

Larissa M. Williams

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Bates College
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RESEARCH INTERESTS

Cellular and molecular responses to toxicants, biological importance of genetic variation

EDUCATION

2010 North Carolina State University, Department of Environmental and Molecular Toxicology
Ph.D. in Environmental Toxicology

Dissertation: Signatures of Selection in Natural Populations Adapted to Chronic Pollution

Advisor: Marjorie Oleksiak

2005 Smith College, Major: Biological Sciences, Minor: Marine Sciences

Bachelor of Arts with Highest Honors

Honors Thesis: The Use of the Brackish Water Clam, *Rangia cuneata*, in the Biomonitoring of Polycyclic Aromatic Hydrocarbons at the Marine Corps Air Station (MCAS) Cherry Point, NC

Advisors: Paulette Peckol (Smith College), Patricia McClellan-Green (NC State University)

PROFESSIONAL APPOINTMENTS

7/25- present Bates College, Department of Biology, Professor
8/23- 7/25 Bates College, Department of Biology, Associate Professor
8/21- 7/23 Bates College, Department of Biology, Associate Professor and Chair
8/18- 8/21 Bates College, Department of Biology, Associate Professor
8/12- 7/18 Bates College, Department of Biology, Assistant Professor
11/12- 8/15 Woods Hole Oceanographic Institution, Guest Investigator
6/14- 8/14 Mount Desert Island Biological Laboratory, Visiting Scientist
3/11-11/12 Woods Hole Oceanographic Institution, Department of Biology,
NIH NRSA Postdoctoral Fellow. Mark Hahn, Supervisor
8/11- 5/12 Wheaton College, Department of Biology, Visiting Assistant Professor
10/10- 2/11 Woods Hole Oceanographic Institution, Department of Biology,
Postdoctoral Investigator. Mark Hahn, Supervisor

TEACHING EXPERIENCE

2011- present Bates College, Department of Biology
2017, 20 -25 Harvard University, **Lecturer** in Principles of Toxicology course
2011-12 Wheaton College (MA), **Visiting Assistant Professor** of Biology
2011 Woods Hole Oceanographic Institution, **Instructor** for short course: "Ocean Sciences for British Petroleum Environmental Science Employees"
2006, '07 North Carolina State University, **Lecturer** in Environmental Toxicology

TEACHING AND MENTORING AT BATES COLLEGE

Courses offered (regular teaching load = 5 course equivalents per year):

BIO195K – Lab-Based Biological Inquiry: Poisons	BIOs32 – The Ecology and Evolutionary Biology of the Galapagos Archipelago
BIO202 – Cellular Basis of Life	
BIO204 – Biological Research Experience	BIOs40 – Experimental Developmental and Molecular Biology
BIO 242 – Cellular and Molecular Biology	EXDS116/215/216 – STEM Scholars
BIO 328 – Developmental Biology	FYS431 – What's for Dinner?
BIO 331 – Molecular Biology	FYS505 – STEM Scholars
BIO 460 – Junior Seminar	
BIO476 – Seminar and Research	
BIO480 – Senior Seminar	

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Mentoring of undergraduate research (since 2012):

Honors senior thesis (Biology): 1

Senior thesis (Biology, Biochemistry, Environmental Studies): 51

Summer student research fellows: 23

Year-long student research assistants: 16

HONORS AND AWARDS

2021	Society of Toxicology Undergraduate Educator Award
2015	Harvard Center for Community Partnerships Faculty Award for Outstanding New Community Partnership Initiative, Bates College
2011	Toxicology Scholar Program Awardee, Society of Toxicology
2010	Kenneth R. Keller Award for Excellence in Doctoral Dissertation Research, North Carolina State University
2004-5	E.J. Murphy Scholarship, Smith College
2004	Bookhout Fellowship, Duke University Marine Laboratory
2003,4	Five College Coastal and Marine Sciences Research Internship
2001-5	First Group Scholar and Dean's list, Smith College

EXTRAMURAL RESEARCH SUPPORT AND FELLOWSHIPS

2024	Maine INBRE P20-GM103423 (PI: James Coffman, Mount Desert Island Biological Laboratory), Williams' Core Access Grant: \$5,000 total direct costs, "Determining windows of cardiotoxicity to triphenyl phosphate at environmentally relevant concentrations in the zebrafish model using a transcriptomic approach," National Institute of General Medical Sciences, National Institutes of Health
2014-19	Maine INBRE P20-GM103423 (PI: Patricia Hand, Mount Desert Island Biological Laboratory), Williams' subaward: \$460,000 total direct costs, "Role of nuclear factor, erythroid 2 (Nfe2) in the oxidative stress response during development," National Institute of General Medical Sciences, National Institutes of Health
2014-17	DBI-1428210 (Lead PI: Larissa Williams), \$791,480 total direct costs, "Acquisition of a white light laser confocal microscope for multidisciplinary research and teaching at a liberal arts undergraduate institution," National Science Foundation Division of Biological Infrastructure
2014	Mount Desert Island Biological Laboratory Visiting Scientist Fellowship, \$16,960, "Developmental effects of pro-oxidant exposure"
2011-12	1F32ES019832-01 (PI: Larissa Williams), \$90,214 total direct costs, "Transcription factor cross-talk in developmental toxicity," National Institute of Environmental Health Science, National Institutes of Health.
2005-6	5T32ES007046-29 (PI: Robert Smart, North Carolina State University), Williams' subaward: \$37,250 total direct costs, National Institute of Environmental Health Science, National Institutes of Health.

INTRAMURAL RESEARCH AND CURRICULAR SUPPORT

2022	Student Faculty Research Grant (\$15,000), Bates College, by NIH P20-GM103423 from the National Institute of General Medical Sciences (Maine INBRE)
2022	STEM Scholars Summer Funding (\$6,080)
2019	Faculty Development Grant (\$10,000), Bates College
2019	Student Faculty Research Grant (\$15,000), Bates College, by NIH P20-GM103423 from the National Institute of General Medical Sciences (Maine INBRE)
2018	STEM Faculty-Student Summer Research Grant (\$6,736.60), Bates College

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- 2016 Student Faculty Research Grant (\$7,500), Bates College, by NIH P20-GM103423 from the National Institute of General Medical Sciences (Maine INBRE)
- 2015 Student Faculty Research Grant (\$7,500), Bates College, by NIH P20-GM103423 from the National Institute of General Medical Sciences (Maine INBRE)
- 2014 Student Faculty Research Grant (\$15,000), Bates College, by NIH P20-GM103423 from the National Institute of General Medical Sciences (Maine INBRE)
- 2014 Harvard Center Faculty Discretionary Grant (\$400), Bates College.
- 2014 Harvard Center Faculty Discretionary Grant (\$1000), Bates College.
- 2013 Undergraduate Research Assistant Grant (\$2,808), co-awarded with William Ambrose, Bates College, by NIH P20-GM103423 from the National Institute of General Medical Sciences (Maine INBRE)
- 2013 Undergraduate Research Assistant Grant (\$3,240), Bates College, by NIH P20-GM103423 from the National Institute of General Medical Sciences (Maine INBRE)
- 2013 Faculty Development Grant (\$4,024.20), co-awarded with Nancy Kleckner, Bates College
- 2013 Student Faculty Research Grant (\$15,000), Bates College, by NIH P20-GM103423 from the National Institute of General Medical Sciences (Maine INBRE)
- 2012 Faculty Development Grant (\$7,528), co-awarded with Donald Dearborn, Bates College

PUBLICATIONS (* denotes undergraduate author)

*Schmandt B, *Diduff M, *Smart G, **Williams L**. (2024). Environmentally relevant concentrations of triphenyl phosphate (TPhP) impact development in zebrafish. *Toxics*, **12**: 368. doi: 10.3390/toxics12050368.

Featured on cover

*Neighmond H, *Quinn A, *Schmandt B, *Ettinger K, Hill A, **Williams L** (2023). Developmental Bisphenol S Toxicity in Two Freshwater Animal Models. *Environmental Toxicology and Pharmacology*. **104**: 104311. doi: 10.1016/j.etap.2023.104311.

Sant KE, **Williams LM** (2021). The role of diversity, equity, and inclusion in the future of toxicology. *Toxicological Sciences*, **182(2)**: 355-356.

Williams LM, Bowsher AM, *Chrysovergi M-A, Ambrose WG Jr (2020). Bloodworm (*Glycera dibranchiata* Ehlers, 1868) populations in the Gulf of Maine are connected through gene flow. *Marine Science and Biology*. **1**: 1-4.

Sant KE, *Moreau HM, **Williams LM**, Jacobs HM, Bowsher AM, *Boisvert JD, Smolowitz RM, *Pantazis J, Timme-Laragy A (2020). Embryonic exposures to mono-2-ethylhexyl phthalate induce larval steatosis in zebrafish independent of Nrf2a signaling. *Journal of Developmental Origins of Health and Disease*. doi: 10.1017/S2040174420000057.

*Ulin A, *Henderson J, *Pham M-T, *Meyo J, *Chen Y, Karchner SI, Goldstone JV, Hahn ME, **Williams LM** (2019). Developmental regulation of nuclear factor erythroid-2 related factors (Nrfs) by AHR1b in zebrafish (*Danio rerio*). *Toxicological Sciences*, **167(2)**: 536-545. *Featured as an editorial highlight*

Jacobs HM, Sant KE, Basnet A, **Williams LM**, Moss JB, Timme-Laragy A (2018). Embryonic exposure to Mono(2-ethylhexyl) phthalate (MEHP) disrupts pancreatic organogenesis in zebrafish (*Danio rerio*). *Chemosphere*, **195**: 498-507.

Sant KE, Hansen JM, **Williams LM**, *Tran NL, Goldstone JV, Stegeman JJ, Hahn ME, Timme-Laragy A (2017). The role of Nrf1 and Nrf2 in the regulation of glutathione and redox dynamics in the developing embryos. *Redox Biology*, **13**: 207-218.

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Lord JP, **Williams LM** (2017). Northward Expansion of Genetically Diverse Invasive Asian Shore Crab (*Hemigrapsus sanguineus*) Populations. *Biological Invasions*, **19**(4): 1153-1168.

Williams LM, *Lago B, McArthur AG, Raphenya AR, *Pray N, *Saleem N, *Salas S, *Paulson K, *Mangar R, Liu Y, Vo AH, Shavit J (2016). The transcription factor, Nuclear factor, erythroid 2 (Nfe2), is a regulator of the oxidative stress response during *Danio rerio* development. *Aquatic Toxicology*, **180**: 141-154.

Williams LM, *Nivison CL, Ambrose WG Jr, *Dobbin R, Locke WL V (2015). Lack of adult novel northern lineages of invasive green crab *Carcinus maenas* along much of the northern US Atlantic coast. *Marine Ecology Progress Series*, **532**: 153-159.

Williams LM (2013). A toxicologist's perspective on having and doing it all: teaching, research, and service at a small liberal arts school. *Journal of Toxicological Education*, **1**:1-9.

Williams LM, Timme-Laragy AR, Goldstone JV, McArthur AG, Stegeman JJ, Smolowitz RM, Hahn ME (2013). Developmental expression of the Nfe2-related factor (Nrf) transcription factor family in the zebrafish, *Danio rerio*. *PLoS One*, **8**(10):e79574.

Sotka EE, **Williams LM**, Oleksiak MF, Strand AE (2012). Can diversifying selection be distinguished from history in geographic clines? A population genomic study of killifish (*Fundulus heteroclitus*). *PLoS One*, **7**(9):e45138.

Williams LM, Oleksiak MF (2011). Evolutionary and Functional analyses of Cytochrome P4501A promoter polymorphisms in natural populations. *Molecular Ecology*, **20**(24):5236-47.

Williams LM, Oleksiak MF (2011). Ecologically and Evolutionarily Important SNPs identified in natural populations. *Molecular Biology and Evolution*, **28**(6):1817-26.

Whitehead A, Galvez Z, Zhang S, **Williams LM**, Oleksiak MF (2011). Functional genomics of physiological plasticity and local adaptation in killifish: an emerging model in environmental genomics. *Journal of Heredity*, **102**(5):499-511.

Williams LM, Ma X, Boyko AR, Bustamante CD, Oleksiak MF (2010). SNP identification, verification, and utility for population genetics in a non-model genus. *BMC Genetics*, **11**:32.

Williams LM, Oleksiak MF (2008). Signatures of selection in natural populations adapted to chronic pollution. *BMC Evolutionary Biology*, **8**:282.

CONTRIBUTED PRESENTATIONS AT CONFERENCES (* denotes undergraduate author)

Williams LM (2025). Poster: Use of A Poison CURE to Increase STEM Persistence and Identity at the Undergraduate Level. Society of Toxicology Annual Meeting, Orlando, FL.

Williams LM (2025). Invited oral presentation: Northeast Society of Toxicology's Undergraduate Program 2018-present. Society of Toxicology Annual Meeting, Orlando, FL.

Williams LM (2024). Oral presentation: From surviving to thriving a first biology course: use of CUREs as gateway courses, 2024 HHMI New England Regional Inclusive Excellence Meeting, Wellesley, MA.

Hill A, Eaton CD, Schlax P, **Williams L**, Koviach-Cote J, Diamond-Stanic A, McGuinness T, Ott K. (2023). Oral presentation: Reform across STEM Disciplines with Equity and Justice as the Guiding Principle: A Case Study at Bates College, AAC&U Transforming STEM Higher Education Conference, Arlington, VA.

Williams LM, *Schmandt S, *Diduff M, *Smart G (2023). Oral presentation: Environmental Levels of TPHP Exposure Alter Zebrafish Cardiac Development. Maine Zebrafish Symposium, Orono, ME.

*Ettinger K, *Holton D, **Williams LM** (2023). Poster: Bisphenol S Exposure in Embryonic Zebrafish. Society of Toxicology Annual Meeting, Nashville, TN.

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- *Min EJ, *Schmandt BR, *Neiditz H, *Verma A, Chen X, Beganny S, Trapani, JG, **Williams LM** (2023). Poster: The Role of Nfe2 in Development and Oxidative Stress Response in Zebrafish Inner Ear Function. Annual Meeting of the Association for Research in Otolaryngology, Orlando, FL.
- *Schmandt S, *Diduff M, * Smart G, **Williams LM** (2022). Poster: Triphenyl Phosphate Alters Zebrafish Cardiac Development at Environmentally Detected Concentrations. Northeast Society of Toxicology Meeting, Boston, MA. *B. Schmandt won 2nd place poster presentation for this work.*
- *Ettinger K, *Holton D, **Williams LM** (2022). Poster: Bisphenol S Exposure in Embryonic Zebrafish. Northeast Society of Toxicology Meeting, Boston, MA.
- Katija K, **Williams LM**, Takayama L, Woodward B, Soper D (2022). Oral presentation: FathomNet Education Experience: Designing and implementing an integrative, remote experiential learning curricula to better understand marine biodiversity. Online Ocean Sciences Conference.
- *Neiditz H, *Verma A, **Williams LM**, Trapani J (2021). Poster: Role of Nfe2 during inner ear development and the oxidative stress response of larval zebrafish (*Danio rerio*). Online National Collegiate Research Conference (NCRC). *H. Neiditz won best presentation for this work.*
- *Neiditz H, *Verma A, **Williams LM**, Trapani J (2020). Poster: Role of Nfe2 during inner ear development and the oxidative stress response of larval zebrafish (*Danio rerio*). Online Northeast Society of Toxicology Annual Meeting. *H. Neiditz won best undergraduate presentation for this work.*
- *Neiditz H, *Verma A, **Williams LM**, Trapani J (2020). Poster: Role of Nfe2 during inner ear development and the oxidative stress response of larval zebrafish (*Danio rerio*). Online Developmental Biology Meeting.
- *Verma A, **Williams LM**, Trapani J (2020). Poster: Exploring inner-ear phenotypes of Nfe2 Δ/Δ KO zebrafish larvae pre- and post-oxidative stress. Online Beckman Annual Symposium.
- *Verma A, **Williams LM**, Trapani J (2020). Poster: Exploring inner-ear phenotypes of Nfe2 Δ/Δ KO zebrafish larvae pre- and post-oxidative stress. Neuron, Hamden, CT.
- Williams LM** (2020). Poster: From surviving to thriving: the use of zebrafish in an introductory CURE course. Maine Zebrafish Symposium, Lewiston, ME.
- Bowsher A, *Ross M, *Mait M, **Williams LM** (2020). Poster: Role of the transcription factor Nfe2 and pro-oxidant exposure in inner ear development in zebrafish. Maine Zebrafish Symposium, Lewiston, ME.
- Bowsher A, *Ross M, *Mait M, **Williams LM** (2019). Poster: Role of the transcription factor Nfe2 and pro-oxidant exposure in inner ear development in zebrafish. Maine Biological and Medical Sciences Symposium, Salisbury Cove, ME.
- Bowsher A, *Mait M, **Williams LM** (2019). Poster: Role of the transcription factor Nfe2 and pro-oxidant exposure in inner ear development in zebrafish. Society of Toxicology Annual Meeting, Baltimore, MD.
- *Moreau H, Sant K, **Williams LM**, Timme-Laragy A (2019). Poster: Role of Nrf2a in modulating MEHP-induced hepatosteatosis following embryonic exposure in *Danio rerio*. Society of Toxicology Annual Meeting, Baltimore, MD.
- Gray JP, Curran CP, **Williams LM** (2019). Poster: Undergraduate education programs at the Northeast and Ohio Valley regional society of toxicology chapters: large impact for a low cost. Society of Toxicology Annual Meeting, Baltimore, MD.
- *Moreau, H, Sant K, **Williams LM**, Timme-Laragy A (2018). Poster: Role of Nrf2a in modulating MEHP-induced hepatosteatosis following embryonic exposure in *Danio rerio*. Northeast Society of Toxicology Regional Chapter Meeting, Shrewsbury, MA.

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Bowsher AM, *Mait M, **Williams LM** (2018). Poster: Role of the transcription factor Nfe2 and pro-oxidant exposure in inner ear development in zebrafish. Northeast Society of Toxicology Regional Chapter Meeting, Shrewsbury, MA.

*Ulin A, *Henderson J, *Pham M, *Meyo J, *Chen Y, Karchner SI, Goldstone JV, Hahn ME, **Williams LM** (2018). Poster: Developmental Regulation of Nuclear Factor Erythroid-2 Related Factors (*nrf*s) by AHR1b. Society of Toxicology Annual Meeting, San Antonio TX.

Williams LM (2018). Invited oral presentation: Getting to Yes: Academic Negotiations at a Primarily Undergraduate Institution. Society of Toxicology Annual Meeting, San Antonio TX.

Williams LM (2018). Invited oral presentation: Lessons learned from a flipped classroom. Society of Toxicology Annual Meeting, San Antonio TX.

Williams LM, *Lago B, McArthur AG, Raphenya AR, *Pray N, *Saleem N, *Salas S, *Paulson K, *Mangar RS, Liu Y, Vo AH, Shavit JS (2017). Oral presentation: The transcription factor, Nuclear Factor, erythroid 2 (Nfe2), is a regulator of the oxidative stress response during *Danio rerio* Development. Northeast Regional IDeA Conference, Burlington, VT.

Williams LM, *Lago B, McArthur AG, Raphenya AR, *Pray N, *Saleem N, *Salas S, *Paulson K, *Mangar RS, Liu Y, Vo AH, Shavit JS (2017). Oral presentation: The transcription factor, Nuclear Factor, erythroid 2 (Nfe2), is a regulator of the oxidative stress response during *Danio rerio* Development. Pollutant Responses in Marine Organisms (PRIMO), Matsuyama, Japan.

*Pantazis J, Timme-Laragy AR, **Williams LM** (2017). Poster: Roles of CNC b-ZIP Nfe2-Related Factors in response to oxidative stress induced by MEHP. Maine Biological and Medical Sciences Symposium, Salisbury Cove, ME.

Williams LM, Kleckner N, Gould T (2017). Poster: Cultivating a Relationship with Students and Faculty from a Local Community College Through Short Courses. Society of Toxicology Annual Meeting, Baltimore, MD.

*McLean M, *Theriault D, *Kelley M, *Lago B, McArthur A, **Williams LM** (2017). Poster: Role of Nfe2 and pro-oxidant exposure in inner ear development in zebrafish. Society of Toxicology Annual Meeting, Baltimore, MD.

Williams LM, *Lago B, McArthur AG, Raphenya AR, *Pray N, *Saleem N, *Salas S, *Paulson K, *Mangar RS, Liu Y, Vo AH, Shavit JS (2017). Poster: The transcription factor, Nuclear Factor, erythroid 2 (Nfe2), is a regulator of the oxidative stress response during *Danio rerio* Development. Society of Toxicology Annual Meeting, Baltimore, MD.

Williams LM (2017). Invited oral presentation: Navigating the Hiring Process at a Primarily Undergraduate Institution. Society of Toxicology Annual Meeting, Baltimore, MD.

Karchner SI, Jenny MJ, Aluru N, Franks DG, Laub LB, Linney E, **Williams LM**, Teraoka H, Hahn ME (2017). Poster: Evidence for developmental versus toxicological roles for zebrafish Ahr1b. Society of Toxicology Annual Meeting, Baltimore, MD.

Gray J, Willett K, **Williams L**, Fitsanakis V, Eidemiller B, Reynolds M (2017). Poster: The Society of Toxicology's Eminent Toxicologist Recorded Lecture Series: Usage Data and Examples for Use in Teaching. Society of Toxicology Annual Meeting, Baltimore, MD.

*Ulin A, **Williams LM** (2017). Poster: Use of chromatin immunoprecipitation in developing zebrafish (*Danio rerio*) to show direct regulation of *nrf* genes by Ahr1B. Yale Undergraduate Research Conference, New Haven, CT.

*Theriault D, *McLean M, **Williams LM** (2016). Poster: Inner ear development in zebrafish (*Danio rerio*) under conditions of oxidative stress. MDIBL Annual Student Symposium, Salisbury Cove, ME.

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Williams LM, McArthur A, *Lago B, *Pray N, *Saleem N, *Salas S, *Paulson K, *Mangar R, Liu Y, Vo A, Shavit J (2016). Poster: Nuclear factor, erythroid 2 (Nfe2) is a novel transcriptional regulator of oxidative stress during development. 6th Biennial National IDeA Symposium of Biomedical Research Excellence, National Institutes of Health, Washington, D.C.

*Tran NL, Timme-Laragy AR, **Williams LM** (2016). Oral presentation: Role of Nrf1 paralogs in regulating the transcriptional response to phthalates in zebrafish (*Danio rerio*). Maine Biological and Medical Sciences Symposium, Salisbury Cove, ME.

*Henderson J, **Williams LM** (2016). Poster: Utilizing Chromatin Immunoprecipitation to Investigate Transcriptional Regulation in Zebrafish (*Danio rerio*) during Early Development. Maine Biological and Medical Sciences Symposium, Salisbury Cove, ME.

Williams LM, Lord JP (2016). Oral presentation: Distribution and genetic diversity of the Asian shore crab, *Hemigrapsus sanguineus*, along the East Coast of the United States. Benthic Ecology Annual Meeting, Portland, ME.

Williams LM (2016). Invited oral presentation: A semester-long, inquiry-based, lab using the aryl hydrocarbon receptor (Ahr) in an upper-level undergraduate biology course. Society of Toxicology Annual Meeting, New Orleans, LA.

*Tran NL, **Williams LM**, Timme-Laragy AR (2016). Poster: Role of Nrf1 paralogs in regulating the transcriptional response to phthalates in zebrafish (*Danio rerio*). Society of Toxicology Annual Meeting, New Orleans, LA. *N. Tran won the Pfizer Travel Award for this work.*

*Jacobs HM, Sant KE, **Williams LM**, Timme-Laragy AR (2016). Poster: Mono-2-ethylhexyl phthalate (MEHP) alters embryonic growth and pancreatic organogenesis in zebrafish. Society of Toxicology Annual Meeting, New Orleans, LA.

Williams LM, *Pray N, *Saleem N, *Salas S, *Paulson K, *Mangar, R (2015). Oral presentation: Response to structurally diverse pro-oxidant exposure during development. IDeA Northeast Regional Conference, Bar Harbor, ME.

Williams LM, *Pray N, *Saleem N, *Salas S (2015). Poster: Response to structurally diverse pro-oxidant exposure during development. Cellular and Molecular Mechanisms of Toxicity Gordon Research Conference, Andover, NH.

*Morrill KM, **Williams LM** (2015). Oral presentation: Genetic diversity and the 2013 decline of eelgrass (*Zostera marina*) beds of the Frenchman Bay, ME coastlines. Maine Biological and Medical Sciences Symposium, Salisbury Cove, ME.

*Pham MT, **Williams LM** (2015). Oral presentation: Transcriptional regulation of the nuclear factor erythroid 2-related factor (*nrf*) family by the aryl hydrocarbon receptor-1b (Ahr1b) during *Danio rerio* development by chromatin immunoprecipitation. Maine Biological and Medical Sciences Symposium, Salisbury Cove, ME.

*Pray N, *Saleem N, *Salas S, **Williams LM** (2015). Poster: Toxicity of pro-oxidants in the developing zebrafish, *Danio rerio*. Maine Biological and Medical Sciences Symposium, Salisbury Cove, ME.

Williams LM, *Nivison CL, Ambrose WG Jr, *Dobbin R, Licke WL (2015). Oral presentation: Loss of adult novel northern lineages of the invasive green crab, *Carcinus maenas*, along the Northwestern Atlantic Coast. Benthic Ecology Meeting, Quebec City.

Williams LM, Timme-Laragy AR, Goldstone JV, McArthur AG, Stegeman JJ, Smolowitz RM, Hahn ME (2014). Invited oral presentation: Developmental expression of the *nrf* gene family and crosstalk with the aryl hydrocarbon receptor. Maine Biological and Medical Sciences Symposium, Salisbury Cove, Maine.

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Hahn ME, Karchner SI, Aluru N, Timme-Laragy AR, **Williams LM** (2014). Invited oral presentation: Diversity as Opportunity: Using fish models to understand the role of conditional transcription factors in mechanisms of developmental toxicity. A Collaborative Workshop on Aquatic Models and 21st Century Toxicology: Leveraging Small Aquarium Fishes to Advance Understanding of Environmentally Influenced Human Disorders and Diseases, Research Triangle Park, NC.

Gray JP, Billack B, Borland MG, Ford SM, Gallo MA, Hall G, Ray SD, Reynolds M, Slitt AL, **Williams LM**, Zamule SM (2014). Poster: The Journal of Toxicological Education (JToxEd)—A Milestone in Toxicology Education. Society of Toxicology Annual Meeting, Phoenix, AZ.

Williams LM (2013). Poster: Investigation into the evolutionary response of natural populations to chronic anthropogenic pollution. Ecological and Evolutionary Genomics Gordon Research Conference, Biddeford, ME.

Williams LM, Timme-Laragy AR, Goldstone JV, McArthur AG, Stegeman JJ, Smolowitz RM, Hahn ME (2013). Oral presentation: Developmental expression of the Nfe2-related factor (Nrf) transcription factor family. North Atlantic Zebrafish Research Symposium, Orono, ME.

Williams LM, Oleksiak MF (2012). Invited oral presentation: Signatures of selection in natural populations adapted to chronic pollution. Ecological Society of America Annual Meeting, Portland, OR.

Williams LM, Timme-Laragy AR, Franks DG, Jenny MJ, Hahn ME (2012). Poster: Developmental expression of the Nfe2-related (nrf) transcription factor family and regulation by Ahr2. Society of Toxicology Annual Meeting, San Francisco, CA.

Williams LM, Oleksiak MF (2011). Poster: Selection in natural populations. Ecological and Evolutionary Genomics Gordon Research Conference, Biddeford, ME.

Williams LM, Oleksiak MF (2011). Poster: Cytochrome P4501A promoter polymorphisms in natural populations. Society of Toxicology Annual Meeting, Washington D.C.

Williams LM, Oleksiak MF (2010). Poster: Promoter polymorphisms and function in natural populations. New England Membrane Enzyme Group (NUTMEG) Conference, Woods Hole, MA.

Williams LM, Oleksiak MF (2010). Poster: Genome scans in natural populations for selectively important SNPs using high-throughput technology. Society of Toxicology Annual Meeting, Salt Lake City, UT.

Williams LM, Oleksiak MF (2008). Poster: Genome-wide scans in a non-model species using 454 pyrosequencing. Society for Molecular Biology and Evolution Annual Meeting, Barcelona, Spain.

Williams LM, Oleksiak MF (2007). Oral presentation: Signatures of selection in natural populations adapted to chronic pollution. Society for Molecular Biology and Evolution Annual Meeting, Halifax, Nova Scotia, Canada.

Williams LM, Oleksiak MF (2006). Poster: Genome Search for Selectively Important Loci in *Fundulus heteroclitus* populations. Society for Molecular Biology and Evolution Annual Meeting, Tempe, AZ.

PROFESSIONAL SERVICE ACTIVITIES

Committees and Other Service

2025- present	Committee on Personnel and Teaching Evaluations, Bates College
2023- present	Chair, Institutional Biosafety Committee, Bates College
2023- present	Membership Committee, Society of Toxicology
2023- present	Academic Standing Committee, Bates College
2018- present	Editorial Board, Toxicology Mechanisms and Methods
2014- present	Review Editor, Frontiers in Evolutionary and Population Genetics
2013- present	Founding Editor, Journal of Toxicological Education

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2025	Technical Panelist, USC Sea Grant
2022- 2025	Committee on Teaching and Learning, Bates College
2019- 2025	HHMI Leadership Team, Bates College
2016, 19, 23, 25	Panelist, National Science Foundation, Major Research Instrumentation (MRI) Panel
2022- 2023	President, Northeast Society of Toxicology Regional Chapter, Society of Toxicology
2020- 2023	Budget and Finance Advisory Committee, Bates College
2021- 2022	Chair, Faculty United for Toxicology Undergraduate Recruitment and Education, Society of Toxicology
2021- 2022	Vice-president, Northeast Society of Toxicology Regional Chapter, Society of Toxicology
2020- 2022	Nominating Committee, Society of Toxicology
2019- 2022	President, Southern Maine Chapter of Sigma Xi
2020- 2021	Co-chair, Faculty United for Toxicology Undergraduate Recruitment and Education, Society of Toxicology
2019- 2021	Councilor, Northeast Society of Toxicology Regional Chapter, Society of Toxicology
2019- 2021	Councilor, Molecular and Systems Biology Specialty Section, Society of Toxicology
2019- 2020	Member, Faculty United for Toxicology Undergraduate Recruitment and Education, Society of Toxicology
2019	Bates College Biochemistry honors thesis committee for Nathan Frederick
2018- 2019	Ad hoc member, Undergraduate Education Subcommittee, Society of Toxicology
2017- 2019	Diversity in STEM Initiative (DSI), Bates College
2016- 2019	Teaching and Learning Committee, Bates College (chair from 2017-2018)
2015- 2019	Table Host for <i>In Vitro</i> Luncheon, Society of Toxicology Annual Meeting
2012- 2019	Institutional Biosafety Committee, Bates College
2018	CDI Undergraduate Diversity Program 3-day mentor, Society of Toxicology
2017- 2018	Chair, Undergraduate Education Subcommittee, Society of Toxicology
2017, 18	Volunteer for Career Exploration event at Society of Toxicology Annual Meeting
2014, 17,18	Mentoring Facilitator, Society of Toxicology
2016- 2017	Co-Chair, Undergraduate Education Subcommittee, Society of Toxicology
2014-16	Committee on the Evaluation of Teaching, Bates College
2011,16	CDI Undergraduate Diversity Program Sunday mentor, Society of Toxicology
2012-15	Biological Chemistry Program Committee, Bates College
2015	Undergraduate Education Subcommittee, Society of Toxicology
2015	Panelist, National Science Foundation, Integrative Ecological Physiology preliminary and full proposal study section
2015	Ad hoc research proposal reviewer, National Science Foundation, Arctic Observing Network Program
2015	Reviewer, National Science Foundation, Evo-Devo-Eco Network
2015	Bates College Biological Chemistry honors thesis committee for Joshua Zimmer
2014	Bates College Neuroscience honors thesis committee for Abigail Alexander
2013-14	Student Research Committee, Bates College
2011-12	Advocacy Committee, National Postdoctoral Association
2011-12	Councilor, Society of Toxicology Postdoctoral Assembly Board
2010-11	President, Woods Hole Oceanographic Institution Postdoctoral Association
2010-11	Gender Equity Committee, Woods Hole Oceanographic Institution

Journal Reviewer

Aquatic Toxicology, Axios Review, BMC Evolutionary Biology, BMC Supplements, Clinical and Experimental Pharmacology and Physiology, Comparative Biochemistry and Physiology, CourseSource, Current Zoology, Ecotoxicology, Environmental Toxicology and Pharmacology, Evolutionary Applications,

Larissa M. Williams

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Heredity, International Journal of Molecular Sciences, Journal of Toxicological Education, MDIBL Bulletin, Molecules, Molecular Biology and Evolution, Molecular Ecology, PLoS One, Toxicology Mechanisms and Methods, Toxicology Letters, Toxicological Sciences

Textbook Reviewer

Lewin's Essential Genes (2013), Principles of Development (2016), Writing in the Biological Sciences (2017), Biology: How Life Works (2019), Introduction to Toxicology (2019)

Community Outreach

Scientific Partner for MDIBL NIH SEPA grant, 2023-2025

Maine State Science Fair Judge, 2015, 17, 21, 25

Volunteer at Riding to the Top (therapeutic riding program; Windham, ME), 2013-2019

Organizer for Annual Bates College Darwin Day with Lewiston Middle School, 2015-2019

Falmouth Middle and High School Science Fair Judge, 2011 and 2012

Membership in Professional and Honor Societies

American Association for the Advancement of Science, Sigma Xi, and Society of Toxicology