PLoS ONE*. 12(7), e0180454.
37. Perrichon, P., C. Pasparakis, **E. Mager**, J. Stieglitz, D. Benetti, M. Grosell, and W. Burggren. (2017) Morphology and Cardiac Physiology are Differentially Affected by Temperature in Developing Larvae of the Marine Fish Mahi-Mahi (*Coryphaena hippurus*). *Biology Open*. 6, 800-809.

36. **Mager, E.†**, C. Pasparakis, L. Schlenker, Z. Yao, C. Bodinier, J. Stieglitz, R. Hoenig, J. Morris, D. Benetti, and M. Grosell. (2017) Assessment of Early Life Stage Mahi-Mahi Windows of Sensitivity during Acute Exposures to *Deepwater Horizon* Crude Oil. *Environmental Toxicology and Chemistry*. 36, 1887-1895.
35. Xu, E., **E. Mager**, M. Grosell, E. Hazard, G. Hardiman, and D. Schlenk. (2017) Novel Transcriptome Assembly and Comparative Toxicity Pathway Analysis in Mahi-Mahi (*Coryphaena hippurus*) Embryos and Larvae Exposed to *Deepwater Horizon* Oil. *Scientific Reports*. 7, 44546.

PUBLISHED PRIOR TO UNT (34 of 66 TOTAL):

34. Pasparakis, C., **E. Mager**, J. Stieglitz, D. Benetti, and M. Grosell. (2016) Effects of *Deepwater Horizon* Crude Oil Exposure, Temperature and Developmental Stage on Oxygen Consumption of Embryonic and Larval Mahi-Mahi (*Coryphaena hippurus*). *Aquatic Toxicology*. 181, 113-123.
33. Nelson, D., R. Heuer, G. Cox, J. Stieglitz, R. Hoenig, **E. Mager**, D. Benetti, M. Grosell, and D. Crossley. (2016) Effects of Crude Oil on In Situ Cardiac Function in Young Adult Mahi-Mahi (*Coryphaena hippurus*). *Aquatic Toxicology*. 180, 274-281.
32. Stieglitz, J., **E. Mager**, R. Hoenig, M. Alloy, D. Benetti, A. Roberts, and M. Grosell. (2016) A Novel Exposure System for Embryo-Larval Toxicity Testing of Pelagic Fish Species: Assessment of Photo-Enhanced Toxicity of Crude Oil. *Chemosphere*. 162, 261-268.
31. Stieglitz, J., **E. Mager**, R. Hoenig, D. Benetti, and M. Grosell. (2016) Impacts of *Deepwater Horizon* Crude Oil Exposure on Adult Mahi-Mahi (*Coryphaena hippurus*) Swim Performance. *Environmental Toxicology and Chemistry*. 35(10), 2613-2622.
30. Xu, E., **E. Mager**, M. Grosell, C. Pasparakis, L. Schlenker, J. Stieglitz, D. Benetti, E. Hazard, S. Courtney, G. Diamante, J. Freitas, G. Hardiman, and D. Schlenk. (2016) Time- and Oil-Dependent Transcriptomic and Physiological Responses to *Deepwater Horizon* Oil in Mahi-Mahi (*Coryphaena hippurus*) Embryos and Larvae. *Environmental Science & Technology*. 50(14), 7842-7851.
29. Alloy, M., D. Baxter, J. Stieglitz, **E. Mager**, R. Hoenig, D. Benetti, M. Grosell, J. Oris, and A. Roberts. (2016) Ultraviolet Radiation Enhances the Toxicity of *Deepwater Horizon* Oil to Mahi-Mahi (*Coryphaena hippurus*) Embryos. *Environmental Science & Technology*. 50(4), 2011-2017.
28. Esbaugh, A., **E. Mager**, J. Stieglitz, R. Hoenig, T. Brown, B. French, T. Linbo, C. Lay, H. Forth, N. Scholz, J. Incardona, J. Morris, D. Benetti, and M. Grosell. (2016) The Effects of Weathering and Chemical Dispersion on *Deepwater Horizon* Crude Oil Toxicity to Mahi-Mahi (*Coryphaena hippurus*) Early Life Stages. *Science of the Total Environment*. 543, 644-651.
27. Edmunds, R., J. Gill, D. Baldwin, T. Lindbo, B. French, T. Brown, A. Esbaugh, **E. Mager**, J. Stieglitz, R. Hoenig, D. Benetti, M. Grosell, N. Scholz, and J. Incardona. (2015) Corresponding Morphological and Molecular Indicators of Crude Oil Toxicity to the Developing Hearts of Mahi-Mahi. *Scientific Reports*. 5, 17326.
26. Ruhr, I., **E. Mager**, Y. Takei, and M. Grosell. (2015) The Differential Role of Renoguanlylin in Osmoregulation and Apical Cl⁻/HCO₃⁻ Exchange Activity in the Posterior Intestine of the Gulf Toadfish (*Opsanus beta*) Acclimated to Hypersaline Seawater. *American Journal of Physiology*. 309, R399-R409.
25. Brix, K., A. Esbaugh, **E. Mager**, and M. Grosell. (2015) Comparative Evaluation of Na⁺ Uptake in *Cyprinodon variegatus variegatus* and *Cyprinodon variegatus hubbsi* (Cyprinodontiformes, Teleostei):

- Evaluation of NHE Function in High and Low Na⁺ Freshwater. *Comparative Biochemistry and Physiology, Part A*. 185, 115-124.
24. Ruhr, I., C. Bodinier, **E. Mager**, A. Esbaugh, C. Williams, Y. Takei, and M. Grosell. (2014) Guanylin Peptides Regulate Electrolyte and Fluid Transport in the Gulf Toadfish (*Opsanus beta*) Posterior Intestine. *American Journal of Physiology*. 307(9), R1167-R1179.
 23. **Mager, E.**, A. Esbaugh, J. Stieglitz, R. Hoenig, C. Bodinier, J. Incardona, N. Scholz, D. Benetti, and M. Grosell. (2014) Acute Embryonic or Juvenile Exposure to *Deepwater Horizon* Crude Oil Impairs the Swimming Performance of Mahi-Mahi (*Coryphaena hippurus*). *Environmental Science & Technology*. 48(12), 7053-7061.
 22. Incardona, J., L. Gardner, T. Linbo, T. Swarts, A. Esbaugh, **E. Mager**, J. Stieglitz, B. French, J. Labenia, C. Laetz, M. Tagal, A. Elizur, D. Benetti, M. Grosell, B. Block, and N. Scholz. (2014) *Deepwater Horizon* Crude Oil is Cardiotoxic to the Developing Hearts of Pelagic Fish. *Proceedings of the National Academy of Sciences*. 111(15), E1510-E1518.
 21. Nys, C., C. Janssen, **E. Mager**, A. Esbaugh, K. Brix, M. Grosell, W. Stubblefield, K. Holze, and K. De Schampelaere. (2014) Development and Validation of a Biotic Ligand Model for Predicting Chronic Toxicity of Lead (Pb) to *Ceriodaphnia dubia*. *Environmental Toxicology and Chemistry*. 33(2), 394-403.
 20. Esbaugh, A., **E. Mager**, K. Brix, and M. Grosell. (2013) Implications of pH Manipulation Methods for Metal Toxicity: Not All Acidic Environments Are Created Equal. *Aquatic Toxicology*. 130-131, 27-30.
 19. **Mager, E.**, L. Medeiros, A. Lange, and M. McDonald. (2012) The Toadfish Serotonin 2A (5-HT_{2A}) Receptor: Molecular Characterization and Its Potential Role in Urea Excretion. *Comparative Biochemistry and Physiology, Part A*. 163(3-4), 319-326.
 18. Esbaugh, A., K. Brix, **E. Mager**, K. De Schampelaere, and M. Grosell. (2012) Multi-Linear Regression Analysis, Preliminary Biotic Ligand Modeling, and Cross Species Comparison of the Effects of Water Chemistry on Chronic Lead Toxicity in Invertebrates. *Comparative Biochemistry and Physiology, Part C*. 155(2), 423-431.
 17. **Mager, E.** (2011) Lead. In *Homeostasis and Toxicology of Non-Essential Metals. Fish Physiology*, Vol. 31B (eds. C.M. Wood, A.P. Farrell, and C.J. Brauner), pp. 185-236. Academic Press, New York.
 16. Esbaugh, A., K. Brix, **E. Mager**, and M. Grosell. (2011) Multi-Linear Regression Models Predict the Effects of Water Chemistry on Acute Lead Toxicity to *Ceriodaphnia dubia* and *Pimephales promelas*. *Comparative Biochemistry and Physiology, Part C*. 154(3), 137-145.
 15. **Mager, E.** and M. Grosell. (2011) Effects of Acute and Chronic Waterborne Lead Exposure on the Swimming Performance and Aerobic Scope of Fathead Minnows (*Pimephales promelas*). *Comparative Biochemistry and Physiology, Part C*. 154(1), 7-13.
 14. **Mager, E.**, K. Brix, R. Gerdes, A. Ryan, and M. Grosell. (2011) Effects of Water Chemistry on the Chronic Toxicity of Lead to the Cladoceran, *Ceriodaphnia dubia*. *Ecotoxicology and Environmental Safety*. 74(3), 238-243.
 13. **Mager, E.**, A. Esbaugh, K. Brix, A. Ryan, and M. Grosell. (2011) Influences of Water Chemistry on the Acute Toxicity of Lead to *Pimephales promelas* and *Ceriodaphnia dubia*. *Comparative Biochemistry and Physiology, Part C*. 153(1), 82-90.
 12. Medeiros, L., **E. Mager**, M. Grosell, and M. McDonald. (2010) The 5-Hydroxytryptamine (5-HT, Serotonin) Subtype 1A (5-HT_{1A}) Receptor Regulates Cortisol Secretion in the Gulf Toadfish, *Opsanus beta*. *Journal of Comparative Endocrinology*. 168(3), 377-387.

11. Sattin, G., **E. Mager**, M. Beltramini, and M. Grosell. (2010) Cytosolic Carbonic Anhydrase in the Gulf Toadfish is Important for Tolerance to Hypersalinity. *Comparative Biochemistry and Physiology, Part A*. 156(2), 169-175.
10. **Mager, E.**, K. Brix, and M. Grosell. (2010) Influence of Bicarbonate and Humic Acid on Effects of Chronic Waterborne Lead Exposure to the Fathead Minnow (*Pimephales promelas*). *Aquatic Toxicology*. 96(2), 135-144.
9. Taylor J., **E. Mager**, and M. Grosell. (2010) Basolateral NBCe1 Plays a Rate-Limiting Role in Transepithelial Intestinal HCO₃⁻ Secretion Serving Marine Fish Osmoregulation. *Journal of Experimental Biology*. 213(3), 459-468.
8. Grosell, M., **E. Mager**, C. Williams, and J. Taylor. (2009) High Rates of HCO₃⁻ Secretion and Cl⁻ Absorption Against Adverse Gradients in the Marine Teleost Intestine: The Involvement of an Electrogenic Anion Exchanger and H⁺-Pump Metabolon? *Journal of Experimental Biology*. 212(11), 1684-96.
7. **Mager, E.**, H. Wintz, C. Vulpe, K. Brix, and M. Grosell. (2008) Toxicogenomics of Water Chemistry Influence on Chronic Lead Toxicity to the Fathead Minnow (*Pimephales promelas*). *Aquatic Toxicology*. 87(3), 200-209.
6. Goldbart, A., **E. Mager**, M. Veling, J. Goldman, L. Kheirandish-Gozal, L. Serpero, G. Piedimonte, and D. Gozal. (2007) Neurotrophins and Tonsillar Hypertrophy in Children with Obstructive Sleep Apnea. *Pediatric Research*. 62(4), 489-94.
5. **Mager, E.**, G. Renzetti, A. Auais, and G. Piedimonte. (2007) Growth Receptors Expression in the Developing Lung. *Acta Paediatrica*. 96(7), 1015-20.
4. Sabogal, C., A. Auais, G. Napchan, **E. Mager**, B. Zhou, C. Suguihara, E. Bancalari, and G. Piedimonte. (2005) Effect of Respiratory Syncytial Virus on Apnea in Weanling Rats. *Pediatric Research*. 57(6), 819-25.
3. Dahlin, K., **E. Mager**, L. Allen, Z. Tigue, L. Goodglick, M. Wadehra, and L. Dobbs. (2004) Identification of Genes Differentially Expressed in Rat Alveolar Type I Cells. *American Journal of Respiratory Cell and Molecular Biology*. 31(3), 309-16.
2. Vanderbilt, J., **E. Mager**, L. Allen, T. Sawa, J. Weiner-Kronish, and L. Dobbs. (2003) CXC Chemokines and Their Receptor are Expressed in Type II Cells and Upregulated by Injury. *American Journal of Respiratory Cell and Molecular Biology*. 29(6), 661-8.
1. Carmel, G., **E. Mager**, L. Binder, and J. Kuret. (1996) The Structural Basis of Monoclonal Antibody Alz-50's Selectivity for Alzheimer's Disease Pathology. *Journal of Biological Chemistry*. 271(51), 32789-95.

MANUSCRIPTS IN PREPARATION (3)

1. Harried, B., D. Hoeinghaus, and **E. Mager**. (2022) Trait Relationships Within and Among Fundamental Niche Dimensions for a North Texas Intermittent Stream Fish Assemblage.
2. Harried, B., D. Hoeinghaus, **E. Mager**, and L. Driver. (2022) Trait-Based Analysis of Spatiotemporal Dynamics of Intermittent Stream Fish Assemblage Structure.
3. Harried, B., D. Walker, Z. Compson, D. Hoeinghaus, and **E. Mager**. (2022) Utility of host traits for explaining variation in intermittent stream fish cutaneous microbiome structure at different stages of drought.

CONFERENCE PRESENTATIONS

PRESENTED WHILE AT UNT (47 OF 101 TOTAL): *Indicates student author from Mager lab.

101. Emadi, C., F. Dos Santos Neto, B. Smithers, M. Acevedo, and **E. Mager**. (2023) Toxicity Assessment and Real-Time Metabolic Trait Responses of Juvenile *Macrobrachium rosenbergii* to Ammonia Exposure at Different Salinities. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Louisville, KY. [International, abstract selected]
100. Emadi, C., F. Dos Santos Neto, **E. Mager**, B. Smithers, X. Li, and M. Acevedo. (2023) Desalination Concentrate as a Potential Resource for Inland Aquaculture. U.S. Bureau of Reclamation, Annual Water Innovations and Networking Workshop, Alamogordo, NM. [National, abstract selected]
99. **Mager, E.**, E. Price, F. Bonatesta, V. McGruer, D. Schlenk, and A. Roberts. (2023) Exposure of Zebrafish Larvae to Water Accommodated Fractions of Weathered Crude Oil Alters Steroid Hormone Concentrations with Minimal Effect on Cholesterol. Society of Environmental Toxicology and Chemistry, South Central Regional Meeting, Denton, TX. [Regional, abstract selected]
98. **Mager, E.**, F. Bonatesta, *C. Emadi, A. Khursigara, L. Schneider, J. Lee, A. Lund, and A. Esbaugh. (2023) Early Life Stage Exposure to Deepwater Horizon Crude Oil Impairs Teleost Osmoregulation by Altering Kidney Development and Function. Texas Chapter of the American Fisheries Society Annual Meeting, Corpus Christi, TX. [State, abstract selected]
97. *Emadi, C., P. Bean, and **E. Mager**. (2022) Assessing Fish Swimming Performance to Inform Stream Crossing Design and Barrier Prioritization. Texas Chapter of the American Fisheries Society Annual Meeting, Hunt, TX. [State, abstract selected]
96. *Bonatesta, F., L. Schneider, V. Messerschmidt, J. Lee, A. Lund, and **E. Mager**. (2022) Acute Exposure of Early Life Stage Zebrafish (*Danio rerio*) to *Deepwater Horizon* Crude Oil Impairs Glomerular Filtration and Renal Fluid Clearance Capacity. Society of Environmental Toxicology and Chemistry, South Central Regional Meeting, Corpus Christi, TX. [Regional, abstract selected]
95. *Emadi, C., *F. Bonatesta, and **E. Mager**. (2022) Modulation of Hemoglobin Isoform mRNA Expression in *Daphnia magna* in Response to Lead and Hypoxia Co-Exposure. Society of Environmental Toxicology and Chemistry, South Central Regional Meeting, Corpus Christi, TX. [Regional, abstract selected]
94. Harried, B., D. Hoeinghaus, **E. Mager**, and L. Driver. (2022) Trait-based Analysis of Spatiotemporal Dynamics of Intermittent Stream Fish Assemblage Structure. Midwest Fish and Wildlife Conference, Des Moines, IA. [Regional, abstract selected]
93. Harried, B., D. Hoeinghaus, **E. Mager**, and L. Driver. (2022) Trait-based Analysis of Spatiotemporal Dynamics of Intermittent Stream Fish Assemblage Structure. Missouri Natural Resource Conference, Osage Beach, MO. [State, abstract selected]
92. *Bonatesta, F., L. Schneider, V. Messerschmidt, J. Lee, A. Lund, and **E. Mager**. (2021) Zebrafish Renal Filtration Integrity Affected by *Deepwater Horizon* Crude Oil Exposure. Society of Environmental Toxicology and Chemistry North America Annual Meeting (virtual). [International, abstract selected]
91. *Emadi, C., *F. Bonatesta, and **E. Mager**. (2021) qPCR Analysis of Hemoglobin Modulation in Response of Co-Exposure to Hypoxia and Lead on *Daphnia magna*. Society of Environmental Toxicology and Chemistry North America Annual Meeting (virtual). [International, abstract selected]

90. *Emadi, C., P. Bean, and **E. Mager**. (2021) Using Swim Tunnels to Assess Whether Urban Development Is Threatening Our Native Texas Fishes. Texas Master Naturalist Annual Meeting (virtual). [State, abstract selected]
89. *Emadi, C., *F. Bonatesta, S. Nayek, G. Verbeck, and **E. Mager**. (2021) Effects of Co-Exposure to Hypoxia and Lead on *Daphnia magna*. Society of Environmental Toxicology and Chemistry, South Central Regional Meeting (virtual). [Regional, abstract selected]
88. *Bonatesta, F., A. Khursigara, K. Ackerly, A. Esbaugh, and **E. Mager**. (2021) Latent Osmoregulatory Defects in Red Drum (*Sciaenops ocellatus*) Associated with Early-Life Stage Exposure to *Deepwater Horizon* Crude Oil. Society of Environmental Toxicology and Chemistry, South Central Regional Meeting (virtual). [Regional, abstract selected]
87. *Emadi, C., P. Bean, and **E. Mager**. (2021) Assessing Fish Swimming Performance to Inform Stream Crossing Design and Barrier Prioritization. Texas Chapter of the American Fisheries Society (virtual). [State, abstract selected]
86. **Mager, E.**, *F. Bonatesta, R. Leads, E. Price, and A. Roberts. (2020) Effects of Dissolved Organic Carbon, Ultraviolet Light and their Co-exposure on *Deepwater Horizon* Crude Oil Acute Toxicity to Larval Red Drum (*Sciaenops ocellatus*). Society of Environmental Toxicology and Chemistry North America Annual Meeting, SciCon2 (virtual). [International, abstract selected]
85. *Bonatesta, F., *C. Emadi, E. Price, and **E. Mager**. (2020) *Deepwater Horizon* Crude Oil Exposure Effects on the Developing Kidney and Fluid Balance in Early Life-Stage Teleost Fish. Society of Environmental Toxicology and Chemistry North America Annual Meeting, SciCon2 (virtual). [International, abstract selected]
84. *Emadi, C., *F. Bonatesta, S. Nayek, G. Verbeck, and **E. Mager**. (2020) Acute Effects of Co-Exposure to Hypoxia and Lead on the Cladoceran, *Daphnia magna*. Society of Environmental Toxicology and Chemistry North America Annual Meeting, SciCon2 (virtual). [International, abstract selected]
83. Benedict, C., D. Porter, B. Harried, **E. Mager**, and D. Hoeinghaus. (2020) Gill Surface Area, Heart Mass and Metabolic Enzyme Activity of North Texas Stream Fishes. Annual Meeting for the Texas Chapter of the American Fisheries Society, Waco, TX. [State, abstract selected]
82. Porter, D., C. Benedict, B. Harried, **E. Mager**, and D. Hoeinghaus. (2020) Gut Morphology and Digestive Enzyme Activities of North Texas Stream Fishes. Annual Meeting for the Texas Chapter of the American Fisheries Society, Waco, TX. [State, abstract selected]
81. Price, E., and **E. Mager**. (2020) The Effects of Oil and PAH Exposure on Swim Bladder Development and Function. Society for Integrative and Comparative Biology Annual Meeting, Austin, TX. [National, abstract selected]
80. *Bonatesta, F., A. Khursigara, J. Greer, E. Xu, D. Schlenk, A. Esbaugh, and **E. Mager**. (2019) Acute and Latent Effects on the Teleost Kidney Following Early Life-Stage Exposure to *Deepwater Horizon* Crude Oil. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Toronto, Canada. [International, abstract selected]
79. *Emadi, C., *F. Bonatesta, S. Nayek, G. Verbeck, and **E. Mager**. (2019) Effects of Acute and Chronic Co-Exposures to Hypoxia and Lead on the Cladoceran, *Daphnia magna*. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Toronto, Canada. [International, abstract selected]
78. *Bonatesta, F., E. Price, J. Greer, E. Xu, D. Schlenk, and **E. Mager**. (2019) Effects of *Deepwater Horizon* Crude Oil Exposure on the Developing Teleost Kidney. Society for Experimental Biology Annual Meeting, Seville, Spain. [International, abstract selected]

77. **Mager, E.**, *C. Emadi, *F. Bonatesta, E. Price, and G. Verbeck. (2019) Acute and Chronic Effects of Co-Exposure to Hypoxia and Lead on the Cladoceran, *Daphnia magna*. Society for Experimental Biology Annual Meeting, Seville, Spain. [International, abstract selected]
76. Andrzejczyk, N., J. Greer, **E. Mager**, M. Grosell, and D. Schlenk. (2019) Transcriptomic Analysis of Juvenile Mahi-Mahi (*Coryphaena hippurus*) Dermal Mucus as a Noninvasive Monitoring Tool for Effects of *Deepwater Horizon* Oil Exposure. International Symposium on Pollutant Responses in Marine Organisms, Charleston, SC. [International, abstract selected]
75. Andrzejczyk, N., J. Greer, **E. Mager**, M. Grosell, and D. Schlenk. (2019) Whole-Transcriptome Sequencing of Epidermal Mucus as a Novel Method for Oil Exposure Assessment in Juvenile Mahi-Mahi. Society of Environmental Toxicology and Chemistry, Southern California Regional Meeting, La Jolla, CA. [Regional, abstract selected]
74. *Bonatesta, F., J. Greer, E. Xu, D. Schlenk and **E. Mager**. (2019) Effects of *Deepwater Horizon* Crude Oil Exposure on the Developing Teleost Kidney. Society of Environmental Toxicology and Chemistry, South Central Regional Meeting, Waco, TX. [Regional, abstract selected]
73. *Bonatesta, F., J. Greer, E. Xu, D. Schlenk and **E. Mager**. (2019) Effects of *Deepwater Horizon* Crude Oil Exposure on the Developing Teleost Kidney. Gulf of Mexico Oil Spill and Ecosystem Science Meeting, New Orleans, LA. [National, abstract selected]
72. Schlenker, L., M. Welch, **E. Mager**, J. Stieglitz, D. Benetti, P. Munday, and M. Grosell. (2019) Behavioral and Physiological Responses of Bicolor Damselfish and Mahi-Mahi to Olfactory Cues Following Crude Oil Exposure. Gulf of Mexico Oil Spill and Ecosystem Science Meeting, New Orleans, LA. [National, abstract selected]
71. *Bonatesta, F. and **E. Mager**. (2018) Effects of *Deepwater Horizon* Crude Oil Exposure on the Developing Teleost Kidney. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Sacramento, CA. [International, abstract selected]
70. Reynolds, A., D. Crossley, and **E. Mager**. (2018) Effects of Acute and Chronic Thermal Exposure on the Swimming Performance and Aerobic Scope of Sheepshead Minnows (*Cyprinodon variegatus*). American Physiological Society Intersociety Meeting, New Orleans, LA. [National, abstract selected]
69. **Mager, E.** (2018) Novel Insights into Crude Oil and PAH Toxicity in Teleost Fishes. Society of Environmental Toxicology and Chemistry, South Central Regional Meeting, Junction, TX. [Regional, invited]
68. Wang, Y., C. Pasparakis, **E. Mager**, J. Stieglitz, and M. Grosell. (2018) Ontogeny of Urea and Ammonia Transporters in Mahi-Mahi (*Coryphaena hippurus*) Early Life Stages. Gulf of Mexico Oil Spill and Ecosystem Science Meeting, New Orleans, LA. [National, abstract selected]
67. Pasparakis, C., L. Sweet, **E. Mager**, J. Stieglitz, D. Benetti, A. Roberts, and M. Grosell. (2018) Combined Effects of Oil Exposure, Temperature and Ultraviolet Radiation on the Early Life Stages of Mahi-Mahi (*Coryphaena hippurus*). Gulf of Mexico Oil Spill and Ecosystem Science Meeting, New Orleans, LA. [National, abstract selected]
66. Schlenk, D., E. Xu, G. Diamante, S. Chan, **E. Mager**, and M. Grosell. (2018) Integration of microRNA and mRNA in Early Life Stages of Mahi after Exposure to *Deepwater Horizon* Oil. Gulf of Mexico Oil Spill and Ecosystem Science Meeting, New Orleans, LA. [National, abstract selected]
65. **Mager, E.**, I. Ruhr, and M. Grosell. (2017) Impacts of *Deepwater Horizon* Crude Oil Exposure on the Intestinal Transport Physiology of the Gulf Toadfish (*Opsanus beta*). Society of Environmental Toxicology and Chemistry North America Annual Meeting, Minneapolis, MN. [International, abstract selected]

64. Schlenker, L., M. Welch, **E. Mager**, J. Stieglitz, D. Benetti, P. Munday, and M. Grosell. (2017) Behavioral and Physiological Responses of Mahi-Mahi (*Coryphaena hippurus*) and Bicolor Damselfish (*Stegastes partitus*) to Olfactory Cues Following Crude-Oil Exposure. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Minneapolis, MN. [International, abstract selected]
63. Xu, E., G. Diamante, S. Chan, **E. Mager**, M. Grosell, and D. Schlenk. (2017) Regulation of microRNAs in Mahi-Mahi (*Coryphaena hippurus*) Exposed to *Deepwater Horizon* Oil. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Minneapolis, MN. [International, abstract selected]
62. J. Stieglitz, **E. Mager**, R. Hoenig, D. Benetti, and M. Grosell. (2017) Metabolic Implications of Fossil Fuel Exposure in an Adult Pelagic Predatory Fish Species: Mahi-mahi (*Coryphaena hippurus*). American Fisheries Society Annual Meeting, Tampa, FL. [National, abstract selected]
61. Pasparakis, C., L. Sweet, **E. Mager**, J. Stieglitz, C. Casente, D. Benetti, A. Roberts, and M. Grosell. (2017) Impacts of Oil Exposure on Mahi Embryos. American Fisheries Society Annual Meeting, Tampa, FL. [National, abstract selected]
60. Schlenker, L., M. Welch, **E. Mager**, J. Stieglitz, D. Benetti, P. Munday, and M. Grosell. (2017) Behavioral Response of Mahi-Mahi (*Coryphaena hippurus*) and Bicolor Damselfish (*Stegastes partitus*) to Olfactory Cues Following Crude-Oil Exposure from the *Deepwater Horizon* Event. American Fisheries Society Annual Meeting, Tampa, FL. [National, abstract selected]
59. **Mager, E.** (2017) Gulf of Mexico Oil Pollution and Larval Fish Physiology. Joint Meeting of Ichthyologists & Herpetologists, Austin, TX. [National, invited]
58. **Mager, E.**, J. Stieglitz, D. Nelson, R. Heuer, G. Cox, D. Benetti, D. Crossley, and M. Grosell. (2017) Impacts of *Deepwater Horizon* Crude Oil Exposure on the Swimming Performance of Juvenile and Young Adult Mahi-Mahi (*Coryphaena hippurus*). Annual Meeting for the Texas Chapter of the American Fisheries Society, Corpus Christi, TX. [State, abstract selected]
57. Wang, Y., **E. Mager**, C. Pasparakis, and M. Grosell. (2016) Developmental Gene Expression Analysis of the Impacts of Crude Oil Toxicity on Nitrogenous Waste Excretion in Mahi-Mahi (*Coryphaena hippurus*) Early Life Stages. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Orlando, FL. [International, abstract selected]
56. Grosell, M., D. DiNicola, J. Stieglitz, Y. Wang, **E. Mager**, D. Nelson, R. Heuer, D. Crossley, L. Schlenker, C. Pasparakis, P. Perrichon, J. Magnuson, A. Roberts, and D. Benetti. (2016) Sublethal Impacts of the *Deepwater Horizon* Oil Spill on Pelagic Top Predators from the Gulf of Mexico – Communicating Science to a Broad Audience. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Orlando, FL. [International, abstract selected]
55. Grosell, M., G. Xhu, D. Schlenk, G. Galli, H. Shields, R. Heuer, D. Nelson, D. Crossley, C. Pasparakis, Y. Wang, L. Schlenker, P. Perrichon, W. Burggren, J. Stieglitz, **E. Mager**, and D. Benetti. (2016) Assessing Impacts of Crude Oil Exposure Across Multiple Levels of Biological Organization in a Pelagic Marine Teleost, the Mahi-Mahi (*Coryphaena hippurus*), Residing in the Gulf of Mexico. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Orlando, FL. [International, abstract selected]

PRESENTED PRIOR TO UNT (54 OF 101 TOTAL):

54. Perrichon, P., C. Pasparakis, **E. Mager**, J. Stieglitz, D. Benetti, M. Grosell, and W. Burggren. (2016) Cardiotoxicity of *Deepwater Horizon* Oil in Mahi-Mahi Larvae is Temperature Dependent. 12th International Congress on the Biology of Fish, San Marcos, TX.

53. McDondald, M., A. Reddam, M. Lobl, **E. Mager**, and M. Grosell. (2016) The Impact of PAH Exposure on the Toadfish Stress Response. 12th International Congress on the Biology of Fish, San Marcos, TX.
52. Wood, C., I. Ruhr, **E. Mager**, and M. Grosell. (2016) The Euryhaline Killifish: Tritiated Water and PEG-4000 Fluxes Provide New Insights into the Osmorespiratory Compromise in Fresh Water and Sea Water. Canadian Society of Zoologists Meeting, London, Ontario.
51. **Mager, E.**, I. Ruhr, Y. Wang, B. Locher, and M. Grosell. (2016) Effects of Deepwater Horizon Crude Oil Exposure on the Intestinal Transport Physiology of the Gulf Toadfish (*Opsanus beta*). Gulf of Mexico Oil Spill and Ecosystem Science Meeting, Tampa, FL.
50. Xu, E., **E. Mager**, M. Grosell, E. Hazard, S. Courtney, G. Hardiman, and D. Schlenk. (2016) Genome-Wide Transcriptional Responses to *Deepwater Horizon* Oil in Mahi-Mahi (*Coryphaena hippurus*) Embryos. Gulf of Mexico Oil Spill and Ecosystem Science Meeting, Tampa, FL.
49. Lipton, I., M. Carney, J. Morris, **E. Mager**, M. Grosell, K. O'Shaughnessy, E. Chesney and S. Bonnot. (2016). Buoyancy and Diameter of Bay Anchovy, Mahi-mahi, Red Drum, and Red Snapper Eggs Found in the Northern Gulf of Mexico. Gulf of Mexico Oil Spill and Ecosystem Science Meeting, Tampa, FL.
48. Sweet, L., J. Magnuson, T. Garner, M. Alloy, J. Stieglitz, **E. Mager**, D. Benetti, M. Grosell, and A. Roberts. (2016) Exposure to Ultraviolet Radiation Increases the Toxicity of Oil to Mahi-Mahi (*Coryphaena hippurus*) Embryos. Gulf of Mexico Oil Spill and Ecosystem Science Meeting, Tampa, FL.
47. Magnuson, J., L. Sweet, T. Garner, M. Alloy, J. Stieglitz, **E. Mager**, D. Benetti, M. Grosell, and A. Roberts. (2016) Molecular Characterization of Antioxidant Response in Mahi-Mahi (*Coryphaena hippurus*) Embryos Co-Exposed to Oil and Ultraviolet Radiation. Gulf of Mexico Oil Spill and Ecosystem Science Meeting, Tampa, FL.
46. Morris, J.M., H. Forth, C. Lay, R. Takeshita, M. Krasnec, J. Lipton, M. Alloy, C. Overturf, T. Garner, A. Roberts, **E. Mager**, J. Stieglitz, C. Pasparakis, Y. Zongli, D. Benetti, M. Grosell, E. Chesney, K. O'Shaughnessy, and M. Gielazyn. (2016) Toxicity of Very Thin Surface Slicks of *Deepwater Horizon* Oil to Pelagic Gulf of Mexico Fish Embryos and Invertebrates. Gulf of Mexico Oil Spill and Ecosystem Science Meeting, Tampa, FL.
45. Morris, J.M., H. Forth, C. Lay, R. Takeshita, M. Krasnec, J. Lipton, T. Lindsey, F. Galvez, M. Alloy, C. Overturf, A. Roberts, **E. Mager**, J. Stieglitz, C. Pasparakis, Y. Zongli, D. Benetti, M. Grosell, E. Chesney, K. O'Shaughnessy, B. Woodall, J. Roberts, M. Boulais, A. Volety. (2015) Toxicity of Very Thin Surface Slicks of *Deepwater Horizon* Oil to Gulf of Mexico Fish and Invertebrate Embryos and Larvae. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Salt Lake City, UT.
44. **Mager, E.**, C. Bodinier, C. Pasparakis, J. Stieglitz, R. Hoenig, D. Benetti, and M. Grosell. (2014) A Window-of-Exposure Evaluation of *Deepwater Horizon* Crude Oil During 96 h Bioassays for Early Life Stage Mahi-Mahi (*Coryphaena hippurus*). Society of Environmental Toxicology and Chemistry North America Annual Meeting, Vancouver, British Columbia.
43. Pasparakis, C., **E. Mager**, J. Stieglitz, R. Hoenig, D. Benetti, and M. Grosell. (2014) Effects of *Deepwater Horizon* Crude Oil Exposure Combined with Hypoxia or Elevated Temperature on the Swimming Performance of Juvenile Mahi-Mahi (*Coryphaena hippurus*). Society of Environmental Toxicology and Chemistry North America Annual Meeting, Vancouver, British Columbia.
42. Stieglitz, J., R. Hoenig, **E. Mager**, D. Benetti, and M. Grosell. (2014) Impacts of *Deepwater Horizon* Sub-Lethal Crude Oil Exposure On Sub-Adult Mahi-Mahi (*Coryphaena hippurus*): Swim Performance and Metabolic Implications In a High-Value Gulf of Mexico Fish Species. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Vancouver, British Columbia.

41. Grosell, M., C. Pasparakis, **E. Mager**, A. Esbaugh, J. Stieglitz, R. Hoenig, C. Bodinier, J. Incardona, N. Scholtz, A. Roberts, and D. Benetti. (2014) Impacts of *Deepwater Horizon* (DWH) Oil on Pelagic Fish from the Gulf of Mexico (GOM) – An Overview of Relevant Endpoints and Effects. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Vancouver, British Columbia.
40. Gardner, L., J. Incardona, T. Linbo, T. Swarts, A. Esbaugh, **E. Mager**, J. Stieglitz, B. French, J. Labenia, C. Laetz, M. Tagal, A. Elizur, D. Benetti, M. Grosell, B. Block, N. Scholz. (2014) Crude Oil Toxicity on the Early Development of Cultured Pelagic Finfish: Southern Bluefin Tuna *Thunnus maccoyii*, Yellowfin Tuna *Thunnus alalunga* and Yellowtail Amberjack *Seriola lalandi*. World Aquaculture Society Meeting, Adelaide, South Australia.
39. **Mager, E.**, A. Esbaugh, J. Stieglitz, R. Hoenig, C. Bodinier, J. Incardona, N. Scholtz, D. Benetti, and M. Grosell. (2013) Combined Effects of *Deepwater Horizon* Oil exposure and Natural Stressors on the Swimming Performance of Juvenile Mahi-Mahi (*Coryphaena hippurus*). Society of Environmental Toxicology and Chemistry North America Annual Meeting, Nashville, TN.
38. Grosell, M., **E. Mager**, A. Esbaugh, J. Stieglitz, R. Hoenig, C. Bodinier, J. Incardona, N. Scholtz, and D. Benetti. (2013) Impacts of *Deepwater Horizon* (DWH) Oil on Pelagic Fish from the Gulf of Mexico (GOM) – An Overview of Relevant Endpoints and Effects. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Nashville, TN.
37. Stieglitz, J., **E. Mager**, R. Hoenig, D. Benetti, and M. Grosell. (2013) Advancements in *Deepwater Horizon* Oil Spill Toxicity Testing: Development of an Innovative Bioassay System, PELEC, for Use with Pelagic Marine Fish Embryos and Larvae. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Nashville, TN.
36. Grosell, M., **E. Mager**, J. Stieglitz, R. Hoenig, C. Bodinier, A. Esbaugh, J. Incardona, and N. Scholtz. (2013) Impacts of Polycyclic Aromatic Hydrocarbons from the Gulf of Mexico's *Deepwater Horizon* Oil Spill on Swim Performance and Aerobic Scope of the High Performing Pelagic Mahi-Mahi. Society for Experimental Biology Annual Meeting, Valencia, Spain.
35. Bodinier, C., J. Stieglitz, **E. Mager**, R. Hoenig, D. Benetti, and M. Grosell. (2013) Ontogeny of Osmoregulation in Three Finfish Species: Mahi-Mahi, Cobia and Yellowfin Tuna. Society for Experimental Biology Annual Meeting, Valencia, Spain.
34. Brix, K., A. Esbaugh, **E. Mager**, and M. Grosell. (2013) Differential Mechanisms of Na⁺ Uptake in Freshwater by Two Populations of Pupfish (*Cyprinodon variegatus*). Society for Experimental Biology Annual Meeting, Valencia, Spain.
33. Ruhr, I., A. Esbaugh, **E. Mager**, C. Bodinier, and M. Grosell. (2013) Guanylin-Regulated Transport in the Intestinal Epithelia of the Gulf Toadfish (*Opsanus beta*). Society for Experimental Biology Annual Meeting, Valencia, Spain.
32. Stieglitz, J., **E. Mager**, R. Hoenig, D. Benetti, and M. Grosell. (2013) Development of an Innovative Bioassay System (PELEC) for Use with Marine Fish Embryos and Larvae. Larval Fish Conference Annual Meeting, Miami, FL.
31. **Mager, E.**, A. Esbaugh, J. Stieglitz, R. Hoenig, C. Bodinier, D. Benetti, and M. Grosell. (2012) Effects of *Deepwater Horizon* Oil Exposures on the Swimming Performance and Cardiac Development of Juvenile Mahi (*Coryphaena hippurus*). Society of Environmental Toxicology and Chemistry North America Annual Meeting, Long Beach, CA.
30. Esbaugh, A., **E. Mager**, J. Stieglitz, R. Hoenig, J. Incardona, N. Scholtz, D. Benetti, and M. Grosell. (2012) Acute Toxicity and Cardiac Impairment of *Deepwater Horizon* Oil on Two Pelagic Fish Species Native to

the Gulf of Mexico. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Long Beach, CA.

29. Grosell, M., A. Esbaugh, **E. Mager**, J. Stieglitz, R. Hoenig, D. Benetti, A. Roberts, J. Incardona, and N. Scholtz. (2012) Impacts of *Deepwater Horizon* Oil on Pelagic Fish from the Gulf of Mexico – An Overview of Testing Efforts and Results. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Long Beach, CA.
28. Stieglitz, J., R. Hoenig, **E. Mager**, A. Esbaugh, D. Benetti, and M. Grosell. (2012) Impacts of Deepwater Horizon Sub-Lethal PAH Exposure on Late Lifestage Pelagic Gamefish: Utilization of Marine Finfish Aquaculture in Toxicology. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Long Beach, CA.
27. **Mager, E.**, K. Brix, A. Esbaugh, and M. Grosell. (2012) Advances in the Understanding of Water Quality Influences on Pb Toxicity and Mechanisms of the Toxic Action of Pb in Fishes. Society for Experimental Biology Animal Symposium, Tuscany, Italy.
26. Esbaugh, A., **E. Mager**, K. Brix, and M. Grosell. (2011) The Physiological Implications of pH Manipulation Methods and Their Impact on Observed Toxicity. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Boston, MA.
25. **Mager, E.**, K. Brix, and M. Grosell. (2009) Influence of Bicarbonate and Dissolved Organic Carbon on Effects of Full Life Cycle Lead Exposures to the Fathead Minnow (*Pimephales promelas*). Society of Environmental Toxicology and Chemistry North America Annual Meeting, New Orleans, LA.
24. Grosell, M., K. Brix, A. Esbaugh, **E. Mager**, and A. Ryan. (2009) Meeting Challenges for the Development of Biotic Ligand Models (BLMs) for Pb. Society of Environmental Toxicology and Chemistry North America Annual Meeting, New Orleans, LA.
23. Ryan, A., R. Santore, P. Paquin, M. Grosell, K. Brix, R. Gerdes, and **E. Mager**. (2009) Evaluation and Refinement of the Freshwater Biotic Ligand Model for Lead. Society of Environmental Toxicology and Chemistry North America Annual Meeting, New Orleans, LA.
22. Whittamore, J., **E. Mager**, R. Wilson, and M. Grosell. (2009) Intestinal HCO_3^- Secretion by the Seawater-Adapted Killifish (*Fundulus heteroclitus*). Society for Experimental Biology Annual Meeting, Glasgow, UK.
21. McDonald, M., **E. Mager**, and L. Medeiros. (2009) Is the 5-HT_{2A} Receptor Involved in Mediating Pulsatile Urea Excretion in Gulf Toadfish, *Opsanus beta*? Society for Experimental Biology Annual Meeting, Glasgow, UK.
20. Medeiros, L., **E. Mager**, and M. McDonald. (2009) Characterizing and Localizing the 5-Hydroxytryptamine (5-HT, Serotonin) Subtype 1A (5-HT_{1A}) Receptor in *Opsanus beta*: Determining Its Role in the Etiology of Stress and Depression. Society for Experimental Biology Annual Meeting, Glasgow, UK.
19. Grosell, M., J. Taylor, **E. Mager**, C. Williams, J. Genz, S. Perry and K. Gilmour. (2009) What's New with Intestinal Transport Processes in Marine Teleost Osmoregulation? Society for Experimental Biology Annual Meeting, Glasgow, UK.
18. **Mager, E.**, K. Brix, C. Vulpe, H. Wintz, and M. Grosell. (2008) Influence of Ambient Water Chemistry on Chronic Pb Exposures in the Fathead Minnow (*Pimephales promelas*) and Phenotypic Anchoring of Pb-Induced Gene Transcriptional Responses. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Tampa, FL.

17. **Mager, E.** and M. Grosell. (2008) Down The Path To Identifying the Transporter(s) Responsible for Intestinal Anion Exchange in Marine Teleost Osmoregulation: Exploring the Versatile SLC26A6. Society for Experimental Biology Annual Meeting, Marseille, France.
16. **Mager, E.**, H. Wintz, C. Vulpe, K. Brix, and M. Grosell. (2008) Phenotypic Anchoring Transcriptional Responses of the Fathead Minnow (*Pimephales promelas*) During Chronic Pb Exposures and Influence of Ambient Water Chemistry. Society for Experimental Biology Annual Meeting, Marseille, France.
15. **Mager, E.**, K. Brix, H. Wintz, C. Vulpe, M. Bayaa, S. Perry, and M. Grosell. (2007) Evaluation of Water Quality on Acute Pb Toxicity and Molecular Mechanisms of Chronic Pb Toxicity in the Fathead Minnow. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Milwaukee, WI.
14. Grosell, M. and **E. Mager**. (2007) Pb-Induced Gene Expression Changes in Freshwater Organisms May Serve Environmental Monitoring and Reveal General Mechanisms of Pb Toxicity. Society for Experimental Biology Metals Symposium 2007, London, UK.
13. **Mager, E.**, H. Wintz, K. Brix, C. Vulpe, and M. Grosell. (2006) An Integrative Analysis of Water Quality & Chronic Water-borne Lead Toxicity in the Fathead Minnow. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Montreal, Quebec.
12. Poynton, H., H. Wintz, **E. Mager**, L. Yoo, X. Guan, J. Steevens, S. Chan, M. Grosell, E. Perkins, and C. Vulpe. (2006) Ecotoxicogenomics: Mechanistic Insight to Develop Predictive Biomarkers of Effect. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Montreal, Quebec.
11. Grosell, M., **E. Mager**, H. Wintz, K. Brix, and C. Vulpe. (2005) Genomics and Physiology of Waterborne Lead Toxicity in Freshwater Organisms. Society of Environmental Toxicology and Chemistry North America Annual Meeting, Baltimore, MD.
10. Greidinger, E., Y. Zang, K. Jaimes, **E. Mager**, and R. Hoffman. (2005) UI-RNA Plus UI-70KD Ribonucleoprotein Autoantigen Induce Anti-RNP Autoimmunity and Interstitial Lung Disease Without the Need for Additional Adjuvant. *Lupus*. 14, 234.
9. **Mager, E.**, A. Auais, G. Renzetti, and G. Piedimonte. (2005) Effects of Prematurity and Hyperoxia on the Expression of Nerve Growth Factor (NGF) and Nerve Growth Factor Receptors as Determined by Real-Time PCR. International Conference of the American Thoracic Society, San Diego, CA.
8. Goldbart, A., **E. Mager**, M. Veling, J. Goldman, L. Kheirandish, L. Serpero, G. Piedimonte, and D. Gozal. (2005) Nerve Growth Factor-Neurokinin Receptor Expression in Adenotonsillar Tissue in Pediatric Obstructive Sleep Apnea (OSA) May Reflect Viral Pathogenetic Mechanisms. International Conference of the American Thoracic Society, San Diego, CA, USA.
7. Renzetti, G., A. Auais, **E. Mager**, and G. Piedimonte. (2005) Effect of Montelukast Prophylaxis on Respiratory Syncytial Virus (RSV)-Induced Neural Remodeling in the Airways of Weanling Rats. International Conference of the American Thoracic Society, San Diego, CA.
6. **Mager, E.**, G. Renzetti, and G. Piedimonte. (2004) Real-Time PCR Analysis of Nerve Growth Factor (NGF) and Nerve Growth Factor Receptors during Fetal Lung Development. International Conference of the American Thoracic Society, Orlando, FL.
5. Sabogal, C., A. Auais, **E. Mager**, B. Zhou, and G. Piedimonte. (2004) Protective Effect of Numax against Capsaicin-Induced Apnea in Respiratory Syncytial Virus (RSV)-Infected Fisher-344 (F344) Weanling Rats. International Conference of the American Thoracic Society, Orlando, FL.

4. **Mager, E.**, E. Bluestein, and G. Piedimonte. (2003) Expression of Nerve Growth Factor (NGF) and Nerve Growth Factor Receptors During Fetal Lung Development. International Conference of the American Thoracic Society, Seattle, WA.
3. Sabogal, C., **E. Mager**, C. Suguihara, E. Bancalari, and G. Piedimonte. (2003) Protective Effect of Palivizumab against Capsaicin-Induced Apnea in Respiratory Syncytial Virus (RSV)-Infected F-344 Weanling Rats. International Conference of the American Thoracic Society, Seattle, WA.
2. Vanderbilt, J., **E. Mager**, L. Allen, and L. Dobbs. (2001) Isolated Pulmonary Alveolar Type II Epithelial Cells Express Proinflammatory Chemokines (GRO, CINC2a, CINC2b, MIP2) and Chemokine Receptor CXCR2. *Molecular Biology of the Cell*. 12, 420a.
1. **Mager, E.**, J. Vanderbilt, and L. Dobbs. (1999) Differential Gene Expression by Rat Alveolar Type I and Type II Cells Determined by Differential Display-PCR. International Conference of the American Thoracic Society, San Diego, CA.

INVITED SEMINARS

February 17, 2023	Texas Woman's University, Chemistry & Biochemistry Department Seminar
September 2, 2022	University of North Texas, Biology Department Seminar
February 2, 2018	University of North Texas, Biology Department Seminar
August 25, 2017	University of Saskatchewan, Biology Department Seminar
February 18, 2016	University of North Texas, Biology Department Seminar
October 15, 2015	University of South Alabama, Marine Science Department Seminar
April 16, 2015	University of Miami, RSMAS, Sea Secrets Seminar Series
September 17, 2014	Texas A&M University at Galveston, Marine Biology Department Seminar
March 27, 2014	Valdosta State University, Science Seminar Series
March 6, 2014	Texas A&M International University, Biology & Chemistry Department Seminar
January 23, 2014	Armstrong Atlantic State University, Biology Department Seminar

COURSES TAUGHT AT UNT

BIOL 5300, Physiological Ecology (Fall 2018, 2019, 2021, 2022, 2023)
 BIOL 1720, Biology for Science Majors II (Spring 2017, 2019, 2020, Fall 2020, Spring 2021, 2022, 2023, 2024)
 BIOL 4805, Biological Sciences Capstone Seminar (Fall 2016, 2017)

PREVIOUS TEACHING EXPERIENCE

Spring 2016	RSM680, Special Workshop: Techniques for Measuring Respiration, Swimming Performance and Preference/Behavior in Aquatic Invertebrates and Fish, University of Miami
Spring 2015	MBE586, Environmental Biology of Fishes, University of Miami MSC333, Oceans and Human Health, University of Miami (guest lecturer)
Fall 2014	BSC1005, General Education Biology, Miami-Dade College
Spring 2014	RSM680, Special Workshop: Techniques for Measuring Respiration, Swimming Performance and Preference/Behavior in Aquatic Invertebrates and Fish, University of Miami
Fall 2013	BIL360, General Physiology, University of Miami (guest lecturer)

FACULTY DEVELOPMENT ACTIVITIES

- Certificate of Excellence in Teaching Online (August – December 2023)

- Workshop, Mobile Summer Institute on Undergraduate STEM Education (May 14 – 18, 2018)

STUDENT ADVISING

Major Professor:

- Kristina Fite, MS Student (co-advising with Dr. Jason Bohenek; Spring 2024 - Present)
- Fabio Expedito Dos Santos Neto, PhD student (August 2023 – Present)
- Allie Burdette, PhD student (May 2023 – Present)
- Mikayla Mayfield, PSM student (January 2023 – Present)
- McKenzie Martin, MS student (August 2022 – Present)
- Kristina Hellinghausen, Prof. Science Masters student (August 2022 – Present)
- Faisal Alshamrani, Prof. Science Masters student (August 2022 – Present)
- Cameron Emadi, PhD student (January 2019 – Present)
- Ilana Nguyen, MS student (August 2021 – May 2022)
- Lauren Wyles, Prof. Science Masters student (co-advised with Dr. Jim Bednarz; January 2021 – December 2022)
- Ashleigh Haddock, Prof. Science Masters student (August 2020 – May 2022)
- Mehrnaz Moghimi, MS student (January 2019 – December 2021); currently a Research Assistant at Robert Wood Johnson Medical School
- Rahil Alhumaidi, MA student (January 2019 – May 2019)
- Delany Baum, Prof. Science Masters student (August 2018 – August 2020); currently serves as the Project Coordinator for the Tools for Polyploids project at Texas A&M
- Fabrizio Bonatesta, PhD student (August 2017 – May 2022); currently an Environmental Science Senior Analyst at Abt Associates, Inc. (environmental consulting)
- Pascale Mvoulamouyi Ebbah, Prof. Science Masters student (August 2017 – December 2019)
- Ryan Pingenot, Prof. Science Masters student (August 2017 – May 2019); currently works at the Mustang Special Utility District (a water utility company)

Committee Member:

- Kasey Pruett, PhD student (September 2023 – Present)
- Kayla Nguyen-Alley, PhD student (February 2023 – Present)
- Katherine Burbules, MS student (February 2023 – Present)
- Andrew Kuehm, Prof. Science Masters Student (April 2022 – Present)
- April Pease, PhD student (March 2022 – Present)
- Tyler Lawrence, PhD student (January 2022 – Present)
- Lauren Crowder, MS student (November 2021 – May 2023)
- Victoria Youngblood, PhD student (September 2021 – Present)
- Madeline Jurek, PSM student (March 2021 – October 2021)
- Cole Reeves, MS student (November 2020 – July 2021)
- Rachel Leads, PhD student (October 2020 – Present)
- Krystal Toney, PhD student (October 2020 – Present)
- Vaibhavi Srinivasan, MS student (March 2020 – Present)

- Wenasa Frifer, PhD student (February 2020 – Present)
- Allie Burdette, PhD student (February 2020 – May 2023)
- Karem Vazquez, MS & PhD student (August 2019 – Present)
- Amanda Reynolds, PhD student (May 2018 – June 2022)
- Namrata Giri, MS student (May 2018 – Present)
- Brittany Harried, PhD student (August 2017 – July 2021)
- Naim Martinez Bautista, PhD student (March 2017 – September 2019)
- Emma Barnes, MS student (January 2017 – July 2018)
- Brianna Soulen, PhD student (November 2016 – June 2021)
- Jason Magnuson, PhD student (October 2016 – July 2018)
- Sahara Bueker, Undergraduate Honors student (May 2017)

External Examiner:

- Melissa Driessnack Dissertation Defense, University of Saskatchewan (August 2017)

Undergraduate/TAMS Research:

- Rohit Devulapally (TAMS; September 2022 – Present)
- Sean Lee (TAMS; May 2022 – August 2022)
- Fernando Escalante (Undergraduate; March 2021 – Present)
- Hanzala Shekha (Undergraduate; August 2021 – December 2021)
- Harish Sridharan (TAMS; January 2020 – March 2020)
- Karthik Devulapally (TAMS; August 2019 – March 2020)
- Mercedes Crawford (Undergrad; October 2017 – May 2019)
- Shreya Mohanty (TAMS; January 2018 – May 2018)
- Skandah Muthiah (TAMS; June 2017 – August 2017)
- Robert Broun (Undergrad; September 2016 – December 2016)

SERVICE

To the University:

- Gave invited presentation to HNRS 1000 class (October 10, 2023)
- Committee Member, IACUC (September 2018 – Present)
- Ally member of “Advocates and Allies”, an advocacy program for female faculty (November 2017 – Present)
- Ask a Professor First Flight Lunch (August 2018)
- Meet a Professor First Flight Lunch (August 2017)

To the Department:

- Chair, Graduate Studies Committee (January 2024 – Present)
- Committee Member, Biological Sciences Promotion & Tenure – A (September 2023 – Present)

- Committee Member, Computational Biochemistry/Biology Faculty Search Committee (September 2022 – Present)
- Committee Member, Cell Biology Faculty Search Committee (September 2022 – June 2023)
- Environmental Science Graduate Program Coordinator (November 2020 – Present)
- Committee Member, Biochemistry Lecturer Search Committee (October 2020 – March 2021)
- Committee Member, Anatomy/Physiology Lecturer Search Committee (October 2019 – March 2020)
- Committee Member, Budget Officer Search Committee (March 2019 – May 2019)
- Faculty Panel Member and Student Presentation Judge, Biology Graduate Student Research Day (April 11, 2019)
- Interim Committee Member, Scholarship and TA Committee (February 2018)
- Faculty Advisor, Biology Graduate Student Association (September 2017 – May 2021)
- Committee Member, Grade Appeal Committee (May 2017 – Present)

To the Discipline:

- Associate Editor: *Comparative Biochemistry and Physiology Part C* (January 2024 – Present)
- Member of the Planning Committee for the 2024 Society of Environmental Toxicology and Chemistry North America Annual Meeting, Ft. Worth, TX (September 2023 – Present).
- Organized and hosted the 2023 South-Central Chapter of the Society of Environmental Toxicology and Chemistry Conference at UNT (April 2023)
- Editorial Board Member: *Fishes* (February 2022 – Present)
- Grant Reviewer, *Ad Hoc*, National Science Foundation, Established Program to Stimulate Competitive Research (EPSCoR) (June 2020)
- Grant Review Panel Member, National Academy of Sciences Gulf Research Program, Healthy Ecosystems, Washington, D.C. (December 18, 2019)
- Member, Board of Directors, South-Central Regional Chapter, Society of Environmental Toxicology and Chemistry (April 2023 – Present)
- Immediate Past President, South-Central Regional Chapter, Society of Environmental Toxicology and Chemistry (April 2022 – April 2023)
- President, South-Central Regional Chapter, Society of Environmental Toxicology and Chemistry (July 2020 – April 2022)
- Chair, Plenary Subcommittee of the Planning Committee for the Society of Environmental Toxicology and Chemistry North America Annual Meeting, Ft. Worth, TX (August 2019 – November 2020).

- Vice President, South-Central Regional Chapter, Society of Environmental Toxicology and Chemistry (May 2019 – July 2020)
- Guest Editor for Special Issue, “Fish Metabolic Physiology in Response to Stress”, *Biology* (January 2019 – January 2020)
- Student Poster Judge, Federation of North Texas Area Universities Graduate Student Research Symposium, University of North Texas (April 5, 2019)
- Guest Editor for Special Issue, “Effects of Crude Oil”, *Comparative Biochemistry and Physiology Part C* (December 2018 – Present)
- Student Poster Judge, Federation of North Texas Area Universities Graduate Student Research Symposium, Texas Woman’s University (March 23, 2018)
- Editorial Board Member: *Aquatic Physiology, specialty section of Frontiers in Physiology* (May 2022 – Present)
- Editorial Board Member: *Comparative Biochemistry and Physiology Part C* (2016 – January 2024)
 - Reviewer for Journals: *Animals, Antioxidants, Aquatic Toxicology, Archives of Environmental Contamination and Toxicology, Biocatalysis and Agricultural Biotechnology, Biology Letters, Chemosphere, Comparative Biochemistry and Physiology Parts A & C, Critical Reviews in Environmental Science and Technology, Ecotoxicology and Environmental Safety, Environment & Health, Environmental Biology of Fishes, Environmental Health Insights, Environmental Pollution, Environmental Science and Pollution Research, Environmental Science: Processes & Impacts, Environmental Science and Technology, Environmental Toxicology, Environmental Toxicology and Chemistry, Fish Physiology and Biochemistry, Hydrobiologia, International Journal of Molecular Sciences, iScience, Journal of Applied Ichthyology, Journal of Comparative Physiology B, Journal of Experimental Biology, Journal of Experimental Marine Biology and Ecology, Journal of Experimental Zoology Part A, Journal of Hazardous Materials, Journal of Marine Science and Engineering, Journal of Toxicology and Environmental Health Part A, Marine and Freshwater Behaviour and Physiology, Marine Environmental Research, Marine Pollution Bulletin, PLOS ONE, Polycyclic Aromatic Compounds, Science of the Total Environment, Scientific Reports, SpringerPlus, Toxicology Reports, Toxicological Sciences*
- Memberships in Professional Organizations: *Society of Environmental Toxicology and Chemistry, Society for Integrative and Comparative Biology, American Fisheries Society*
- Other Conference-Related:
 - ❖ Student Presentation Judge, Texas Chapter of the American Fisheries Society (February 24, 2023).
 - ❖ Student Presentation Judge, Texas Chapter of the American Fisheries Society (virtual) (February 2 – 4, 2021).
 - ❖ Student Presentation Judge, Society of Environmental Toxicology and Chemistry, SciCon2 (virtual) (November 15 – 19, 2020).

- ❖ Student Presentation Judge, Society of Environmental Toxicology and Chemistry, Toronto, CA (November 4 – 6, 2019).
- ❖ Session Co-chair, Gulf of Mexico Oil Spill & Ecosystem Science Conference, New Orleans, LA (February 6, 2019).
- ❖ Session Co-chair, Gulf of Mexico Oil Spill & Ecosystem Science Conference, New Orleans, LA (February 6, 2018).
- ❖ Student Presentation Judge, Society of Environmental Toxicology and Chemistry, Sacramento, CA (November 5 – 7, 2018).
- ❖ Student Presentation Judge, Society of Environmental Toxicology and Chemistry, Minneapolis, MN (November 12 – 16, 2017).
- ❖ Student Mentor for Career Navigation Event, Society of Environmental Toxicology and Chemistry, Orlando, FL (November 9, 2016).

To the Public:

- Hosted laboratory discussion on environmental research at UNT, water resource management, and environmental protection, education and careers with Dallas EEI high school students, UNT, Denton, TX (June 21, 2023).
- AP Capstone Research Expert Adviser for high school junior, Highland Park High School, University Park, TX (January 2023 – April 2023).
- Keynote Speaker and Student Mentor, 8th Annual Dallas EEI Water Conservation Environmental Summit, Conrad High School, Dallas, TX (April 30, 2022).
- Provided interview on the effects of non-renewable energy on our planet for Adelyn Nahhas, a 5th grade student at Newton Rayzor Elementary School, Denton, TX (April 19, 2021).
- Guest Speaker (Remote), Briarhill Middle School, Highland Village, TX (September 2020)
- Virtual Science Fair Judge for SparkSTEM, High School Division, Plano, TX (May 2020)
- Student Mentor, 5th Annual Dallas EEI Water Conservation Environmental Summit, Sunset High School, Dallas, TX (April 6, 2019).
- Student Mentor, 7th Grade Science Fair Project for Abishai Rajan, Schimelpfenig Middle School, Plano, TX (January 2017 – February 2017).

AWARDS AND RECOGNITION

- Best Professional Poster Presentation, Texas Chapter of the American Fisheries Society (January 23, 2017).
- Ranked within the top 5% of reviewers for Environmental Toxicology and Chemistry based on the quality, quantity, and timeliness of reviews, Environmental Toxicology and Chemistry (2016).