**CURRICULUM VITAE**

Joseph Hopkin Bisesi Jr, Ph.D.

Assistant Professor

University of Florida

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**EDUCATION**

* **Ph.D. Environmental Toxicology,** December 2011,*Clemson University, Clemson, SC*

 Advisor: Dr. Stephen J. Klaine

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**

* **Assistant Professor** *University of Florida, Department of Environmental and Global Health, Center for Environmental and Human Toxicology, Gainesville, FL*

September 2016-Present

* **Masters Programs Director** *University of Florida, Department of Environmental and Global Health, Gainesville, FL*

January 2017-Present

* **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-Present

* **Post-Doctoral Associate** *University of Florida, Department of Environmental and Global Health, Center for Environmental and Human Toxicology, Gainesville, FL*

August 2011-May 2014

* **Graduate Research Assistant** *Clemson University Institute of Environmental Toxicology, Pendleton, SC*

August 2006-August 2011

* **Graduate Research Assistant** *Clemson University Aquatic Animal Research Lab, Clemson, SC*

May 2005-May 2007

* **Graduate Research Assistant**, *Waddell Mariculture Center, Bluffton, SC*

 April 2006-August 2006

* **Undergraduate Research Assistant**, *Clemson University Aquatic Animal Research Lab, Clemson, SC*

August 2003-May 2004

* **Undergraduate Research Assistant**, *SC Life, Clemson University, Clemson, SC*

August 2004-May 2005

**TEACHING EXPERIENCE**

* **Current Courses**, *University of Florida, Gainesville, FL*
* Environmental Health Concepts in Public Health, Summer 2013 (online), Summer 2014 (online), Fall 2014 (on campus), Summer 2015 (online), Spring 2016 (online)
* Environmental Toxicology, Fall 2016, Fall 2017 (online)
* Critical Thinking in Environmental and Global Health, Spring 2015 (on campus)
* Environmental and Global Health Journal Club, Spring 2015 (on campus)
	+ - * **Guest Lecturer,** *Clemson University, Clemson, SC*
			* Global Public Health, Environmental Health Research Across the Globe: Applications In Underdeveloped Countries, Spring 2017 (on campus)
			* Clinical Medicine, Environmental toxicology lecture, Spring 2015 (on campus)
			* Advanced Toxicology, Nanotoxicology Lecture, Fall 2016 (on campus)
			* Advanced Environmental Toxicology, Population level ecotoxicology and *in situ* biomonitoring lectures, Spring 2010 (on campus), Spring 2011 (on campus)
			* Public and Environmental Health, Environmental Toxicology Lecture, Spring 2010 (on campus)
* **Graduate Teaching Assistant,** *Clemson University, Clemson, SC*
* Comparative Physiology Lab, Spring 2007 (on campus)
* Vertebrate Biology Lab, Spring 2006 (on campus), Fall 2006 (on campus)
* General Biology Lab, Fall 2005 (on campus)

**GRANT SUPPORT**

* **Funded**
* NSF CBET 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 1st, 2016-June 30th, 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 1st, 2016-February 27th, 2017

* Illumina RNASeq Pilot Grant Program: Understanding Mechanisms of Diet and Chemical Induced Obesity Using RNAseq

**Bisesi (PI)** $5,000, December 1st, 2015-June 1st, 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 15th, 2015-December 14th, 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

Denslow (PI), **Bisesi (Co-I)** $25,000, January 1, 2015-May 30, 2015

* **Pending**
* AAVN and Waltham Early Career Research Grant, Submitted April 2017: Understanding the influence of brominated flame retardants on hyperthyroidism in cats

**Bisesi (PI)** $23,707

* Disney Conservation Fund, Submitted March 2017: Searching for endangered smalltooth sawfish

**Bisesi (PI)** $49,995

* Disney Conservation Fund, Submitted March 2017: Tracking the endangered largetooth sawfish

Vulpe (PI), **Bisesi (Co-PI)** $50,000

* GoMRI RFP VI, Submitted March 2017: Evaluating the impacts of gulf oil on the nutritional quality of aquatic food chains

**Bisesi (PI)** $999,903

* NSF BCS Cultural Anthropology, Submitted January 2017: Livelihoods, biofuel burning, and maternal perceptions of indoor air pollution in Eastern Province Zambia

Young (PI), **Bisesi (Co-PI)** $350,464

* NIH R21 National Institute of Diabetes and Digestive and Kidney Diseases, Submitted October 2016: Host immune-gut microbiome interactions following a high fat diet.

**Bisesi (Co-PI)** $412,466

* **Not Funded**
* NSF CBET Environmental Engineering, Submitted October 2016: WERF: Collaborative Research: Nano-enabled Disinfection Technology for Sustainable Aquaculture in the Food-Energy-Water Nexus

Saleh (PI), **Bisesi (Co-I)** $350,000

* NSF/USDA EAGER to Develop and Enable Breakthrough Technologies for Animal and Plant Phenomics and Microbiomes: An automated pathway-targeted approach (Enzymes of Metabolites or “EnzMet”) to improve predictions of gut microbiome communities and metabolites

**Bisesi (Co-PI)** $200,000

* NSF/USDA Innovations at the Nexus of Food, Water, Energy, and Water Systems, Submitted March 2016: Novel Nano-enabled Disinfection Technology for Sustainable Aquaculture

**Bisesi (Co-PI)** $1,000,000

* NIH U01 National Institute of Environmental Health Sciences. Submitted November 2015: Real-world Exposure Systems to Assess Nanomaterial-Induced Pathogen Susceptibility

Sabo-Attwood (PI)**, Bisesi (Co-I)** $1,500,000

Reviews and Resubmission Status**:** Proposal was discussed, awaiting comments, plan to resubmit as R01 in October 2016

* University of Florida Research Opportunity Seed Fund, Submitted January 2016: Understanding the role of host-gut microbiome interactions in high fat diet induced gastrointestinal inflammation

**Bisesi (PI)** $95,842

* NIH R21 National Institute of Diabetes and Digestive and Kidney Diseases, Submitted October 2015: Host immune responses mediate gut microbiota dysbiosis via HMGB1 following a high fat diet.

**Bisesi (Co-PI)** $398,930

Reviews and Resubmission Status**:** Not discussed, spoke to program officer, will revise to resubmit in October 2016

* GoMRI RFP V, Submitted March 2015: Impacts of gulf oil on nutrient quality of marine algae: Implications for aquatic food chains

**Bisesi (PI)** $1,075,077

Reviews and Resubmission Status**:** Comments easily addressed, will resubmit to GOMRI pending 2016 RFP

* GoMRI RFP V, Submitted March 2015: Returning to NORmAL: Interactions between Nutrients, Oil, Recovery and HeALth indices for individual fitness

**Bisesi (Co-PI)** $1,436,478

Reviews and Resubmission Status**:** Comments easily addressed, will resubmit to GOMRI pending 2016 RFP

* University of Florida Research Opportunity Seed Fund: Determining the contributions of environmental contaminants to obesity: A mechanistic case study with phthalates.

**Bisesi (Co-PI)** $100,000

Reviews and Resubmission Status**:** Strong reviews, comments addressed and resubmitted to 2016 seed fund competition

* GoMRI consortium submitted June 2014: PetroBenthos - Petroleum Hydrocarbons in Deep Benthic and Near Shore Ecosystems: Combined effects of multiple stressors. Denslow (PI), **Bisesi (Co-I)** $15,000,000.

Reviews and Resubmission Status**:** Comments taken into consideration and resubmitted to GOMRI V RFP in March 2015

* NSF CBET Environmental Health and Safety of Nanotechnology submitted November 2014: Collaborative Research: Interactions of single-walled carbon nanotubes and pesticides from contaminated sediments.

**Bisesi (PI)** $299,189.

Reviews and Resubmission Status**:** Returned without review, issues addressed and resubmitted October 2015

* NIH R01 National Heart Lung and Blood Institute submitted October 2014: The influence of hybrid nanomaterials on pulmonary innate immune mechanisms.

Sabo-Attwood (PI), **Bisesi (Co-I)** $1,722,067.

Reviews and Resubmission Status**:** Not discussed, resubmission not planned

* NIH R21 National Institute of Environmental Health Sciences submitted February 2015: Environmental contaminants and obesity: A mechanistic case study with phthalates.

Martyniuk (PI), **Bisesi (Co-I)** $412,000

Reviews and Resubmission Status**:** Not discussed, resubmission planned for June 2016

**PEER REVIEWED PUBLICATIONS**

* **Published (17)**
* **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. 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. In Press. Environmental Toxicology and Chemistry. DOI: 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.
* 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.
* **Bisesi, J.H.**; Ngo, T.; Ponnavolu, 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.
* 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.
* **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.
* 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.
* **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 (2)**

* **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 (66 total, \*indicates Bisesi lab student presentation)**

* 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. 3rd 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**. PPARα as a key component of obesity-related transcriptional networks in the gastrointestinal system following oral exposure to phthalates. Poster Presentation. 3rd 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 PPARα? 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 (TiO2) nanoparticles. Poster Presentation. 9th 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. 9th 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. Blanzy, 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. Blanzy, 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, 9th 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, 9th 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. Ponnavolu, 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. Ponnavolu, 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 florescence 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, 7th 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, 7th 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®), 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 buproprion 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®), 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**

* **Primary Graduate Students**
* Amanda Buerger: PhD in Environmental Health (est. May 2019), University of Florida
* Mechanisms of chemical induced obesity
* Alexis Wormington: PhD in Environmental Health (est. May 2020), University of Florida
* Interactions of single-walled carbon nanotubes and chemicals in the gastrointestinal system
* David Dillon: PhD in Anthropology (est. May 2019), University of Florida
* Development of airborne PAH analysis methods for rural Zambia
* Lauren Stoczynski: MS in Biological Sciences (est. August 2016), Clemson University
* Impacts of sertraline and citalopram on hybrid striped bass brain chemistry and behavior
* Ho Fei Sit: MPH, Environmental Health Concentration May 2016, University of Florida
* Comparison of aquatic contaminants in rural vs. urban areas of Haiti
* Thuy Ngo: BHS 2014, MPH, 2015, University of Florida
* Toxicity of carbon-metal hybrid nanomaterials in fish
* **Masters Program Advisees**
* Lindsay Jackson, MPH, Environmental Health Concentration May 2017, University of Florida
* Chris Pierson, MHS, One Health Concentration May 2017, University of Florida
* Ho Fei Sit: MPH, Environmental Health Concentration May 2016, University of Florida
* Amanda Tiblier: MHS, One Health Concentration May 2016, University of Florida
* Tara Wilfong: MPH, Environmental Health Concentration May 2016
* **Graduate Student Committees**
* Faith Lambert: PhD in physiological Sciences (est. May 2019), University of Florida
* David Dillon: PhD in Anthropology (est. May 2019), University of Florida
* Maternal and child susceptibility to biomass fuels in eastern Zambia
* Justine Nicholas: MS in physiological Sciences (est. May 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 Students**
* Michael Yan: BS in Biology (est. May 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 Ponnavolu: 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

**PROFESSIONAL DEVELOPMENT**

* 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**

* Deans Citation Award, University of Florida, College of Public Health and Health Professions

2014

* Travel assistance bursary for the 7th International Conference on the Environmental Effects of Nanoparticles and Nanomaterials.

2012 ($500)

* Society of Environmental Toxicology and Chemistry student training exchange opportunity award.

2011 ($578)

* Carolina’s Regional Chapter of the Society of Environmental Toxicology and Chemistry 1st Place student poster presentation ($300). Annual Carolina's SETAC meeting 2010, Athens, GA
* Carolina’s Regional Chapter of the Society of Environmental Toxicology and Chemistry 1st Place student platform presentation ($300). Annual Carolina's SETAC meeting 2007, Athens, GA
* Clemson University Biological Sciences Graduate Student Association Fall Travel Award

2007 ($400), 2008 ($400)

* Clemson University Biological Sciences Graduate Student Association Spring Travel Award

2007 ($194.38), 2008 ($400), 2010 ($400)

* Clemson University Graduate Student Government Fall Professional Enrichment Grant

2007 ($100), 2008 ($75), 2009 ($800), 2010 ($671)

* Clemson University Graduate Student Government Spring Professional Enrichment Grant

2008 ($150)

* Society of Environmental Toxicology and Chemistry Student Travel Award

2007 ($300), 2010 ($265)

**ORGANIZATIONS AND SERVICE**

* Committee Service
* University of Florida
* College of Public Health and Health Professions Public Health Operations Committee
* College of Public Health and Health Professions Public Health MPH Environmental Health Concentration Program Director
* Department of Environmental and Global Health Program Committee
* Department of Environmental and Global Health MHS Program Director
* Delta Omega Public Health Honors Society, Beta Upsilon Chapter
	+ Inducted April 2017
* Grant review Panelist
	+ EPA STAR Fellowships: 2015
	+ State of Texas Endangered Species Research: 2014
* Journal reviewer
	+ Aquatic Toxicology
	+ Comparative Biochemistry and Physiology
	+ PLOS One
	+ Ecotoxicology and Environmental Safety
	+ Scientific Reports
	+ Environmental Toxicology and Chemistry
	+ Chemosphere
	+ Environmental Biology of Fishes
	+ Nanotoxicology
	+ Nanomaterials
	+ Current medicinal chemistry
	+ Ecotoxicology
	+ Journal of Toxicology and Environmental Health
* Society of Environmental Toxicology and Chemistry

2005-Present

* Session Chair: 2013, 2015, 2016
* Southeast Regional Chapter of Environmental Toxicology and Chemistry

2014-Present

* President: September 2016-Present
* Vice President: September 2015-September 2016
* Carolina’s Regional Chapter of Environmental Toxicology and Chemistry

2006-2014

* + Student Representative to SETAC North America: March 2009-March 2010
* Clemson University Environmental Toxicology Graduate Group

2006-2011

* + President: August 2008-July 2009
	+ Vice President: August 2007-July 2008
* Clemson University Biological Sciences Graduate Student Association

2005-2011

* + Treasurer: August 2006-July 2007
* Clemson University SCUBA Club

2006-2011

* + President: August 2007-May 2010
	+ Equipment Manager: May 2010-August 2011