

## **Jeffrey T. Miller**

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Environmental Toxicology Department

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### **Education:**

PhD, University of California-Davis

*(Expected Sept. 2018)*

Pharmacology & Toxicology Affiliate of  
the Center for Population Biology

MS, Saint Cloud State University

*(May 2011)*

Cell & Molecular Biology Emphasis  
in Aquatic Toxicology

BA, Minnesota State University-Moorhead

*(May 2009)*

Ecology & Evolutionary Biology  
Minor in Geosciences

**Research Interest:** Investigating the mechanisms that underlie the physiological and evolutionary responses of natural populations to environmental contaminants.

### **Publications:**

**Miller, J.T.**, Clark, B., Nacci, D., Champlin, D., Whitehead, A.W. (In prep) Parallelism and divergence in the genetic basis of adaptive pollution tolerance in killifish. *Invited submission for Proceedings of the Royal Society B special issue on Urban Evolutionary Ecology*

**Miller, J.T.**, Nacci, D., Champlin, D., Whitehead, A.W. (In prep) Meiotic map and genome synteny analysis of killifish, *Fundulus heteroclitus*. *Plan to submit to 'Genome Biology & Evolution', November 2017*

Rochman, C., Tahir, A., Williams, S., Baxa, D., Lam, R., **Miller, J.**, Teh, F.C., Werorilangi, S., Teh, S. J. (2015) Plastic in seafood: Plastic debris in fish and bivalves sold for human consumption. *Scientific Reports* 5, 14340

Dubansky, B., Whitehead, A., **Miller, J. T.**, Rice, C. D., & Galvez, F. (2013) Multitissue molecular, genomic, and developmental effects of the deepwater horizon oil spill on resident Gulf killifish (*Fundulus grandis*). *Environmental Science and Technology*, 47, 5074–5082. doi:10.1021/es400458p

Kolok, A., **Miller, J.**, Schoenfuss, H. (2012) The mini mobile environmental monitoring unit: a novel bio-assessment tool. *Journal of Environmental Monitoring* 14 (1), 202-208

Wisenden, B., Karst, J., **Miller, J.**, Miller, S.D. Fuselier, L. (2008) Anti-Predator Behavior in Response to Chemical Cues in *Umbra limi*. *Environmental Biology of Fishes* 82: 85-92

### **Platform Presentations:**

**Miller, J.T.**, Cherr, G., Whitehead, A. April 2015 ‘Aquatic Copper-Oxide Nanoparticle Exposure May Target Osmoregulatory Plasticity of Fish from Salinity Variable Environments.’ Northern California Society of Environmental Toxicology and Chemistry.

**Miller, J.T.**, Martinovic, D., Bartel, SE., Schoenfuss, HL. May 2011. ‘Abiotic Influences on Estrogenic Biomarker Expression in Riverine Conditions of Exposure to Treated Wastewater.’ International Conference on Pollutant Responses in Marine Organisms.

**Miller, J.T.**, Martinovic, D., Bartel, SE., Schoenfuss, HL. *March 2011*. ‘How does treated wastewater effluent affect the biology of fish in receiving streams?’ Minnesota Pollution Control Agency Wastewater Operations Conference.

**Miller, J.T.**, Martinovic, D., Bartel, SE., Schoenfuss, HL. *March 2011*. ‘Bioassessment of Wastewater’s Estrogenic Impacts: Various Methods of Exposure Can Biomarkers Be Altered Differentially?’ Mid-West Society of Environmental Toxicology and Chemistry.

### **Poster Presentations:**

**Miller, J.T.**, Cherr, G., Whitehead, A. (2014). ‘Impairment of Killifish Osmoregulatory Function by Aquatic Nano-Copper Oxide Exposure’. Western Society of Naturalists Annual Meeting.

**Miller, J.T.**, Pilcher, W., Champlin, D., Proestou, D., Nacci, D., Whitehead, A.W. (2012). ‘Genomic responses to PAHs in 2 pollution tolerant populations of *Fundulus heteroclitus*.’ National Meeting for Society for Environmental Toxicology and Chemistry.

**Miller, J.T.**, Martinovic, D., Bartel, S. E., Schoenfuss, H. L. (2010). ‘Quantifying Exposure & Effects of Endocrine Active Chemicals in the Environment through Parallel Field and Laboratory Studies of Bioindicators in *Pimephales promelas*.’ National Meeting for Society of Environmental Toxicology and Chemistry.

### **Awards and Funding:**

National Institute of Environmental Health Sciences Predoc Training Fellowship (2016)

National Science Foundation GK-12 Graduate Fellowship (2014-2015)

Western Society of Naturalists Travel Award (2015)

Society of Environmental Toxicology and Chemistry Research Scholarship (2014)

George Freiderich Wildlife Protection Fund Fellowship (2013)

Society for Environmental Toxicology and Chemistry Attendance Travel Award (2012)

### **Employment and Teaching Experience:**

Data Carpentry Certified Instructor (*R/Python/Git/Bash*, Summer 2017)

Teaching Assistant - University of California, Davis (*Analyzing Next-Generation Sequencing Data Workshop*, Summer 2017)

Graduate Teaching Assistant - University of California, Davis (*Biological Effect of Toxicants, Introductory Biology*, Fall 2014-Current)

Graduate Teaching Assistant - Louisiana State University (*Biology for Science Majors 101/102, Fall 2011-Spring 2012*)  
Graduate Research Assistant – St. Cloud State University (*Aquatic Toxicology, Spring 2010-Fall 2011*)  
Biological Science Technician – United States Park Service (*Summer 2010*)  
Wilderness Technician – United States Forest Service (*Summer 2008, 2009*)  
Outdoor Education Coordinator - Student Conservation Assoc. (*Winter 2007-Summer 2008*)

**Committees and Service:**

UC Davis Bodega Marine Laboratory Outreach and Marine Ecology Educator (*2013-Current*)  
UC Davis Pharmacology and Toxicology Graduate Group - Admissions Committee (*Winter 2013*)  
Northern California Society for Environmental Toxicology and Chemistry - Board of Directors (*2014-2015*)  
Archbold Biological Station - Volunteer Herpetology and Stream Ecology (*Summer 2011*)  
Student Conservation Association - Outdoors Education Program Coordinator (*Winter 2008*)

**References:**

Dr. Andrew Whitehead – University of California, Davis  
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Dr. Gary Cherr – University of California, Davis  
2099 Westshore Rd, Bodega Bay, CA 94923  
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