

# CURRICULUM VITAE

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## EDUCATION

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- **Ph.D. Environmental Toxicology**, December 2011, *Clemson University, Clemson, SC*  
Advisor: Dr. Stephen J. Klaine (Deceased)  
Dissertation: "Impacts of psychotropic pharmaceuticals on hybrid striped bass: Altered predation behavior as a function of changes in brain chemistry"
- **M.S. Biological Sciences**, May 2007, *Clemson University, Clemson, SC*  
Advisor: Dr. Joseph R. Tomasso  
Thesis: "Growth and survival of the Pacific white shrimp, *Litopenaeus vannamei*, in sea salt and other ionic environments."
- **B.S. Biological Sciences**, May 2005, *Clemson University, Clemson, SC*

## PROFESSIONAL EXPERIENCE

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- **Associate Professor with Tenure** *University of Florida, Department of Environmental and Global Health, Center for Environmental and Human Toxicology, Gainesville, FL*  
July 2023 – Present
- **Assistant Professor** *University of Florida, Department of Environmental and Global Health, Center for Environmental and Human Toxicology, Gainesville, FL*  
September 2016-June 2023
- **PhD in Public Health Program Director** *University of Florida, Department of Environmental and Global Health, Gainesville, FL*  
September 2017-Present
- **Masters of Health Science in One Health Program Director** *University of Florida, Department of Environmental and Global Health, Gainesville, FL*  
September 2017-December 2020

- **Masters of Public Health, Environmental Health Concentration Coordinator** *University of Florida, Department of Environmental and Global Health, Gainesville, FL*  
August 2016 – August 2017
- **Research Assistant Professor** *University of Florida, Department of Environmental and Global Health, Center for Environmental and Human Toxicology, Gainesville, FL*  
June 2014-August 2016
- **Adjunct Assistant Professor** *Clemson University, Department of Biological Sciences, Clemson, SC*  
April 2013-April 2017
- **Post-Doctoral Associate** *University of Florida, Department of Environmental and Global Health, Center for Environmental and Human Toxicology, Gainesville, FL*  
August 2011-May 2014

## TEACHING EXPERIENCE

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- **Primary Instructor, University of Florida, Gainesville, FL**
  - PHC 6937: Grant Writing and Evaluation, On Campus: Summer 2021
  - PHC 6304/HSC4507: Environmental Toxicology Applications in Public Health, Online: Fall 2016, 2017, 2020; Hyflex: Fall 2018, 2019, 2021, 2022
  - PHC 6424: Environmental Policy and Risk Management, Online: Spring 2019, 2020, 2022, 2023
  - PHC 6313: Environmental Health Concepts in Public Health, Online: Summer 2013, 2014, 2015, Spring 2016, 2018, 2019; On Campus: Fall 2014
  - PHC 7935: Critical Thinking in Environmental and Global Health, On Campus: Spring 2015
  - Environmental and Global Health Journal Club, On Campus: Spring 2015
- **Guest Lecturer**
  - PHC4024: Applied Epidemiology, Wastewater Based Epidemiology, On Campus: Fall 2022
  - PHC 6715: Public Health Research Methods, Wastewater Based Epidemiology, On Campus: Spring 2022
  - PHC 3440: Global Public Health, Environmental Health Research Across the Globe: Applications In Underdeveloped Countries, On Campus: Spring Semesters 2017-Present
  - VME 6934: Ecotoxicology and Risk Assessment, Mechanisms of Xenobiotic Induced Gastrointestinal Toxicity, On Campus: Spring 2022
  - PHC 6937: Mechanisms of Environmental Disease, Mechanisms of Xenobiotic Induced Gastrointestinal Toxicity, On Campus: Spring 2021
  - BMS 6810: Introduction to Clinical Medicine, Environmental toxicology lecture, On Campus: Spring 2015
  - VME 6603: Advanced Toxicology, Nanotoxicology Lecture, On Campus, Fall 2016, 2018, 2020

## GRANT SUPPORT

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- **Ongoing:**
  - Florida Fish and Wildlife Conservation Commission: Examining potential off target effects in native Florida largemouth bass from aquatic invasive plant management  
**Bisesi (PI):** \$99,890, 7/2021-6/2023

- NIEHS R03ES032889-01: Examining thyroid hormone synthesis feedback loops as xenobiotic target for brominated flame retardant metabolites  
**Bisesi (PI):** \$148,878, 3/2021-2/2023
- USFDA/JMT: Environmental Impact Analysis services Subcontract  
**Bisesi (PI),** \$10,000, 3/2022-6/2024
- NIOSH U54 OH011230: Southeastern Coastal Center for Agricultural Health and Safety  
Morris (PI), **Bisesi (Co-I):** \$100,000
- **Pending**
  - NiPERA/Windward Environmental: Characterization of effects from episodic nickel exposures for inclusion in the Biotic Ligand for Episodic Exposures (BLEEM)  
**Bisesi (PI):** \$35,000, 6/2023-12/2023
  - NIDA R01: Developing a holistic wastewater-based epidemiology framework as an early warning system for monitoring drug use in vulnerable communities  
Sabo-Attwood (PI), **Bisesi (Co-I):** \$3,375,534, 4/2024- 3/2029
  - NIH/NSF: GATOR Center for Oceans and Human Health  
Sabo-Attwood (PI), **Bisesi (Co-PI/Project PI):** \$7,083,479, 12/2023-11/2028
  - NIEHS R01: Effects of obesogens on lipid utilization and exercise capacity  
**Bisesi (PI):** \$2,840,118, 7/2024-6/2029
  - NIAID R21: Detection of Sexually Transmitted Pathogens in Wastewater – A Pilot Study for Community-Scale Wastewater-Based Surveillance  
Maurelli (PI), **Bisesi (Co-I):** \$410,041, 1/2024-12/2025
- **Completed:**
  - Electric Power Research Institute: Episodic Exposure to Metals: Application of the Biotic Ligand for Episodic Exposures Model (BLEEM) to Zn and Al  
**Bisesi (PI)** \$300,000, 1/2019-12/2022
  - Royal Canin: Screening small molecules for regulatory effects on the thyroid hormone system using a primary cell culture from hyperthyroid cats  
**Bisesi (Co-PI)** \$256,047, 6/2020-5/2023.
  - NIDA 3U01DA051126-02S2: Integrating Wastewater-Based Epidemiology into the National Drug Early Warning System Coordinating Center to Track Community Health Trends  
Cotler (PI), **Bisesi (Co-I):** \$152,499, 5/2021-4/2022.
  - UF Research Opportunity Seed Fund: A humanized peroxisome proliferator activated receptor alpha (PPAR $\alpha$ ) zebrafish: A new transgenic model for obesogenic chemical screening  
**Bisesi (PI):** \$85,000, 7/2020-7/2022
  - Florida Sea Grant: Investigations and Community Engagement to Address Theft and Vandalism Affecting Florida's Gulf Coast Shellfish Production  
Kane (PI), **Bisesi (Co-I)** \$266,801, 2/2019-5/2022
  - NSF CBET #1601559 Nano-Bio Phenomena and Processes in the Environment: Understanding how interactions of single-walled carbon nanotubes with biological interfaces in the gastrointestinal system may alter chemical bioavailability  
**Bisesi (PI)** \$299,999, July 1<sup>st</sup>, 2016-March 31<sup>st</sup>, 2021
  - Syracuse University: Testing the toxicity of pesticide treated mosquito nets  
**Bisesi (Co-I)** \$5,000, September 1<sup>st</sup>, 2018-August 31, 2019
  - University of Florida College of Veterinary Medicine Consolidated Faculty Research Development Grant: Are Polybrominated Diphenyl Ethers (PBDEs) Associated with Feline Hyperthyroidism?

- **Bisesi (Co-PI)** \$9,500, March 1<sup>st</sup>, 2016-February 27<sup>th</sup>, 2017
- Illumina RNASeq Pilot Grant Program: Understanding Mechanisms of Diet and Chemical Induced Obesity Using RNAseq  
**Bisesi (PI)** \$5,000, December 1<sup>st</sup>, 2015-June 1<sup>st</sup>, 2016
- University of Florida College of Veterinary Medicine Consolidated Faculty Research Development Grant: A high throughput *in vivo* screen (HTS) to assess gut inflammatory response and mitochondrial function treatments with microbial metabolites  
**Bisesi (Co-PI)** \$10,000, December 15<sup>th</sup>, 2015-December 14<sup>th</sup>, 2016
- University of Florida International Center Global Fellows Program: Examining links between chemical contaminants and human health outcomes in Kisumu, Kenya.  
**Bisesi (PI)** \$5,000, January 1, 2016-December 31, 2016
- Southeast Center for Integrated Metabolomics Pilot and Feasibility Projects: Metabolomics profiling in a diet-induced zebrafish model for obesity  
**Bisesi (Co-PI)** \$9,820, June 1, 2015-May 31, 2016
- Florida Department of Environmental Protection Contract: Evaluating Emerging Contaminants of Concern in Florida Waterbodies – Pilot Study: Measuring Estrogenicity and Androgenicity of the Water Samples with Estrogen Receptor and Androgen Receptor Binding and Transactivation Assays  
**Bisesi (Co-I)** \$25,000, January 1, 2015-May 30, 2015

## PUBLICATIONS

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- **Peer Reviewed Publications (40)**
  - Rainey, A.L.; Liang, S.; **Bisesi, J.H.**; Sabo-Attwood, T.; Maurelli, A.T. A multistate assessment of population normalization factors for wastewater-based epidemiology of COVID-19. PLoS ONE 18(4): e0284370. DOI: 10.1371/journal.pone.0284370
  - Rainey, A.L.; Buschang, K.; O’Conner, A.; Love, D.; Wormington, A.; Messcher, R.L.; Loeb, J.C.; Robinson, S.E.; Ponder, H.; Waldo, S.; Williams, R.; Shapiro, J.; McAlister, E.B.; Lauzardo, M.; Lednicky, J.A.; Maurelli, A.T.; Sabo-Attwood, T.; **Bisesi, J.H.** Retrospective analysis of wastewater-based epidemiology of SARS-CoV-2 in residences on a large college campus: Relationships between wastewater outcomes and COVID-19 cases across two semesters with different COVID-19 mitigation policies. Environmental Science and Technology, Water: 3(1) 16-29. DOI: 10.1021/acsestwater.2c00275
  - Rainey, A.L.; Loeb, J.C.; Robinson, S.E.; Davis, P.; Liang, S.; Lednicky, J.A.; Coker, E.S.; Sabo-Attwood, T.; **Bisesi, J.H.\***; Maurelli, A.T.\* Assessment of a mass balance equation for estimating community-level prevalence of COVID-19 using wastewater-based epidemiology in a mid-sized city. Scientific Reports, 12(1) 1-11. DOI: 10.1038/s41598-022-21354-6
  - Welsh, R.; Pickard, E.A.; Bisesi, J.H.; Ryan, S.; Makaure, J.; Stewart, D.; Larsen, D.A. Mosquito Net Fishing as a Normal Accident and the Roles of Traditional and Bureaucratic Authority in Barotseland, Zambia. Accepted to Society and Natural Resources, October 2022. DOI: 10.1080/08941920.2022.2139443
  - Martyniuk, C.J.; Buerger, A.N.; Vespalcova, H.; Rudzanova, B.; Sohag, S.R.; Hanlon, A.T.; Ginn, P.E.; Craft, S.L.; Smetanova, S.; Budinska, E.; **Bisesi, J.H.**; Adamovsky, O. 2022. Sex-dependent host-microbiome dynamics in zebrafish: Implications for toxicology and gastrointestinal physiology. Comparative Physiology and Biochemistry – Part D: Genomics and Proteomics, 42: 100993.
  - Buerger, A.N.; Parente, C.E.; Harris, J.P.; Watts, E.G.; Wormington, A.M.; **Bisesi, J.H.** 2022. Impacts of diethylhexyl phthalate and overfeeding on physical fitness and lipid mobilization of *Danio rerio* (zebrafish). Chemosphere, 295: 133703. DOI: 10.1016/j.chemosphere.2022.133703

- Rainey, A.L.; Loeb, J.C.; Robinson, S.E.; Lednicky, J.A.; McPherson, J.; Colson, S.; Allen, M.; Coker, E.S.; Sabo-Attwood, T.; Maurelli, A.T.; **Bisesi, J.H.** 2022. Wastewater surveillance for SARS-CoV-2 in a small coastal community: effects of tourism on viral presence and variant identification among low prevalence populations. *Environmental Research*, 208 (15): 112496. DOI: 10.1016/j.envres.2021.112496
- Barnett, L.A.; Kramer, N.E.; Buerger, A.N.; Love, D.H.; **Bisesi, J.H.**; Cummings, B.S. 2021. Transcriptomic Analysis of the Differential Nephrotoxicity of Diverse Brominated Flame Retardants in Rat and Human Renal Cells. *Int. J. Mol. Sci*, 22(18): 10044. DOI: 10.3390/ijms221810044
- Fahr, D.J.; Hinz, F.O.; Reisinger, A.J.; Huddleston III, G.M.; **Bisesi, J.H.**; Wilson, P.C. 2021. Influence of Water Resource Recovery Facility Effluents on the Presence of Selected Trace Organic Contaminants (TOCs) in the Reedy River, South Carolina. *Bulletin of Environmental Contamination and Toxicology* volume 107: 868–875. DOI: 10.1007/s00128-021-03365-7
- Wormington, A.M.; Bisesi, S.; Gabrielli, D. Nouri, M.Z., Coker, E.S.; Denslow, N.D.; Sabo-Atwood, T.; **Bisesi, J.H.** 2021. Emerging investigator series: Examination of the gastrointestinal lipidome of largemouth bass exposed to dietary single-walled carbon nanotubes. *Environmental Science: Nano*, 8(10): 2792-2801. DOI: 10.1039/d1en00303h.
- Adamovsky, O.; **Bisesi, J.H.**; Martyniuk, C.J. 2021. Plastics in our water: Fish microbiomes at risk? *Comparative Biochemistry and Physiology Part D: Special Issue - Comparative animal physiology and the microbiome*. 39: 100834. DOI: 10.1016/j.cbd.2021.100834
- Dillon, D.T.; Webster, G.D.; **Bisesi, J.H.** 2021. Contributions of biomass/solid fuel burning to blood pressure modification in women: A systematic review and meta-analysis. *American Journal of Human Biology*, 34(1): e23586. DOI: 10.1002/ajhb.23586
- Sabo-Attwood, T.; Apul, O.; **Bisesi, J.H.**; Kane, A.S.; Saleh, N.B. 2021. Nano-scale Applications in Aquaculture: Opportunities for Improved Production and Disease Control. *Journal of Fish Diseases*. 44(4): 359-370. DOI: <https://doi.org/10.1111/jfd.13332>
- Larsen, D.A.; Makaure, J.; Ryan, S.J.; Stewart, D.; Traube, A.; Welsh, R.; Love, D.H.; **Bisesi, J.H.** 2021. Implications of insecticide-treated mosquito net fishing in lower income countries. *Environmental Health Perspectives*. 129 (1): 0150011-0150016. DOI: <https://doi.org/10.1289/EHP7001>
- Sehna, L.\*; Brammer-Robbins, E.\*; Wormington, A\*; Blaha, L.; **Bisesi, J.H.**; Larkin, I.; Martyniuk, C.J.; Simonin, M.; Adamovsky, O. 2021. Microbiome Composition and Function in Aquatic Vertebrates: Small Organisms Making Big Impacts on Aquatic Animal Health. Special Issue in *Frontiers in Microbiology 'The Microbiome – A New Scientific Frontier In Environmental Science For Ecosystem Health'*. 12:358 DOI: 10.3389/fmicb.2021.567408 \*Co-first authors.
- Hua, Q.; Adamovsky, O.; Vespalcova, H.; Boyda, J.; Schmidt, J.T.; Kozuch, M.; Craft, S.L.M.; Ginn, P.E.; Smatana, S.; Budinska, E.; Persico, M.; **Bisesi, J.H.**; Martyniuk, C.J. 2021. Microbiome sequencing and predicted relative metabolomic turnover (PRMT) indicates disrupted bacterial heme biosynthesis and selenium metabolism in the gastrointestinal system of zebrafish (*Danio rerio*) with exposure to the organochlorine dieldrin. *Environmental Pollution*. 268: 115715
- Adamovsky, O.; Buerger, A.N.; Vespalcova, H.; Sohag, S.R.; Hanlon, A.T.; Ginn, P.E.; Craft, S.L.; Smatana, S.; Budinska, E.; Persico, M.; **Bisesi, J.H.**; Martyniuk C.J. 2020. Evaluation of Microbiome-Host Relationships in the Zebrafish Gastrointestinal System Reveals Adaptive Immunity Is a Target of Bis(2-ethylhexyl) Phthalate (DEHP) Exposure. *Environmental Science and Technology*. 54(9): 5719-5728.
- Buerger, A.N.; Dillon, D.T.; Schmidt, J.; Yang, T.; Zubcevic, J.; Martyniuk, C.J.; **Bisesi, J.H.** 2020. Gastrointestinal dysbiosis following diethylhexyl phthalate exposure in *Danio rerio* (zebrafish): altered microbial diversity, functionality, and network connectivity. *Environmental Pollution*. 265 (B): 114496. DOI: <https://doi.org/10.1016/j.envpol.2020.114496>

- Williams, C.L.; Garcia-Reyero, N.; Martyniuk, C.J.; Tubbs, C.W.; **Bisesi, J.H.** 2020. Regulation of endocrine systems by the microbiome: Perspectives from comparative animal models. *General and Comparative Endocrinology*. 292: 113437. DOI: <https://doi.org/10.1016/j.ygcen.2020.113437>
- Wormington, A.M.; De María, M.; Kurita, H.G.; **Bisesi, J.H.**; Denslow, N.D.; Martyniuk, C.J. 2019. Antineoplastic Agents: Environmental Prevalence and Adverse Outcomes in Aquatic Organisms. *Environmental Toxicology and Chemistry*. 39 (5): 967-985. DOI: <https://doi.org/10.1002/etc.4687>
- Nicholas, J.; Chen, H.; **Bisesi, J.H.**; Bolser, D.C.; Castleman, W.; Ferguson, P.L.; Sabo-Attwood, T. 2019. Utilization of Near Infrared Fluorescence Imaging to Track and Quantify the Pulmonary Retention of Single-Walled Carbon Nanotubes in Mice. *NanoImpact*. 14: 100167. DOI: [10.1016/j.impact.2019.100167](https://doi.org/10.1016/j.impact.2019.100167)
- Buerger, A.; Schmidt, J.; Tiblier, A.; Martyniuk, C.J.; **Bisesi, J.H.** 2019. Examining the mechanisms of diethylhexyl phthalate induced responses in the gastrointestinal system of zebrafish (*Danio rerio*). *Environmental Pollution*. 245: 1086-1094. DOI: [10.1016/j.envpol.2018.11.032](https://doi.org/10.1016/j.envpol.2018.11.032)
- Adamovsky, O.\*; Buerger, A.\*; Wormington, A.M.; Ector, N; Griffitt, R.J.; **Bisesi, J.H.†**; Martyniuk, C.J.†. 2018. The gut microbiome and aquatic toxicology: An emerging concept for environmental health. *Environmental Toxicology and Chemistry*. 37(11): 2758-2775. DOI: [10.1002/etc.4249](https://doi.org/10.1002/etc.4249) \*Co-First Authors, †Co-Corresponding Authors
- Lavelle, C.\*, Smith, L.C.\*, **Bisesi, J.H.\***, Yu, F., Silva-Sanchez, C., Moraga-Amador, D., Buerger, A.N., Garcia-Reyero, N., Sabo-Attwood, T., Denslow, N.D. 2018. Tissue-based mapping of the fathead minnow (*Pimephales promelas*) transcriptome and proteome. *Frontiers in Endocrinology*. 9: 611 DOI: [10.3389/fendo.2018.00611](https://doi.org/10.3389/fendo.2018.00611) \*Co-First Authors
- Chen, H., Zheng, X., Nicholas, J., Humes, S.T., Loeb, J.C., Robinson, S.E., **Bisesi, J.H.**, Das, D., Saleh, N.B., Castleman, W.L., Lednický, J.A., Sabo-Attwood, T. 2017. Single-walled carbon nanotubes modulate pulmonary immune responses and increase pandemic influenza a virus titers in mice. *Virology Journal*. 14:242-257. DOI: [10.1186/s12985-017-0909-z](https://doi.org/10.1186/s12985-017-0909-z)
- **Bisesi, J.H.**, Robinson, S.E., Lavelle, C.M., Ngo, T., Castillo, B., Crosby, H., Liu, K., Das, D., Plazas-Tuttle, j., Saleh, N., Ferguson, P.L., Denslow, N.D., Sabo-Attwood, T. 2017. Influence of gastrointestinal environment on the bioavailability of ethinyl estradiol sorbed to single-walled carbon nanotubes. *Environmental Science and Technology*. 51(2): 948-957. DOI: [10.1021/acs.est.6b04728](https://doi.org/10.1021/acs.est.6b04728)
- Wormington, A.M.; Coral, J.; Alloy, M.M.; Damarè, C.L.; Mansfield, C.M.; Klaine, S.J.; **Bisesi, J.H.**; Roberts, A.P. 2017. Effect of natural organic matter on the photo-induced toxicity of titanium dioxide nanoparticles. *Environmental Toxicology and Chemistry*. 36(6): 1661-1666. DOI: [10.1002/etc.3702](https://doi.org/10.1002/etc.3702)
- Smith, L.C.; Clark, J.C.; **Bisesi, J.H.**; Ferguson, P.L.; Sabo-Attwood, T. 2016. Differential recruitment of co-regulatory proteins to the human estrogen receptor 1 in response to xenoestrogens. Special Issue of *Comparative Biochemistry and Physiology Part D, 'Environmental Omics'*, DOI: [10.1016/j.cbd.2016.04.003](https://doi.org/10.1016/j.cbd.2016.04.003).
- Sweet, L.E.; **Bisesi, J.H.**; Ngai-Yu LEI, E.; Lam, M.H.W.; Klaine, S.J. 2016. The effects of bupropion on hybrid striped bass brain chemistry and predatory behavior. *Environmental Toxicology and Chemistry*, 35(8): 2058-2065. DOI: [10.1002/etc.3350](https://doi.org/10.1002/etc.3350).
- **Bisesi, J.H.**; Ngo, T.; Ponnalu, S.; Liu, K.; Lavelle, C.M.; Afrooz, A.R.M.N.; Saleh, N.B.; Ferguson, P.L.; Denslow, N.D.; Sabo-Attwood, T. 2015. Examination of Single-Walled Carbon Nanotubes Uptake and Toxicity from Dietary Exposure: Tracking Movement and Impacts in the Gastrointestinal System. Special Issue of *Nanomaterials 'Advancements in Nanotoxicology'*, 5(2) 1066-1086.
- **Bisesi, J.H.**; Sweet, L.E.; van den Hurk, P.; Klaine, S.J. 2015. Effects of an antidepressant mixture on the brain serotonin and predation behavior of hybrid striped bass. Special Issue of *Environmental*

Toxicology and Chemistry 'Pharmaceuticals in the Environment', 35(4): 938-945. DOI: 10.1002/etc.3114

- Lavelle, C.; **Bisesi, J.H.**; Hahn, M.; Kroll, K.; Sabo-Attwood, T.; Denslow, N. 2015. Oral bioavailability and sex specific tissue partitioning of quantum dots in fathead minnows, *Pimephales promelas*. Special issue of Environmental Science: Nano 'Nanotoxicology in the Environment', 2: 583-593. DOI: 10.1039/C5EN00122F
- Plazas-Tuttle, J.; Rowles III, L.S.; Chen, H.; **Bisesi, J.H.** Sabo-Attwood-T.; Saleh, N.B. 2015. Dynamism of stimuli-responsive nanohybrids: Environmental Implications. Special Issue of Nanomaterials 'Advancements in Nanotoxicology', 5(2) 1102-1123.
- **Bisesi, J.H.**; Bridges, W.; Klaine, S.J. 2014. Effects of the antidepressant venlafaxine on fish brain serotonin and predation behavior. Aquatic Toxicology, 148: 130-138.
- **Bisesi, J.H.**; Merten, J.; Keira, L.; Parks, A.N.; Afrooz, A.R.M.N.; Glenn, J.B.; Klaine, S.J.; Kane, A.S.; Saleh, N.B.; Ferguson, P.L.; Sabo-Attwood, T. 2014. Tracking and quantification of single-walled carbon nanotubes in fish using near infrared fluorescence. Environmental Science and Technology, 48: 1973-1983.
- Saleh, N.B.; Aich, N.; **Bisesi, J.H.**; Tuttle, J.P.; Sabo-Attwood, T. 2014. Emergent Properties and Toxicological Considerations for Nanohybrid Materials in Aquatic Systems. Special Issue of Nanomaterials 'Nanotoxicology', 4(2): 372-407.
- Dominguez, G.A.; **Bisesi, J.H.**, Kroll, K.J.; Denslow, N.D.; Sabo-Attwood, T. 2014. Control of Transcriptional repression of the vitellogenin receptor gene in largemouth bass (*Micropterus salmoides*) by xenoestrogens. Toxicological Sciences. 141 (2): 423-31.
- Schierz, A.; Espinasse, B.; Wiesner, M.; **Bisesi, J.H.**; Sabo-Attwood, T.; Ferguson, P.L. 2014. Fate of single walled carbon nanotubes in wetland ecosystems. Environmental Science Nano, 1: 574-583. DOI: 10.1039/C4EN00063C
- Sanpui, P.; Zheng, X.; Loeb, J.; **Bisesi, J.H.**; Khan, I.; Afrooz, A.R.M.N.; Liu, K.; Badireddy, A.R.; Wiesner, M.R.; Ferguson, P.L.; Saleh, N.; Lednicky, J.; Sabo-Attwood, T. 2014. Single-walled carbon nanotubes increase pandemic influenza A H1N1 virus infectivity of lung epithelial cells. Particle and Fiber Toxicology, 11(1): 66-81.
- Parmenter, K.J.; **Bisesi, J.H.**; Young, S.P.; Klaine, S.J.; Atwood, H.L.; Browdy, C.L.; Tomasso, J.R. 2009. Culture of Pacific White Shrimp *Litopenaeus vannamei* in a Mixed-Ion Solution. North American Journal of Aquaculture, 71: 134-137.
- **Peer Reviewed Publications Under Review (1)**
  - Dillon, D.T.; Young, A.G.; Sliva Sanchez, C.; Hazemba, A.N.; **Bisesi, J.H.** Characterizing Polycyclic Aromatic Hydrocarbon and Fine Particulate Matter Exposures among Electricity and Charcoal using Households in Eastern Zambia: A Cross-Sectional Study. Submitted to Atmospheric Environment, October 2021.
- **Peer Reviewed Publications In Preparation (3)**
  - Edhlund, I.A.; Sweet, L.E.; **Bisesi, J.H.**; Lee, C.; and Tollefsen, K.E. Petri Nets as a Unifying Tool to Link Physiologically Based Toxicokinetic Models to Adverse Outcome Pathways. Targeted for submission to Environmental Toxicology and Chemistry, August 2022.
  - Wormington, A.M.; Gabrielli, D.J.; Nouri, M-Z.; Lin, A.M.; Robinson, S.E.; Sabo-Attwood, T.; Bowden, J.; Denslow, N.D.; Bisesi, J.H. Disruption of gastrointestinal lipids as a mechanism for endocrine toxicity of organochlorine pesticides in freshwater fish. Targeted for submission to Environmental Pollution, August 2022.

- Love, D.H.; Welsh, R.; Larsen, D.A.; Hinz, F.; Wilson, P.C.; Bisesi, J.H. Investigating the Impact of Insecticide Treated Net Fishing on *Daphnia Magna*. Targeted for submission to Environmental Toxicology and Chemistry, August 2022.
- **Technical Reports (2)**
  - Development of an Integrated Episodic Exposure and Bioavailability Model, Electric Power Research Institute, Palo Alto, CA: 2007. 1014065. Klaine, S.J., **Bisesi, J.H.**, Ryan, A., Santore, R.
  - Understanding the effects of episodic exposures of zinc to fathead minnows, International Zinc Association, Durham, NC: 2006. Klaine, S.J., **Bisesi, J.H.**, Van Genderen, E., Green, A.
- **Non-Peer Reviewed Publications (4)**
  - **Bisesi, J.H.**; Adamovsky, O.; Martyniuk, C.J. Recent Insights from Comparative Animal Microbiomics: Editorial for Virtual Special Issue in the Comparative Animal Physiology and the Microbiome, Submitted to Comparative Biochemistry and Physiology Part D, June 2021
  - **Bisesi, J.H.**; Martyniuk, C.M. 2021. Guest Editors' Editorial for Virtual Special Issue of the Fifth Biennial Meeting of the North American Society for Comparative Endocrinology (Sociedad Norteamericana de Endocrinología Comparada; Société Nord-Américaine d'Endocrinologie Comparée). *General and Comparative Endocrinology*, 308: 113770. DOI: 10.1016/j.ygcen.2021.113770
  - Christopher, J.M. and **Bisesi, J.H.**, 2019. Guest Editors' Introduction-Special issue of the fifth biennial meeting of the North American Society for Comparative Endocrinology. *General and comparative endocrinology*, 283: p.113222. DOI: 10.1016/j.ygcen.2019.113222
  - Basili, D.; Adamovsky, O.; Smatana, S.; **Bisesi, J.H.**; Martyniuk, C.J. Adverse outcomes and the microbiome: A guide to comprehensive characterization. *Society of Environmental Toxicology and Chemistry Technical Issue Paper*. [https://www.setac.org/resource/resmgr/publications\\_and\\_resources/setac\\_tip\\_microbiome.pdf](https://www.setac.org/resource/resmgr/publications_and_resources/setac_tip_microbiome.pdf).
- **Masters and PhD Theses**
  - **Bisesi, J.H.** 2011. Impacts of psychotropic pharmaceuticals on hybrid striped bass: altered predation behavior as a function of changes in brain chemistry. Doctor of Philosophy Dissertation, Clemson University.
  - **Bisesi, J.H.** 2007. Growth and Survival of the Pacific white shrimp, *Litopenaeus vannamei*, in sea salt and other ionic environments. Master of Science Thesis, Clemson University.

## **INVITED SEMINARS (10)**

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- **Bisesi, J.H.** The gastrointestinal microbiome: a crucial endpoint for toxicity testing in aquatic organisms. University of Stavanger (Norway) Department of Chemistry, Bioscience, and Environmental Engineering, Spring 2022
- **Bisesi, J.H.** Toxicity of emerging contaminants to the gastrointestinal system: Implications for nutrient availability and xenobiotic bioavailability. Clemson University Department of Biological Sciences Seminar Series, Spring 2022
- **Bisesi, J.H.** Rainey, A., Maurelli, A., Sabo-Attwood, T., Lednicky, J. Lessons learned from GatorWATCH: A study of SARS-CoV-2 transmission using wastewater monitoring. University of Florida Department of Environmental Engineering Sciences Departmental Seminar Series, Spring 2021

- **Bisesi, J.H.**, Rainey, A., Maurelli, A., Sabo-Attwood, T., Lednicky, J. Using sewershed surveillance of SARS-CoV-2 on a college campus to inform targeted testing strategies. American Water Works, Florida Section Fall Conference, Fall 2020.
- **Bisesi, J.H.**, Sabo-Attwood, T., Wormington, A., Lavelle, C., Robinson, S., Denslow, N.D., Ferguson, P.L. Dietary exposure to carbon nanotubes in fish: A Trojan horse for legacy chemical exposure? Georgia Southern Department of Biology Seminar Series. Spring 2020.
- **Bisesi, J.H.** Impacts of single-walled carbon nanotubes on the gastrointestinal system of fish. Auburn University School of Fisheries, Aquaculture, and Aquatic Sciences Seminar Series. Spring 2019
- **Bisesi, J.H.**, T. Sabo-Attwood, A. Wormington, C. Lavelle, S. Robinson, N. Denslow, P.L. Ferguson. Toxicant adsorption to particles in the aquatic environment: A trojan horse for exposure? University of Florida Department of Physiological Sciences Seminar Series. Fall 2018
- **Bisesi, J.H.**, A.N. Buerger, O. Adamovsky, J. Schmidt, C. Martyniuk. Investigating the disruption of the zebrafish gastrointestinal system by the suspected obesogen diethylhexyl phthalate. US EPA, Office of Research and Development, Raleigh NC, Fall 2018
- **Bisesi, J.H.**, L.E. Sweet, S.J. Klaine. Contamination of our waters with antidepressants: Do mood altering drugs change brain chemistry and behavior in fish? University of Florida Environmental and Global Health Seminar Series, Spring 2015
- **Bisesi, J.H.**, T. Ngo, B. Castillo, C. Lavelle, K. Liu, A.N. Parks, A. Schierz, A.R.M.N. Afrooz, N. Aich, J.B. Glenn, J. Merten, N.D. Denslow, T. Sabo-Attwood, P.L. Ferguson, N. Saleh, S.J. Klaine. Tracking single walled carbon nanotube distribution, toxicity, and interactions with xenobiotics using novel techniques in fish. Clemson University Environmental Toxicology Seminar Series, Fall 2014

#### **CONFERENCE PROCEEDINGS (140, \*indicates Bisesi lab student presentation)**

- Rainey, A.L.; Coker, E.S.; Bisesi, J.H.; Sabo-Attwood, T.; Maurelli, A.T. Assessment of the Mass Balance Equation for Estimating Community-Level Prevalence of COVID-19 via Wastewater-Based Epidemiology. Poster Presentation. American Society For Microbiology. Washington, DC. June 9, 2022.
- Monticelli, G.; Peggs, D.; Zarza, C.; **Bisesi, J.H.**; Magnuson, J.T.; Schlenk, D.; Pampanin, D. Florfenicol in salmon diet. Platform Presentation. 21<sup>st</sup> International Symposium on Pollutant Responses in Marine Organisms (PRIMO21), Gothenburg, Sweden, May 2022
- \*Love, D.H.; Filgueiras, M.; Welsh, R.; Larsen, D.A.; Hinz, F.; Wilson, P.C.; **Bisesi, J.H.** Examining the practice of pre-washing pyrethroid treated nets to mitigate toxicity in invertebrates. Poster Presentation. University of Florida Water Symposium. Gainesville, Florida. February 2022.
- \*Love, D.H.; Filgueiras, M.; Welsh, R.; Larsen, D.A.; Hinz, F.; Wilson, P.C.; **Bisesi, J.H.** Impacts of pre-washing insecticide treated mosquito nets to reduce environmental and public health risks from off-label use. Platform Presentation. University of Florida Public Health Research Day. Virtual. February 2022.
- Rainey, A.L.; Coker, E.S.; **Bisesi, J.H.**; Sabo-Attwood, T.; Maurelli, A.T. Assessment of the Mass Balance Equation for Estimating Community-Level Prevalence of COVID-19 via Wastewater-Based Epidemiology. Platform Presentation. University of Florida College of Public Health and Health Professions Research Day, Gainesville, Florida, United States. February 2022.
- Rainey, A.L.; Coker, E.S.; **Bisesi, J.H.**; Sabo-Attwood, T.; Maurelli, A.T. Assessment of the Mass Balance Equation for Estimating Community-Level Prevalence of COVID-19 via Wastewater-Based Epidemiology. Poster Presentation. University of Florida's Emerging Pathogens Institute Research Day, Gainesville, Florida, United States. February 2022.

- Madani, N.; Ulrich, J.; **Bisesi, J.H.**; Jayasundara, N.; Ferguson, P.L.; Sabo-Attwood, T. Application of Non-Target Analysis of Environmental Surface Water Samples in Evaluating Toxicity Databases. Poster Presentation. Public Health and Health Professions Research Day. Virtual. February 2022.
- \*Love, D.H.; Filgueiras, M.; Welsh, R.; Larsen, D.A.; Hinz, F.; Wilson, P.C.; **Bisesi, J.H.** Examining the practice of pre-washing nets as a method of mitigating toxicity from insecticide treated net fishing. Platform Presentation. North American SETAC Meeting. Virtual. November 2021.
- \*Wormington, A.; Robinson, S.E.; Denslow, N.D.; Mohammad-Zaman, N.; da Silva, B.; Bowden, J.; Sabo-Attwood, T.; **Bisesi, J.H.** Effects of the gastrointestinal environment on desorption, bioavailability, and uptake of contaminants during dietary exposure to single-walled carbon nanotubes. Platform Presentation. North American SETAC Meeting. Virtual. November 2021.
- Madani, N.; Ulrich, J.; **Bisesi, J.H.**; Jayasundara, N.; Ferguson, P.L.; Sabo-Attwood, T. Analysis of the Impacts of Irbesartan on Human and Zebrafish PPAR $\gamma$  via Non-Target Analysis and In Vitro Bioassay Testing. Platform Presentation. Southeast Society of Toxicology. Virtual. November 2021.
- Madani, N.; Ulrich, J.; **Bisesi, J.H.**; Jayasundara, N.; Ferguson, P.L.; Sabo-Attwood, T. Analysis of Angiotensin Receptor Blockers and PPAR $\gamma$  in Aquatic Species Via Non-Target Analysis and In Vitro Bioassay Testing. Poster. Society of Environmental Toxicology and Chemistry. Virtual. November 2021.
- \*Love, D.H.; Welsh, R.; Larsen, D.A.; Hinz, F.; Wilson, P.C.; **Bisesi, J.H.** Examining the potential for leaching and toxicity from mosquito net fishing. Platform Presentation. Southeast SETAC Meeting, Virtual, May 2021.
- \*Gabrielli, D.J.; Wormington, A.M.; Nouridelavar, M.; Bisesi, S.E.; Sabo-Attwood, T.; Denslow, N. **Bisesi, J.H.** Disruption of the Gastrointestinal Lipidome After Exposure to Single-Walled Carbon Nanotubes in a Piscivorous Fish. Lightning Talk. Southeast SETAC Meeting, Virtual, May 2021.
- Madani, N.; Ulrich, J.; **Bisesi, J.H.**; Jayasundara, N.; Ferguson, P.L.; Sabo-Attwood, T. Investigating Impacts of Irbesartan on PPAR $\gamma$  in Aquatic Species via Non-Target Analysis and In Vitro Bioassay Testing. Platform Presentation. Southeast SETAC Meeting. Virtual. May 2021.
- \*Dillon, D.T.; **Bisesi, J.H.** Air pollution and exposure profiles among women in eastern Zambia: sources and mediators. Poster Presentation. Human Biological Association Annual Meeting, Virtual, March 2021
- \*Parente, C.E.; Buerger, A.N.; Watts, E.G.; Harris, J.P.; **Bisesi, J.H.** Examining impacts on physical fitness and lipid utilization in zebrafish following overfeeding and exposure to DEHP. Poster presentation. UF Undergraduate Research Symposium, virtual, March 2021.
- \*Love, D.H.; Manrique, A.; Welsh, R.; Larsen, D.A.; Wilson, P.C.; **Bisesi, J.H.** Mosquito net fishing: A novel exposure pathway for pyrethroid toxicity in aquatic organisms. Poster Presentation. University of Florida's College of Public Health and Health Professions Research Day, Gainesville, FL, February 2021.
- Rainey, A.; Maurelli, A.; **Bisesi, J.H.** Assessment of Membrane Filtration Methods for The Recovery of SARS-CoV-2 From Wastewater. Platform Presentation. University of Florida's College of Public Health and Health Professions Research Day, Gainesville, FL, February 2021.
- Rainey A.; **Bisesi, J.H.**; Sabo-Attwood T.; Maurelli A. Wastewater-Based Epidemiology of SARS-CoV-2 in Gainesville, FL. Poster. University of Florida's Emerging Pathogens Institute Research Day, Gainesville, FL, February 2021.
- \*Wormington, A.M.; Mohammadzaman, N.; Robinson, S.; Gabrielli, D.; Coker E.; Denslow, N.; **Bisesi, J.H.** Gastrointestinal lipidomics as a biomarker of foodborne pesticide toxicity in a freshwater predator. Platform presentation. Society of Environmental Toxicology and Chemistry (SETAC) North America 41st Annual Meeting, Virtual, November 2020.
- \*Wormington, A.M.; Robinson, S.; Mohammadzaman, N.; Gabrielli, D.; Coker E.; Denslow, N.; Sabo-Attwood, T.; **Bisesi, J.H.** Changes in the gastrointestinal lipidome of largemouth bass exposed to single-

walled carbon nanotubes. Invited Platform presentation. Society of Environmental Toxicology and Chemistry (SETAC) North America 41st Annual Meeting, Virtual, November 2020.

- \*Love, D.H.; Manrique, A.; Welsh, R.; Larsen, D.A.; Wilson, P.C.; **Bisesi, J.H.** Insecticide treated mosquito net fishing in Zambia: A case study for the importance of one health approaches to public health interventions. Invited Poster Presentation. Society of Environmental Toxicology and Chemistry (SETAC) North America 41st Annual Meeting, Virtual, November 2020.
- \*Parente, C.E.; Buerger, A.N.; Watts, E.G.; Harris, J.P.; **Bisesi, J.H.** Impact of diethylhexyl phthalate on physical fitness and lipid utilization genes in zebrafish. Poster presentation. Society of Environmental Toxicology and Chemistry (SETAC) North America 41st Annual Meeting, Virtual, November 2020.
- \*Wormington, A.M.; Bisesi, S.; Lavelle, C.; Sabo-Attwood, T.; Bowden, J.A.; **Bisesi, J.H.** Effects of particle adsorption in aquatic environments on the bioavailability of pharmaceutical contaminants in fish. Poster presentation. 7th UF Water Institute Symposium, Gainesville, FL. February 2020
- **Bisesi, J.H.**, Patel, T., Welsh, R., Larsen, D.A. Insecticide treated mosquito net fishing in Zambia: A case study for the importance of one health approaches to public health interventions. Invited Platform Presentation. North American SETAC Meeting. Toronto, Ontario, Canada. November 2019.
- \*Wormington, A.M.; Mohammadzaman, N.; Bisesi, S.; Buerger, A.; Dillon, D.T.; Lavelle, C.; Denslow, N.D.; Coker, E.; Sabo-Attwood, T.; **Bisesi, J.H.** What can gastrointestinal 'OMICs contribute to the discussion? A case study with carbon nanotubes and largemouth bass. Platform presentation. SETAC North American SETAC Meeting, Toronto, Ontario, Canada. November 2019.
- \*Buerger, AN, Dillon, DT, Martyniuk, CJ, **Bisesi, JH.** Gastrointestinal mediated impacts on lipid metabolism following chronic exposure to a phthalate plasticizer in zebrafish. Poster. North American SETAC Meeting. Toronto, Ontario, Canada, November 2019.
- \*Buerger, A., Dillon, D.T., Martyniuk, C.J., **Bisesi, J.H.** Influences of life stage at first exposure on the disruption of the gastrointestinal microbiome by a phthalate plasticizer. Platform Presentation. North American SETAC Meeting. Toronto, Ontario, Canada, November 2019.
- Martyniuk, C.J., Buerger, A.N., Hanlon, A., Sohag, S., Vespalcova, H., Smatana, S., Budinska, E., Craft, S.L., Ginn, P., **Bisesi, J.H.**, Adamovsky, O. Dietary exposure to bis(2-ethylhexyl) phthalate on the zebrafish (*Danio rerio*) microbiome-gut axis: A multi-omics approach. Platform Presentation. North American SETAC Meeting. Toronto, Ontario, Canada, November 2019.
- Qing, H., Adamovsky, O., Boyda, J., Schmidt, J., Kozuch, M., Craft, S.L., Ginn, P., **Bisesi, J.H.**, Martyniuk, C.J. Physiological Sciences Sub-chronic dietary exposure to the organochlorine pesticide dieldrin alters the gut microbiome of zebrafish (*Danio rerio*). Poster. North American SETAC Meeting. Toronto, Ontario, Canada, November 2019.
- \*Watts, E.G., Buerger, A.N., Parente, C.E., **Bisesi, J.H.** Effects of diethyl-hexyl phthalate on expression of genes related to lipid metabolism and adipogenesis in zebrafish. Poster. Florida Genetics Symposium. Gainesville, FL, USA. November 2019.
- \*Parente, C.E., Buerger, A.N., Watts, E.G., **Bisesi, J.H.** Examining physical fitness and alterations in gene expression following overfeeding and exposure to DEHP in *Danio rerio*. Poster. Florida Genetics Symposium. Gainesville, FL, USA. November 2019.
- \*Manrique, A.F., Love D.H., Patel, T., Welsh, R., Larsen, D.A, **Bisesi, J.H.** Determining the Toxicity of Deltamethrine Treated Mosquito Nets on *Pimephales promelas* and *Daphnia magna*. Poster Presentation. UF Diversity Graduate Research Symposium. Gainesville, FL, USA. October 2019.
- \*Wormington, A.M.; Buerger, A.N.; Robinson, S.E.; Lavelle, C.M.; Ngo, T.; Kroll, K.J.; Denslow, N.D.; Sabo-Attwood, T.; **Bisesi, J.H.** The impact of dietary single-walled carbon nanotubes on growth in largemouth bass: a role for the gut microbiome? Platform presentation. SETAC Southeastern Region 17th Annual Meeting, Pensacola, FL. September 2019

- \*Caples, K.A., Manrique, A.F., Stoczynski, L. Patel, T. van den Hurk, P., **Bisesi, J.H.** Determining the Impact of Sertraline on Aquatic Species. Poster. SETAC Southeastern Region 17th Annual Meeting, Pensacola, FL. September 2019.
- \*Johnson, B., Robinson S.E., Wormington, A., Nagulapalli, S., Buerger, A., **Bisesi, J.H.** Comparing episodic toxicity of zinc to *Daphnia magna* and *Ceriodaphnia dubia*: implications for regulation of metal discharge. Poster. SETAC Southeastern Region 17th Annual Meeting, Pensacola, FL. September 2019.
- Madani, N., Ulrich, J., Dickerson, M. **Bisesi, J.H.**, Ferguson, P.L., Sabo-Attwood, T. Identification of Chemical Fingerprints in Complex Haitian Water Mixtures. Poster. SETAC Southeastern Region 17th Annual Meeting, Pensacola, FL. September 2019.
- \*Manrique, A.F., Love D.H., Patel, T., Welsh, R., Larsen, D.A., **Bisesi, J.H.** Investigating the Environmental Toxicity of Insecticide Treated Mosquito Nets on Aquatic Organisms. Poster. SETAC Southeastern Region 17th Annual Meeting, Pensacola, FL. September 2019.
- \*Parente, C.E., Buerger, A.N., Watts, E., Harris, J., **Bisesi, J.H.** Examining the influence of overfeeding and DEHP exposure on gross morphology and gene expression in *Danio rerio*. Poster. SETAC Southeastern Region 17th Annual Meeting, Pensacola, FL. September 2019.
- \*Watts, E.G., Buerger, A., Wormington, A., Patel, T., **Bisesi, J.H.** Comparing the sensitivity of fathead minnows and zebrafish in larval behavioral assays following exposure to venlafaxine. Poster. SETAC Southeastern Region 17th Annual Meeting, Pensacola, FL. September 2019.
- **Bisesi, J.H.**, Patel, T., Welsh, R., Larsen, D.A. Investigating the toxicity of insecticide treated mosquito nets to early life stages of fathead minnows (*Pimephales promelas*). Poster. SETAC Africa Biennial Meeting. Cape Town, South Africa. May 2019
- \*Buerger, A.N., Dillon, D.T., Adamovsky, O., Martyniuk, C.J., **Bisesi, J.H.** Diethyl Hexyl Phthalate causes alterations in Host and Microbial Nutrient Metabolism: A Potential Obesogenic Mechanism. Poster. SETAC Europe Meeting. Helsinki, Finland. May 2019
- \*Buerger, A.N., Dillon, D.T., Martyniuk, C.J., **Bisesi, J.H.** Molecular and microbial responses in the zebrafish gastrointestinal system following exposure to the suspected obesogen diethylhexyl phthalate. Poster. SETAC Africa Biennial Meeting. Cape Town, South Africa. May 2019
- \*Buerger, A.N., Martyniuk, C.J., Dillon, D.T., **Bisesi, J.H.** Coupled host and microbial responses to phthalate exposure: Implications for obesity. Poster. Society of Toxicology Meeting. Baltimore, MD. March 2019
- Santore, R.C., **J.H. Bisesi**, A.C. Ryan, K.E. Croteau. Predicting the toxicity of episodic (pulsed) exposures of copper and zinc. Platform Presentation. North America SETAC Meeting, Sacramento, CA. November 2018.
- \*Buerger, A.N., C.J. Martyniuk, **J.H. Bisesi**. Host-microbiome alterations of fatty acid metabolism in *Danio rerio* following dietary phthalate exposure. Platform Presentation. North America SETAC Meeting, Sacramento, CA. November 2018.
- \*Wormington, A., A.N. Buerger, S. Robinson, C. Lavelle, T. Ngo, K. Kroll, N.D. Denslow, T. Sabo-Attwood, **J.H. Bisesi**. Understanding how dietary exposure to single-walled carbon nanotubes may alter the composition and functionality of the gut microbiome. Poster Presentation. North America SETAC Meeting, Sacramento, CA. November 2018.
- Adamovsky, O., A. Buerger, **J.H. Bisesi**, C.J. Martyniuk. The effect of the plasticizer (Di-2-(ethylhexyl) phthalate) on microbiome-gut axis in zebrafish. Poster Presentation. North America SETAC Meeting, Sacramento, CA. November 2018.
- \*Buerger, A.N., Dillon, D.T., Martyniuk, C.J., **Bisesi, J.H.** Phthalate-Induced Dysbiosis: Alterations in Microbial Diversity, Function, and Network-Connectivity in Zebrafish. Platform Presentation. Southeast Society of Toxicology Meeting. Gainesville, FL. October 2018.

- \*Wormington, A.N., Robinson, S.E., Lavelle, C.M., Ngo, T., Kroll, K.J., Denslow, N.D., Sabo-Attwood, T., **Bisesi, J.H.** Exploring the cause of chemical desorption from single-walled carbon nanotubes in the gastrointestinal system of fish. Platform Presentation. Southeast Society of Toxicology Meeting. Gainesville, FL. October 2018.
- \*Buerger, A.N., Martyniuk, C.J., **Bisesi, J.H.** Examining host transcriptional changes and microbial dysbiosis following dietary phthalate exposure in zebrafish (*Danio rerio*). Poster. Hipergator Symposium. Gainesville, FL. October 2018.
- \*Wormington, A.N., Robinson, S.E., Lavelle, C.M., Ngo, T., Kroll, K.J., Denslow, N.D., Sabo-Attwood, T., **Bisesi, J.H.** Exploring the cause of chemical desorption from single-walled carbon nanotubes in the gastrointestinal system of fish. Poster. International Conference on the Environmental Effects of Nanomaterials and Nanoparticles. Durham, NC. September 2018.
- \*Dillon, D.T., A.N. Buerger, **J.H. Bisesi.** Impacts of diethylhexyl phthalate (DEHP) on the gut microbiome of Zebrafish: the utility of stochastic degree sequence modeling and network analysis. Platform Presentation. SE SETAC Meeting, Dauphin Island, AL. August 2018.
- \*Buerger, A.N., C.M. Lavelle, T. Sabo-Attwood, **J.H. Bisesi.** Analysis of transcriptomics data in non-model species: An introduction for use in toxicological studies. Platform Presentation. SE SETAC Meeting, Dauphin Island, AL. August 2018.
- \*Buerger, A.N., C.J. Martyniuk, **J.H. Bisesi.** Investigating a causal pathway of phthalate contributions to obesity via host-gut microbiome interactions. Poster Presentation. University of Florida Graduate Student Research Day, Gainesville, FL. April 2018.
- \*Wormington, A.M., A.N. Buerger, S.E. Robinson, T. Sabo-Attwood, **J.H. Bisesi.** The effect of dietary single-walled carbon nanotube exposure on the gastrointestinal microbiome of largemouth bass. Poster Presentation. University of Florida Public Health Day. Gainesville, FL. April 2018.
- \*Dillon, D.T., G.D. Webster, **J.H. Bisesi.** Chronic exposure to biomass fuel emissions and blood pressure modifications: a systematic review and meta-analysis. Poster Presentation. Annual Meeting for the Society of Human Biology. Austin, TX. April 2018.
- \*Buerger, A.N., C.J. Martyniuk, **J.H. Bisesi.** Phthalate disruption of the gastrointestinal microbiome as a potential obesogenic mechanism: a multigenerational study using *Danio rerio*. Poster Presentation. Society of Toxicology Meeting, San Antonio, TX. March 2018.
- **Bisesi, J.H.**, D.L. Ivey, F. Lambert, J. Seitz, C. Vulpe. Using environmental DNA to understand population level effects of aquatic environmental contaminants. Platform Presentation. North America SETAC Meeting. November 2017.
- **Bisesi, J.H.**, A. Maurelli, F. Sergile, T. Sabo-Attwood, T. Astleford, L. Rubloff, R. Kiehlmeier, S. Mantri, V. Remington. Challenges of setting up a water quality testing lab in the developing world: A case study in Haiti. Platform Presentation. North America SETAC Meeting. November 2017.
- Sabo-Attwood, T., L. Ferguson, **J.H. Bisesi**, A. Ali, S. Ryan. Assessing Environmental Chemical Pollutant Impacts on Waterborne Pathogen Emergence and Evolution in Haiti. Platform Presentation. North America SETAC Meeting. November 2017.
- \*Wormington, A.M., S.E. Robinson, C.M. Lavelle, T. Ngo, K.J. Kroll, N.D. Denslow, T. Sabo-Attwood, **J.H. Bisesi.** Understanding how interactions of single-walled carbon nanotubes with the gastrointestinal system may alter the composition of the gut microbiome. Platform Presentation. North America SETAC Meeting. Minneapolis, MN. November 2017.
- \*Stoczynski, L., P. van den Hurk, **J.H. Bisesi.** Effects of selective serotonin reuptake inhibitors sertraline and citalopram on hybrid striped bass predatory behavior and brain intestine chemistry. Platform Presentation. North America SETAC Meeting. Minneapolis, MN. November 2017.

- Adamovsky, O., M. Huber, K. Souders, T. Garrett, **J.H. Bisesi**, C. Martyniuk. Global metabolomic profiling in larval zebrafish following exposure to the obesogenic DEHP (bis (2-ethylhexyl) phthalate). Platform Presentation. North America SETAC Meeting. Minneapolis, MN. November 2017.
- Adamovsky, O., M. Huber, A. Buerger, **J.H. Bisesi**, C.J. Martyniuk. Di-2-(ethylhexyl) phthalate (DEHP) effect on intestinal microbiome. Poster Presentation. North America SETAC Meeting. November 2017.
- \*Buerger, A., F. Lambert, S. Humes, A. Wormington, J. Nicholas, D. Faulkner, M. Koroly, **J.H. Bisesi**. Adventures with Paracelsus: Increasing toxicological literacy among rising high school seniors enrolled in SSTP at the University of Florida. Poster Presentation. North America SETAC Meeting. November 2017.
- \*Buerger, A.N., J. Schmidt, C.J. Martyniuk, **J.H. Bisesi**. Host-microbiome responses to DEHP exposure: A multigenerational obesity study in *Danio rerio*. Platform Presentation. North America SETAC Meeting, Minneapolis, MN. November 2017.
- \*Buerger, A.N., J. Curtis, A.M. Wormington, **J.H. Bisesi**. Effects of the antidepressant venlafaxine on fish behavior: Is appetite or motor function more sensitive? Poster Presentation. SE SOT Meeting, Fort Valley, GA. October 2017.
- Adamovsky, O., P.E. Ginn, A.N. Buerger, **J.H. Bisesi**, C.J. Martyniuk. Sex-specific transcriptomic responses in the gut of zebrafish following exposure to di-2-ethylhexyl phthalate in the diet. Poster Presentation. University of Florida Genetics Symposium, Gainesville, FL. October 2017.
- \*Wormington, A.M., S. Robinson, P.L. Ferguson, T. Sabo-Attwood, **J.H. Bisesi**. The interplay between single-walled carbon nanotubes and the gastrointestinal system: Implications for adsorbed chemical release. Platform Presentation. SE SETAC Meeting. Brunswick, GA. September 2017.
- \*Buerger, A.N., J. Curtis, A.M. Wormington, **J.H. Bisesi**. The effects of the antidepressant venlafaxine on the swimming speed and oxygen consumption rate of fathead minnows (*Pimephales promelas*). Platform Presentation. SE SETAC Meeting, Brunswick, GA. September 2017.
- \*Dillon, D.T., V. Dang, A.G. Young, **J.H. Bisesi**. Optimizing field methods for studying airborne environmental toxicants and gendered health impacts in eastern Zambia. Poster Presentation. SE SETAC Meeting. Brunswick, GA. September 2017.
- \*King, J., D. Ivey, F. Lambert, J. Seitz, C. Vulpe, **J.H. Bisesi**. Using Environmental DNA to determine the population-level effects of environmental contaminants on endangered Smalltooth Sawfish. SE SETAC Meeting. Brunswick, GA. September 2017.
- **Bisesi, J.H.**, A. Buerger, J. Schmidt, C. Martyniuk. Effects of obesogens on host-microbiome function in the gastrointestinal system: What can we learn from zebrafish? Platform Presentation. Obesity and Chronic Diseases Conference. San Francisco, CA. July 2017.
- Jackson, L., **J.H. Bisesi**, D.S. Batey. Persons Living with HIV Perspectives of Their Built Environment: Results from a Study of Health and Community. Poster Presentation. UF Public Health Day. Gainesville, FL. April 2017
- **Bisesi J.H.**, T. Ngo, B. Castillo, C.M. Lavelle, S.E. Robinson, H. Crosby, N. Saleh, P.L. Ferguson, N.D. Denslow, T. Sabo-Attwood. Single-walled carbon nanotubes may release adsorbed chemicals during exposures in the fish gastrointestinal system. Platform Presentation. 3<sup>rd</sup> International Conference on Environmental Pollution, Restoration, and Management. Quy Nohn, Vietnam. March 2017
- \*Buerger, A., J. Schmidt, C. Paixao, A. Tiblier, C.J. Martyniuk, **J.H. Bisesi**. PPAR $\alpha$  as a key component of obesity-related transcriptional networks in the gastrointestinal system following oral exposure to phthalates. Poster Presentation. 3<sup>rd</sup> International Conference on Environmental Pollution, Restoration, and Management. Quy Nohn, Vietnam. March 2017
- \*Buerger, A., J. Schmidt, C. Paixao, A. Tiblier, C.J. Martyniuk, **J.H. Bisesi**. Does oral exposure to phthalates alter obesity related transcriptional networks in the gastrointestinal system through PPAR $\alpha$ ? Poster Presentation. Society of Toxicology Annual Meeting. Baltimore, MD. March 2017

- \*Buerger, A., J. Schmidt, A. Tiblier, C.J. Martyniuk, **J.H. Bisesi**. Host-microbiome responses in the gastrointestinal system following exposure to plasticizers: Exploring mechanisms related to obesity. Poster Presentation. UF Genetics Institute Symposium. Gainesville, FL. December 2016
- \*Gump, K., A.M. Wormington, R.C. Hill, **J.H. Bisesi**, C.J. Martyniuk, A.E. Gallagher. Are Polybrominated Diphenyl Ethers (PBDEs) Associated with Feline Hyperthyroidism? Poster Presentation. UF Genetics Institute Symposium. Gainesville, FL. December 2016
- Huber, M., O. Adamovsky, K. Souders, T.J. Garrett, **J.H. Bisesi**, C.J. Martyniuk. Metabolomics and expression profiling of larval zebrafish following DEHP (bis (2-ethylhexyl) phthalate) exposure. Poster Presentation. UF Genetics Institute Symposium. Gainesville, FL. December 2016
- **Bisesi, J.H.**, H.F. Sit, S.E. Robinson, P.L. Ferguson, T. Sabo-Attwood. Challenges in assessing chemical contamination of water in resource poor countries: Lessons learned during field sampling in Haiti. Platform Presentation. SETAC World Congress. Orlando, FL. November 2016
- **Bisesi, J.H.**, S.E. Robinson, P.L. Ferguson, N.D. Denslow, T. Sabo-Attwood. Hormone receptor bioanalytical assays as indicators of endocrine disrupting potential: case studies from the field and laboratory. Platform Presentation. SETAC World Congress. Orlando, FL. November 2016
- \*Buerger, A., J. Schmidt, A. Tiblier, C. Martyniuk, **J. Bisesi**. Phthalates in the gastrointestinal system: Impacts on host-microbiome function. Poster Presentation. SETAC World Congress. Orlando, FL. November 2016
- Sabo-Attwood, T., **J.H. Bisesi**, T. Ngo, B. Castillo, C. Lavelle, S. Robinson H.M. Crosby, N.B. Saleh, P.L. Ferguson, N.D. Denslow. Fish gastrointestinal tracts influence the sorption of organic contaminants to single-walled carbon nanotubes. Platform Presentation. SETAC World Congress. Orlando, FL. November 2016
- Lavelle, C., **J.H. Bisesi**, N.B. Saleh, T. Waltzek, T. Sabo-Attwood. Development of a Non-Toxic Carbon Nanomaterial-Based Filter for Virus Sequestration in Aquaculture Systems. Platform Presentation. SETAC World Congress. Orlando, FL. November 2016
- Johnson, H.E., S. Robinson, A. Simons, A. Bikkasani, A.S. Kane, **J.H. Bisesi**, T. Sabo-Attwood. Modulation of Immune Defense Responses of Fathead Minnows exposed to Single-Walled Carbon Nanotubes. Poster Presentation. SETAC World Congress. Orlando, FL. November 2016
- Robinson, S., H.E. Johnson, D. Das, **J.H. Bisesi**, N.B. Saleh, T. Sabo-Attwood. Novel toxicity associated with emerging hybrid nanomaterials in aquatic systems. Poster Presentation. SETAC World Congress. Orlando, FL. November 2016
- \*Stoczynski, L., **J.H. Bisesi**, P. van den Hurk. Effect of selective serotonin reuptake inhibitor (SSRI) citalopram on hybrid striped bass predatory behavior and brain chemistry. Poster Presentation. SETAC World Congress. Orlando, FL. November 2016
- Smith, L.C., C. Lavelle, F. Yu, C. Silva-Sanchez, N. Vinas, J.H. Bisesi, N.D. Denslow, T. Sabo-Attwood. Tissue-based mapping of the fathead minnow (*Pimephales promelas*) transcriptome and proteome. Poster Presentation. SETAC World Congress. Orlando, FL. November 2016
- \*Buerger, A., J. Schmidt, C. Paixao, A. Tiblier, C. Martyniuk, **J.H. Bisesi**. Phthalate exposure induces transcriptional changes in zebrafish: possible mechanisms for phthalate-induced obesity. Platform Presentation. SE SETAC Meeting. Gainesville, FL. September 2016
- \*Wormington, A.M., J. Coral, M.M. Alloy, C.L. Damare, C.M. Mansfield, **J.H. Bisesi**, S.J. Klaine, A.P. Roberts. Effect of natural organic matter on the photo-induced toxicity of titanium dioxide (TiO<sub>2</sub>) nanoparticles. Poster Presentation. 9<sup>th</sup> International Conference on the Environmental Effects of Nanoparticles and Nanomaterials. Golden, CO. August 2016.
- **Bisesi, J.H.**, T. Ngo, B. Castillo, C.M. Lavelle, S.E. Robinson, H. Crosby, N. Saleh, P.L. Ferguson, N.D. Denslow, T. Sabo-Attwood. Fish gastrointestinal systems alter the sorption of organic contaminants to

single-walled carbon nanotubes. Platform Presentation. 9<sup>th</sup> International Conference on the Environmental Effects of Nanoparticles and Nanomaterials. Golden, CO. August 2016.

- \*Stoczynski, L., S.J. Klaine, **J.H. Bisesi**. Effects of citalopram on hybrid striped bass predatory behavior. Poster Presentation. CSETAC Meeting, Wilmington, NC. May 2016.
- \*Sit, H.F., A. Duvet, L. Jackson, S. Robinson, **J.H. Bisesi**. Survey of Estrogenic Water Contamination in Urban and Rural Areas of Haiti. Poster. University of Florida Public Health Day, Gainesville, FL. April 2016
- Chen, H., X. Zheng, J. Nicholas, J.C. Loeb, **J.H. Bisesi**, S. Robinson, J.A. Lednicky, T. Sabo-Attwood. Single-walled carbon nanotubes suppress the pulmonary immune response and increase viral infectivity of exposed mice. Poster. Society of Toxicology Annual Meeting. New Orleans, LA. March 2016.
- Nicholas, J.N., H. Chen, **J.H. Bisesi**, P.L. Ferguson, K. Lu, D. Bolser, T. Sabo-Attwood. Utilization of Near Infrared Fluorescence Imaging to Track and Quantify Pulmonary Retention of Single-Walled Carbon Nanotubes in Mice. Poster. Society of Toxicology Annual Meeting. New Orleans, LA. March 2016.
- \*Buerger, A., J. Schmidt, C. Paixao, A. Tiblier, C.M. Martyniuk, **J.H. Bisesi**. Phthalates as obesogens: Probing mechanisms of chemical induced obesity in multiple organ systems. Platform Presentation. Young Environmental Scientist Meeting, Gainesville, FL. March 2016.
- Nicholas, J.N., H. Chen, **J.H. Bisesi**, K. Lu, P.L. Ferguson, W.L. Castleman, D. Bolser, T. Sabo-Attwood. Near Infrared Fluorescence Imaging and Quantitation Reveal Biopersistence of Single-Walled Carbon Nanotubes in Murine Lung. Platform Presentation. Young Environmental Scientist Meeting, Gainesville, FL. March 2016.
- Chen, H., X. Zheng, J. Nicholas, J.C. Loeb, **J.H. Bisesi**, S. Robinson, J.A. Lednicky, T. Sabo-Attwood. Single-walled carbon nanotubes induce suppressed pulmonary immune response and increased viral infectivity on exposed mice. Platform Presentation. Young Environmental Scientist Meeting, Gainesville, FL. March 2016.
- \*Buerger, A., J. Schmidt, A. Tiblier, C.M. Martyniuk, **J.H. Bisesi**. Do plasticizers exacerbate molecular responses in the zebrafish gut during obesity? Poster. University of Florida Genetics Institute Symposium, Gainesville, FL. January 2016
- Chen, H., X. Zheng, J. Nicholas, J.C. Loeb, **J.H. Bisesi**, S. Robinson, J.A. Lednicky, T. Sabo-Attwood. Single-walled carbon nanotubes suppress pulmonary immune response and increase viral infectivity on influenza virus exposed mice. Poster. University of Florida Emerging Pathogens Institute Research Day, Gainesville, FL. February 2016
- **Bisesi, J.H.**, T. Ngo, C.M. Lavelle, S.E. Robinson, N.D. Denslow, T. Sabo-Attwood. The fish gastrointestinal system as a toxicant target: Identification of novel toxic mechanisms of nanomaterials and legacy pesticides using RNAseq. Poster, North America SETAC Meeting. Salt Lake City, UT. November 2015
- Ngo, T., B. Castillo, C.M. Lavelle, S.E. Robinson, N.B. Saleh, P.L. Ferguson, N.D. Denslow, T. Sabo-Attwood, **J.H. Bisesi**. Impacts of fish gastrointestinal system pH on single-walled carbon nanotube-ethinyl estradiol sorption behavior. Poster, North America SETAC Meeting. Salt Lake City, UT. November 2015
- Crosby, H.M., S.E. Robinson, C.M. Lavelle, P.L. Ferguson, **J.H. Bisesi**, T. Sabo-Attwood. Examination of the interactions of fish gastrointestinal and plasma proteins with single-walled carbon nanotubes using near infrared fluorescence. Poster, North America SETAC Meeting. Salt Lake City, UT. November 2015
- Sabo-Attwood, T., **J.H. Bisesi**, B. Okech, R. Rheingans, S.E. Robinson, P.L. Ferguson, A. Ali. Expanding the role of environmental toxicology in One Health by studying the influence of contaminants on public health. Platform Presentation, North America SETAC Meeting. Salt Lake City, UT. November 2015

- Lavelle, C.M., **J.H. Bisesi**, N. Saleh, T. Waltzek, T. Sabo-Attwood. Viral Interactions with Carbon Nanomaterials in the aquatic environment; Implications for fish toxicity. Poster, North America SETAC Meeting. Salt Lake City, UT. November 2015
- **Bisesi, J.H.**, T. Ngo, B. Castillo, K. Blanzly, M. Dickenson, S. Peterson, S.E. Robinson, P.L. Ferguson, N.D. Denslow, B. Okech, T. Sabo-Attwood, Screening for estrogenic activity using in vitro hormone receptor assays: case studies from the field and laboratory. Platform Presentation, SE SETAC Meeting, Pensacola, FL, September 2015
- **Bisesi, J.H.**, T. Ngo, C.M. Lavelle, K. Liu, P.L. Ferguson, N.D. Denslow, N.B. Saleh, T. Sabo-Attwood. Interactions of single-walled carbon nanotubes with nutrients: potential implications for aquatic foodwebs. Platform Presentation, PRIMO Meeting, Trondheim, Norway, May 2015
- **Bisesi, J.H.**, T. Ngo, B. Castillo, K. Blanzly, M. Dickenson, S. Peterson, S.E. Robinson, P.L. Ferguson, N.D. Denslow, B. Okech, T. Sabo-Attwood. Hormone receptor binding and activation as an indicator of endocrine disrupting potential: case studies from the field and laboratory. Poster, PRIMO Meeting, Trondheim, Norway, May 2015
- **Bisesi, J.H.**, B. Castillo, C.M. Lavelle, N.D. Denslow, P.L. Ferguson, T. Sabo-Attwood. Nanoparticle-contaminant interactions: A case study of the potential for single-walled carbon nanotubes to suppress xenoestrogen effects in fish. Platform Presentation, North America SETAC Meeting. Vancouver, BC. November 2014
- Sweet, L.E., W. Bridges, **J.H. Bisesi**, N. Tharayil, S.J. Klaine. A model to predict the adverse effects of SSRI antidepressants on fish brain chemistry and predation behavior. Interactive Poster, North America SETAC Meeting, Vancouver, BC. November 2014
- Sabo-Attwood, T., G. Dominguez, **J.H. Bisesi**, S. Jayasinghe, N.D. Denslow. A role for both soluble and membrane estrogen receptors in reproductive processes in fish. Interactive Poster, North America SETAC Meeting, Vancouver, BC. November 2014
- **Bisesi, J.H.**, C.M. Lavelle, K. Liu, P.L. Ferguson, N. Saleh, N.D. Denslow, T. Sabo-Attwood. Examination of the potential for single walled carbon nanotubes to limit nutrient uptake by comparing gastrointestinal gene expression profiles during fish feeding studies. Platform Presentation, 9<sup>th</sup> International Conference on the Environmental Effects of Nanoparticles and Nanomaterials, Columbia, SC. September 2014
- **Bisesi, J.H.**, T. Ngo, N. Saleh, T. Sabo-Attwood, Analysis of the contributions of component materials to the toxicity of hybrid nanomaterials. Poster, 9<sup>th</sup> International Conference on the Environmental Effects of Nanoparticles and Nanomaterials, Columbia, SC. September 2014.
- **Bisesi, J.H.**, B Castillo, C.M. Lavelle, P.L. Ferguson, N.D. Denslow, T. Sabo-Attwood. Effects of co-exposure of single-walled carbon nanotubes and ethinyl estradiol on estrogen receptor binding, activation, and downstream responses in fish. Platform Presentation, SETAC Europe Meeting, Basel, Switzerland, May 2014.
- Sabo-Attwood, T., **J.H. Bisesi**, C.M. Lavelle, P.L. Ferguson, N. Saleh, N.D. Denslow. *In vivo* tracking of single-walled carbon nanotubes and their modulation of nutrient transport and processing genes during fish feeding studies. Platform Presentation. SETAC Europe Meeting, Basel, Switzerland. May 2014.
- **Bisesi, J.H.**, S. Ponnayolu, K. Liu, N. Saleh, P.L. Ferguson, T. Sabo-Attwood. Effects of single walled carbon nanotubes on the expression of genes responsible for nutrient processing and uptake during fish feeding studies. Poster, North America SETAC Meeting, Nashville, TN. November 2013
- Sweet, L.E., **J.H. Bisesi**, W. Bridges, K. Gaworecki, and S.J. Klaine. The development of a model to predict the adverse effects of SSRI antidepressants on fish brain chemistry and predation behavior. Poster, North America SETAC Meeting. Nashville, TN. November 2013

- **Bisesi, J.H.**, S. Ponnayolu, K. Liu, N. Saleh, P.L. Ferguson, T. Sabo-Attwood. Do single walled carbon nanotubes decrease nutrient uptake during fish feeding studies? Poster, NanoFlorida Meeting, Gainesville, FL. September 2013
- Sweet L.E., **J.H. Bisesi**, and S.J. Klaine. Development of a serotonin reuptake transporter binding index as a predictor of the behavioural toxicity of selective serotonin reuptake inhibitor antidepressants found in the aquatic environment. Poster, SETAC Europe Meeting, Glasgow, Scotland. May 2013
- Sabo-Attwood, T., G. Dominguez, **J.H. Bisesi**, K.J. Kroll, and N.D. Denslow. Transcriptional repression of the vitellogenin receptor by xenoestrogens via select estrogen receptor subtypes in largemouth bass. Platform Presentation. PRIMO Meeting, Faro, Portugal. May 2013
- **Bisesi J.H.**, J. Merten, A.N. Parks, P.L. Ferguson, T. Sabo-Attwood. Examining single walled carbon nanotube distribution in live fish during gavage and feeding studies using near infrared fluorescence detection. Platform Presentation, North America SETAC Meeting, Long Beach, CA. November 2012
- Sweet, L.E., **J.H. Bisesi**, S.J. Klaine. Binding affinity of antidepressants to the serotonin reuptake transporter as a predictor of adverse behavioral effects in fish. Poster, North America SETAC Meeting, Long Beach, CA. November 2012
- Sabo-Attwood T., **J.H. Bisesi**, N.B. Saleh, A.R.M.N. Afrooz, A.N. Parks, P.L. Ferguson J. Merten. Dynamics of SWNT distribution and aggregate structure during aquatic exposures. Poster, Sustainable Nanotechnology Organization Meeting, Washington, DC. November 2012
- **Bisesi J.H.**, J. Merten, A.N. Parks, P.L. Ferguson, T. Sabo-Attwood. Imaging real time single walled nanotube distribution in fish using near infrared fluorescence detection. Platform Presentation, 7<sup>th</sup> International Conference on the Environmental Effects of Nanoparticles and Nanomaterials, Banff, Alberta, Canada. September 2012
- Ferguson P.L., P.A. Schierz, B. Espinasse, M. Wiesner, **J.H. Bisesi**, T. Sabo-Attwood. Fate and Transport of Single Walled Carbon Nanotubes in Wetland Ecosystems – First Results from the CEINT SWNT Mesocosm. Platform Presentation, 7<sup>th</sup> International Conference on the Environmental Effects of Nanoparticles and Nanomaterials, Banff, Alberta, Canada. September 2012
- **Bisesi, J.H.**, K.A. Johnson, S.J. Klaine. Do antidepressant mixtures have additive effects on fish predatory behavior? Poster, North America SETAC Meeting, Boston, MA. November 2011
- **Bisesi, J.H.**, S.J. Klaine. Effects of the antidepressant venlafaxine (Effexor<sup>®</sup>), on fish brain chemistry and predation behavior. Platform Presentation, SETAC Europe Meeting, Milan, Italy. May 2011
- Sweet L.E., **Bisesi, J.H.**; Klaine, S.J. Effects of bupropion on brain chemistry and predatory behavior in hybrid striped bass. Poster, Annual Carolina's SETAC meeting, Boone, NC. March 2011
- Yonce, J.C.; **Bisesi, J.H.**; Sowers, A.D.; Klaine, S.J. Testing the sensitivity of the zebrafish embryo test to heavy metal contaminants. Poster, Annual Carolina's SETAC meeting, Boone, NC. March 2011
- **Bisesi, J.H.**, S.J. Klaine. Effects of the antidepressant venlafaxine (Effexor<sup>®</sup>), on fish brain chemistry and predation behavior. Platform Presentation, North American SETAC Meeting, Portland, OR. November 2010
- **Bisesi, J.H.**, A.D. Sowers, S.J. Klaine. Comparative toxicity of heavy metals using fathead minnow WET test methods and zebrafish embryo toxicity testing methods. Poster, North American SETAC Meeting, Portland, OR. November 2010
- **Bisesi, J.H.**, K.M. Gaworecki, S.J. Klaine. Examination of predator-prey interactions during long-term fluoxetine exposure: A behavioral and biochemical perspective. Platform Presentation, SETAC Europe Meeting, Seville, Spain. May 2010
- **Bisesi, J.H.**, K.M. Gaworecki, S.J. Klaine. Examination of predator-prey interactions during long-term fluoxetine exposure: A behavioral and biochemical perspective. Poster, North American SETAC Meeting, New Orleans, LA. November 2009

- **Bisesi, J.H.**, K.M. Gaworecki, S.J. Klaine. Behavioral and biochemical changes in hybrid striped bass as a result of 27 day, low concentration exposures to fluoxetine. Platform Presentation, North American SETAC Meeting, Tampa, FL. November 2008
- **Bisesi, J.H.**, K.M. Gaworecki, S.J. Klaine. Use of a predation bioassay to examine the effects of psychoactive pharmaceuticals on the predation behavior and brain biochemistry of the hybrid striped bass. Poster, Annual Carolina's SETAC Meeting, Moorhead City, NC. April 2008
- **Bisesi, J.H.**, A.S. Green, S.J. Klaine. The effects of duration and concentration of episodic zinc exposure to the fathead minnow, *P. promelas*. Platform Presentation, North American SETAC Meeting, Milwaukee, WI. November 2007
- **Bisesi, J.H.**, K.P. Parmenter, H.L. Atwood, J.R. Tomasso, C.L. Browdy. The effects of nitrite on the production characteristics of the Pacific white shrimp (*Litopenaeus vannamei*) grown in dilute sea water and mixed salt environments. Platform Presentation, Annual Carolina's SETAC Meeting, Athens, GA. April 2007
- J. R. Tomasso, T. I. J. Smith, S. P. Young, **J. H. Bisesi**, V. L. Restrepo and J. S. Wise. Survival and plasma osmolality of black sea bass, *Centropristis striata*, exposed to low salinities. Platform Presentation, World Aquaculture Society Meeting, Bali, Indonesia. May 2005

## STUDENT MENTORING

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- **PhD Student Advisees**
  - Jessica Donaldson: PhD in Environmental Health (est. August 2026), University of Florida
    - Dissertation topic TBD
  - Deirdre Love: PhD in Environmental Health (est. August 2023), University of Florida
    - Effects of insecticide treated mosquito net fishing on aquatic organisms
  - Alexis Wormington: PhD in Environmental Health (Graduated August 2021), University of Florida
    - Interactions between the gastrointestinal system and single-walled carbon nanotubes in fish: effects on gut homeostasis and bioavailability of environmental contaminants
  - Amanda Buerger: PhD in Environmental Health (Graduated December 2019), University of Florida
    - Dissertation Topic: Peroxisome proliferator activated receptor activity and microbial dysbiosis: convergence of dual mechanisms that contribute to obesity following phthalate exposure in *Danio rerio*
- **Masters Program Advisees**
  - Masters of Health Sciences, One Health Concentration, University of Florida
    - Erin Driver, Expected Graduation Spring 2024
    - Brittany Anderson, Expected Graduation Spring 2023
    - Meredith Zahara, Expected Graduation December 2023
    - Julia Alvarez, Graduated May 2022
    - Courtney Hessell, Graduated August 2021
    - Anthony Pepe, Graduated December 2020
    - Meaghan Delise, Graduated December 2019
    - Kelsey Watts, Graduated May 2020
    - Jesse Johnson, Graduated May 2019
    - Mary Bohannon, Graduated May 2019

- Chris Pierson, Graduated May 2017
- Amanda Tiblier, Graduated May 2016
- Masters of Public Health, Environmental Health Concentration, University of Florida
  - Remy Powell, Graduated May 2022
  - Bangning Zhang, Graduated May 2018
  - Lindsay Jackson, Graduated May 2017
  - Ho Fei Sit, Graduated May 2016
  - Tara Wilfong, Graduated May 2016
- Masters of Public Health, Public Health Practice Concentration, University of Florida
  - Linda Hanson, Graduated August 2019
- **Masters Program Research Assistants**
  - Katherine Buschang: MHS, One Health Concentration, May 2022, University of Florida
    - Wastewater surveillance for SARS-CoV-2 on the University of Florida Campus
  - Karly Caples: MHS, One Health Concentration, May 2020, University of Florida
    - Expression of serotonin reuptake transporters in the gastrointestinal systems of hybrid striped bass exposed to sertraline
  - Andres Manrique: MHS, One Health Concentration, May 2020 (Estimated), University of Florida
    - Expression of serotonin reuptake transporters in the gastrointestinal systems of hybrid striped bass exposed to citalopram
  - Jack Vann: MPH, Environmental Health Concentration, May 2018, University of Florida
    - Designing a zebrafish embryo toxicity test for summer research programs at University of Florida
  - Jordan King: MPH, Environmental Health Concentration, May 2018, University of Florida
    - Validating primers for smalltooth sawfish environmental DNA sampling
  - Lindsay Jackson: MPH, Environmental Health Concentration
  - Thuy Ngo: BHS 2014, MPH 2015, University of Florida
    - Toxicity of carbon-metal hybrid nanomaterials in fish
- **External Examiner**
  - Zdena Moosová, PhD in Biology, December 2018, Masaryk University, Czech Republic
  - Alana Weber, MS in Toxicology, December 2021, University of Saskatchewan, Canada
- **Graduate Student Committees**
  - Francisca Hinz: PhD in Soil and Water Sciences (est. May 2025), University of Florida
  - Emily Griffin: PhD in Physiological Sciences (est. May 2023), University of Florida
  - Andrew Rainey: PhD in Public Health, One Health Concentration (est. May 2023), University of Florida
  - Lauren Hintenlang: PhD in Public Health, One Health Concentration (est. Dec. 2023), University of Florida
  - Nima Madani: PhD in Public Health, Environmental Health Concentration (est. Dec. 2022), University of Florida
  - Dani Cucchiara: PhD in Public Health, One Health Concentration, 2022, University of Florida
    - The protective effect of zinc on cadmium toxicity in daphnia magna at the molecular level: an examination of mechanisms
  - Liz Brammer-Robbins: MS in Physiological Sciences, 2021, University of Florida

- Faith Lambert: PhD in Physiological Sciences, 2021, University of Florida
  - Developmental toxicity of select ultraviolet-filters to daphnia magna and their potential role as invertebrate endocrine disruptors
- David Dillon: PhD in Anthropology, 2020, University of Florida
  - Risk perceptions as potential mediators of environmental toxicants associated with biomass fuel use
- Daniel Fahr: MS in Soil and Water Sciences, 2020, University of Florida
  - Influence of Water Resource Recovery Facility Effluents on the Presence of Selected Trace Organic Contaminants (TOCs) in the Reedy River, South Carolina
- Lauren Stoczynski: MS in Biological Sciences, 2016, Clemson University
  - Impacts of sertraline and citalopram on hybrid striped bass brain chemistry and behavior
- Justine Nicholas: MS in physiological Sciences, 2016, University of Florida
  - Using near infrared fluorescence to track single-walled carbon nanotube distribution and clearance from lungs
- Lauren E. Sweet: PhD in Environmental Toxicology, 2015, Clemson University
  - Developing predictive models of fish behavioral and biochemical responses to pharmaceutical contaminants
- Anna Lee McLeod: MS in Environmental Toxicology, 2014, Clemson University
  - Designing behavioral assays to examine the effects of low level metal contamination on fish
- **Undergraduate Research Assistants**
  - Ella Hardin: BS in Chemistry, 2024 (estimated), University of Florida
    - Reducing the effects of insecticide treated net fishing on aquatic invertebrates
  - Yushra Ahmed: BS in Public Health, 2024 (estimated), University of Florida
    - University Scholars Recipient
    - Effects of brominated flame retardants in thyroid receptor  $\beta 2$  in the hypothalamus
  - Melissa Filgueiras: BS in Biology, 2023, University of Florida
    - University Scholars Recipient
    - Effects of ITN Fishing on Daphnia magna
  - Caitlyn Parente: BS in Biochemistry, 2021, University of Florida
    - University Scholars Recipient
    - Effects of DEHP on liver lipid metabolism genes following endurance exercise
  - Kerrie Corcoran: BS in Kinesiology, 2020, University of Florida
    - Effects of sertraline and citalopram on hybrid striped bass guts
  - Emily Watts: BS in Biochemistry, 2020, University of Florida
    - Behavioral response of larval zebrafish to the antidepressant venlafaxine
  - Brooke Johnson: BS in Biology, 2020, University of Florida
    - Responses of Daphnia to episodic exposures to heavy metal contaminants
  - Tejas Patel: BS in Health Sciences, 2019, University of Florida
    - PPHP Honors Program Advisee
    - Response of zebrafish to phthalate plasticizers
  - KD Jacobs: BS in Public Health, 2019, University of Florida
    - Effects of phthalate plasticizers on PPARalpha receptors
  - Michael Yan: BS in Biology, 2016, University of Florida
    - Developing new receptor binding and activation assays
  - Blake Castillo: BS in Biology, 2014, University of Florida

- Single-walled carbon nanotube mediation of ethinyl estradiol binding and activation *in vitro*
- Satvika Ponnaveolu: BS in Biology, 2012, University of Florida
  - Examination of the effects of single walled carbon nanotubes in feeding studies on nutrient processing gene transcription
- Monty Ali: BS in Environmental Engineering, 2014, University of Florida
  - Imaging real time distribution of single walled nanotubes in fish using near infra-red fluorescence detection
- Mary Leigh Morris: MS in Health Science, 2013, University of Florida
  - Examination of the effects of various protein sources on single-walled nanotube fluorescence
- Chase Yonce: BS in Biological Sciences, 2011, Clemson University
  - Testing the sensitivity of the zebrafish embryo test to heavy metal contaminants
- **High School Student Research Assistants**
  - UF CPET Student Science Training Program
    - Lindsay Dolan: Reduction of zinc toxicity through multiple pulse exposures
    - Ryan Katz: Comparison of single and continuous zinc exposure toxicity
    - Ryan Napoleon: Effects of dissolved organic carbon on episodic zinc toxicity
    - Drew Eidemueller: Effects of diurnal pH change on zinc toxicity to *Daphnia magna*
    - Saahi Nagulapalli: Episodic exposures of *Daphnia magna* to zinc
    - Julia Curtis: Effects of the antidepressant venlafaxine on swimming performance in fathead minnows
    - Paige Simone: Designing an *in vitro* transactivation assay for human and zebrafish PPARs

## PROFESSIONAL DEVELOPMENT

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- Communicating your science. Short Course. Carolina's SETAC annual meeting, Boone, NC. April 2011
- The Endocrine System: The Good, The Bad, and The Regulations. Short Course. SETAC Annual Meeting, Portland, OR November 2010
- Eco-challenge: An Eco-Risk simulation game. Short Course. Carolina's SETAC Annual Meeting, Athens, GA March 2010
- Natural Resource Damage Assessment – Key Concepts. Short Course. North American SETAC Annual Meeting, New Orleans, LA. November 2009
- Use and method development training for the Varian 1200L Quadrapole LC/MS/MS. Clemson University/Varian Inc. September 2009
- Introduction to "R" Statistical Software. Workshop. Clemson University/Hydroqual, Inc. January 2009
- Advanced Mass Spectrometric Analysis for Endocrine Disruptors and Pharmaceuticals in the Environment. Short Course. North American SETAC Annual Meeting, Tampa Bay, FL. November 2008
- Sampling Techniques and Innovations for Aquatic and Marine Environmental Research. Short Course. Carolina's SETAC Annual Meeting, Morehead City, NC.

April 2008

- Toxicity Evaluation and Reduction Assessment. Short Course, North American SETAC Annual Meeting, Milwaukee, WI.  
November 2007
- Environmental Risk Assessment of Pharmaceuticals. Short Course, North American SETAC Annual Meeting. Montreal, Quebec.  
November 2006
- SCUBA Diving International Open Water SCUBA Certification.  
April 2005

## **AWARDS**

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- 2022: University of Florida Assistant Professor Excellence Award Nominee
- 2019: Deans Citation Award, University of Florida, College of Public Health and Health Professions
- 2019: Best Paper Award, Environmental Toxicology and Chemistry Journal
- 2018: Presidential Citation for Exemplary Service, Society of Environmental Toxicology and Chemistry
- 2014: Deans Citation Award, University of Florida, College of Public Health and Health Professions

## **ORGANIZATIONS AND SERVICE**

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- Committee Service
  - University of Florida
    - 2016-2017: College of Public Health and Health Professions Public Health Operations Committee
    - 2016-2017: College of Public Health and Health Professions Public Health MPH Environmental Health Concentration Program Director
    - 2017-2019: Department of Environmental and Global Health MHS Program Director
    - 2017-Present: Department of Environmental and Global Health Program Committee
    - 2017-Present: Department of Environmental and Global Health PhD Program Director
    - 2017-Present: Department of Environmental and Global Health Admissions Committee Chair
- Sigma Xi Scientific Research Honors Society
  - Inducted May 2020
- Delta Omega Public Health Honors Society, Beta Upsilon Chapter
  - Inducted April 2017
- Grant review panelist
  - NIH SIEE: July 2021
  - NIH XNDA: February 2021
  - State of California Research Grants: January 2019
  - EPA STAR Fellowships: 2015
  - State of Texas Endangered Species Research: 2014
  - UF Global Fellows Applications: 2020
- Guest Editor
  - General and Comparative Endocrinology: Special Issue - Proceedings of the fifth biennial meeting of the North American Society for Comparative Endocrinology
  - Comparative Biochemistry and Physiology Part D: Special Issue - Comparative animal physiology and the microbiome

- Frontiers in Environmental Science: Special Issue - The Microbiome – A New Scientific Frontier In Environmental Science For Ecosystem Health
- Toxics: Special Issue - Environmental Pollutants and Their Effects on Host Associated Microbial Communities in Human and Animal Systems
- Search Committees
  - Department of Environmental and Global Health: Clinical Assistant Professor Search Committee Member: 2022
  - University of Florida Libraries: Public Health Liaison Librarian Search Committee Member: 2022
  - Department of Environmental and Global Health: Tenure Track Assistant Professor Search Committee Member: 2019
  - Department of Environmental and Global Health: Clinical Assistant Professor Search Committee Chair: 2019
  - University of Florida College of Public Health and Health Professions: Masters of Public Health Program Director Search Committee Member: 2017
- Journal reviewer
  - Aquatic Toxicology
  - Comparative Biochemistry and Physiology
  - PLOS One
  - Ecotoxicology and Environmental Safety
  - Scientific Reports
  - RSC Advances
  - Environmental Toxicology and Chemistry
  - Chemosphere
  - Environmental Biology of Fishes
  - Nanotoxicology
  - Nanomaterials
  - Current medicinal chemistry
  - Ecotoxicology
  - Journal of Toxicology and Environmental Health
  - Journal of Hazardous Materials
  - Neurology and Teratology
  - Environmental Science and Technology
  - Science of the Total Environment
- Society of Environmental Toxicology and Chemistry 2005-Present
  - Chair of Membership Committee: 2019-Present
  - Annual Meeting Program Committee: 2020
    - Technical Program Subcommittee Member
  - Short Course Instructor: 2020, 2021
    - Introduction to Microbiome Sample Collection, Sequencing, and Analysis Methods for Microbial Community Research
  - Session Chair: 2013, 2015, 2016, 2017, 2018, 2019, 2020
- Southeast Regional Chapter of Environmental Toxicology and Chemistry 2014-Present
  - Past President: September 2017-Present
  - President: September 2016-2017

- Vice President: September 2015-September 2016
- Meeting organizer: September 2016 (Gainesville, FL), September 2017 (Brunswick, GA), August 2018 (Dauphin Island, AL)