CURRICULUM VITA

Jennifer L. Freeman, Ph.D.
Professor of Toxicology

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EDUCATION

Ph. D. in Environmental Toxicology and Molecular Cytogenetics May 2005
University of Illinois at Urbana-Champaign
Environmental Toxicology Scholar
Thesis title: "Nuclear characteristics of cells and organisms exposed to agrochemicals contaminating aquatic ecosystems"

Bachelor of Science, Cell and Structural Biology May 2000
University of Illinois at Urbana-Champaign
Minor in Chemistry

ACADEMIC AND PROFESSIONAL APPOINTMENTS

Professor of Toxicology and Health Sciences, School of Health Sciences, Purdue University, West Lafayette, Indiana, August 2021-present

- Interim Director, Center for the Environment, 2021-present
- Director, School of Health Sciences Undergraduate Honors Research Program, 2011-2021
- Courtesy Faculty, Purdue Public Health Graduate Program, Purdue University
- Director, Undergraduate Curriculum Committee, School of Health Sciences, 2013-2019
- Faculty Affiliate, Environmental and Ecological Engineering, 2016-present

Associate Professor of Toxicology and Health Sciences, School of Health Sciences, Purdue University, West Lafayette, Indiana, August 2014-July 2021

Assistant Professor of Toxicology and Health Sciences, School of Health Sciences, Purdue University, West Lafayette, Indiana, August 2007-July 2014

Postdoctoral Researcher and NIH-NRSA Fellow, Harvard Medical School and Brigham and Women's Hospital, Boston, Massachusetts, August 2005-August 2007

Instructor, Department of Biology, Parkland College, Champaign, Illinois, Spring 2005

Graduate Research Assistant, University of Illinois, Urbana, Illinois, August 2000-May 2005

AWARDS and HONORS

2020 **Society of Toxicology, Women in Toxicology Outstanding Young Investigator Award**
2020-2021 Purdue University Insights Forum, Leadership Program
2019 **Purdue University, Charles B. Murphy Outstanding Undergraduate Teaching Award**
2018-2021 Fulbright Specialist Roster Member

2018 Purdue University, Book of Great Teachers
2018 Sigma Xi Mid-Career Research Award, Purdue University
2016 Purdue University Teaching Academy Fellow
2014-2015 Center for the Environment Fellow, Purdue University
2014 Early Career Research Achievement Award, College of Health and Human Sciences, Purdue University
2014 Exceptional Early Career Teaching Award, Purdue University
2013 Purdue Research Foundation International Travel Award
2012 Colgate Palmolive Grants in Alternative Research Award, Society of Toxicology
2011 New Investigator Travel Award, 4th Conference of Zebrafish Investigators, Monterey, CA
2011 International Travel Award, School of Health Sciences, Purdue University
2010 Robert R. Landolt Award for Excellence in Teaching, School of Health Sciences, Purdue University
2009 New Investigator Travel Award, 3rd Conference of Zebrafish Investigators, Monterey, CA
2005-2007 Ruth L. Kirschstein NRSA Postdoctoral Fellowship, Department of Pathology, Brigham and Women's Hospital, Boston, MA
2004 Best Student Poster, Ozark-Prairie Regional Chapter of the Society of Environmental Toxicology and Chemistry
2004 Alumni Travel Award, Department of Crop Sciences, University of Illinois, Urbana, IL
2004 Travel Award, Association of Southeastern Biologists
2003 Named to the Incomplete List of Teachers Ranked as Excellent by Their Students, University of Illinois, Urbana, IL
2003, 2004 Travel Award, Society of Environmental Toxicology and Chemistry
2002-2004 Frerichs Graduate Fellowship, Department of Crop Sciences, University of Illinois, Urbana, IL
2002 Best Student Poster, Water 2002, Illinois Water Resource Center
2002 Graduate Scholarship and Grant, Illinois Lake Management Association
2002 Scholarship, Illinois Water Resource Center
2001-2004 Environmental Toxicology Scholar Fellowship, Environmental Council, University of Illinois, Urbana, IL
2001-present Member, Phi Kappa Phi Honor Society
2001-present Member, Gamma Sigma Delta Honor Society

Professional Research Honors and Recognition

2022 NIH, Neurotoxicology and Alcohol (NAL) Study Section, ad hoc member
2021-22 National Academies of Sciences, Engineering, and Medicine (NASEM) Committee to Review the DODs Revised Approach to Deriving an Occupational Exposure Level for Trichloroethylene (TCE)
2021 Genome Quebec, Genomics Integration Program, Grant Review Panel, member
2021 Session Chair,
2021 DoD CDMRP, Military Operational Medicine Research Program, Contamination Exposure Monitoring Grant Review Panel, member
2021 US Army Corps of Engineers, Engineer Research and Development Center's Grant Review Panel
2021 NIH/NCI, Pre-Clinical Toxicological Evaluations of Investigational Drugs for the Treatment of Cancer and other Diseases, Grant Review Panel, member
2021 NIH/NIEHS Pathway to Independence Award (K99/R00) Grant Review Panel, member
2021 NIH/NIEHS Scientific Peer Review of Career Awards (Ks) Panel, member
2021 NIH/NIEHS Environmental Health Sciences Core Centers P30, ad hoc
2021-2022 Society of Toxicology, Metals Specialty Section, Past-President
2021 NIH/NIEHS Virtual Consortium for Translational/Transdisciplinary Environmental Research (ViCTER) R01 Grant Review Panel, member

2020	**National Sciences and Engineering Research Council of Canada, Discovery Grant panel member for Genes, Cells, and Molecules**
2020	NSF Excellence in Research track of the Historically Black Colleges and Universities Undergraduate Programs (HBCU-UP) Grant Review Panel, member
2020	**European Science Foundation, panel member for Projects of the Research Foundation Flanders**
2020	NIH/NIHMD Grant Review Panel, P50: Specialized Centers of Excellence on Environmental Health Disparities Research, ad hoc member
2020	NIH/NIEHS Virtual Consortium for Translational/Transdisciplinary Environmental Research (ViCTER) R01 Grant Review Panel, member
2020	Department of Defense (DoD) Congressionally Directed Medical Research Programs (CDMRP) Peer Reviewed Medical Research (PRMRP) Discovery Metal Toxicity Award Panel (DIS-MT)
2020	NIH Summer Research Experience Programs (R25) Review Committee, member
2020	**Genome Canada, 2020 LSARP Genomic Solutions for Natural Resources and the Environment Grant Review Panel, member**
2020	NIH/NIEHS Revolutionizing Innovative, Visionary Environmental Health Research (RIVER) Award (R35) Review Committee, member
2020	NIH/NIEHS Environmental Health Sciences Core Centers P30
2020-21	**Society of Toxicology, Metals Specialty Section, President**
2019-21	**Society of Toxicology, Nominating Committee, Member**
2019-21	Society of Toxicology, Specialty Section Collaboration and Communication Group, Member
2019-20	**Society of Toxicology, Metals Specialty Section, Vice-President**
2019	NIH, Special Emphasis Panel Member, Toxicology and Digestive, Kidney and Urological Systems AREA Review
2019	ICTXV (IUTOX/SOT), Symposium Chair, “Leveraging Zebrafish to Support Global Toxicology Challenges”
2019	**Fund for Scientific Research-FNRS Review Panel (Belgium)**
2019	**French Nat’l Research Agency, Contaminants, Ecosystems, & Health Panel**
2019	Society of Toxicology, Platform Chair, “Mechanistic Toxicology to Decode Injury and Repair”
2018-19	**National Academy of Sciences, Committee to Develop a Scoping Plan to Assess the Hazards of Organohalogen Flame Retardants, Member**
2018-19	Society of Toxicology, Ohio Valley Regional Chapter, Past-President
2018-19	Society of Toxicology, Metals Specialty Section, Vice-President Elect
2018	**French Nat’l Research Agency, Contaminants, Ecosystems, & Health Panel**
2018	Society of Toxicology, Workshop Chair, “Defining Domains of Applicability for Zebrafish within Toxicology: A Retrospective and Prospective”
2018	Society of Toxicology, Platform Chair, “Mechanistic and Translational Toxicology: SPC Highlights Emerging Scientists”
2018	NIH, Special Emphasis Panel Member, Toxicology and Digestive, Kidney and Urological Systems AREA Review
2018	NIH SIEE Study Section, ad hoc member
2017-18	**Society of Toxicology, Ohio Valley Regional Chapter, President**
2017-18	Society of Toxicology, RC4, Member
2017	Czech Republic Science Foundation, Grant Review Panel
2017	Society of Toxicology, Platform Chair, “Multi-Omic Connections in Chemical Toxicity”
2017	Society of Toxicology, Ohio Valley Regional Chapter Meeting, Organizer
2017	National Science Foundation, CAREER Grant Review Panel
2016-20	**NIH/NIEHS Environmental Health Sciences Review Committee, Member**
2016	**French National Research Agency, DisruptScreen Panel**
2016	Parkinson’s UK, Grant Review Panel
2016-17	Society of Toxicology, Ohio Valley Regional Chapter, Vice-President

2016	Society of Toxicology, Symposium Chair, "Using Multi- and Transgenerational Effects of Environmental Exposures in Diverse Animal Models for Assessment of Human Health Risks"
2015-19	**Society of Toxicology Scientific Program Committee, Member**
2015-16	Society of Toxicology, Ohio Valley Regional Chapter, Vice-President Elect
2014	NIH/NIEHS Environmental Health Sciences Core Centers P30, ad hoc
2014	NIH/NIEHS Research Training through Environmental Health Science Conference and Meetings, ad hoc
2014	CDC SEP Pilot Interventions to Promote the Health of People with Blood Disorders, Grant Review Panel
2014	NIH/NIEHS Neurodegenerative Disorders Grant Review Panel
2013	**US EPA Special Advisory Panel related to Tier 2 testing of Endocrine Disrupting Chemicals, Member**
2013-15	Society of Toxicology, Metals Specialty Section, Councilor
2013	**Netherlands Organization for Scientific Research for ZonMw-Innovational Research Incentive Grant Review Panel**
2013	University of Wisconsin-Milwaukee, NIEHS Children's Environmental Health Sciences Core Center Pilot Project Review Committee
2013	Society of Toxicology, Symposium Chair, "Application of systems biology to identify molecular mechanisms and biomarkers of lead (Pb) neurotoxicity: Implications in a developmental origin of Alzheimer's disease"
2012-15	Society of Toxicology, Ohio Valley Regional Chapter, Councilor
2011	CDC SEP for Health Affordable Care Act (ACA): Childhood Obesity Research Demonstration Grant Review Panel
2011	Alzheimer's Association Grant Review Panel
2011	CDC SEP for Diamond Blackfan Anemia (U01) Grant Review Panel
2010	NIH/NIEHS Gulf Oil Spill time-sensitive applications, Grant Review Panel
2010	NIH for Director's Opportunity for Research in Five Thematic Areas (RC4) for Genomics and Genetics in Health and Disease, Grant Review Panel
2010	CDC SEP for Knowledge Synthesis Center for Evaluating Genomic Application in Practice & Prevention, Grant Review Panel
2009	NIH/NIEHS Environmental Health Sciences Core Centers P30, ad hoc
2008	CDC for R36 Public Health Research Dissertation Awards, Grant Review Panel

PUBLICATIONS *(*Indicates corresponding author)*

Publications in peer-reviewed journals

1. Sanchez, O.F., L.F. Lin, J. Xie, **J.L. Freeman**, and C. Yuan. 2022. Lead Exposure Induces Dysregulation of Constitutive Heterochromatin Hallmarks in Live Cells. **Current Res. Toxicol**.3:100061. https://doi.org/10.1016/j.crtox.2021.12.001
2. Kiper, K. and **J.L. Freeman*.** 2022. Use of Zebrafish Genetic Models to Study Etiology of the Amyloid-Beta and Neurofibrillary Tangle Pathways in Alzheimer's Disease. **Current Neuropharmacology**. **DOI** : 10.2174/1570159X19666210524155944 *(invited review)*
3. Lin, L., J. Xie, O.F. Sanchez, C. Bryan, **J.L. Freeman**, and C. Yuan. 2021. Low dose lead exposure induces alterations on heterochromatin hallmarks persisting through SH-SY5Y cell differentiation. **Chemosphere**. 264:128486.
4. Horzmann, K.A., L.F. Lin, B. Taslakjian, C. Yuan, and **J.L. Freeman*.** 2021. Embryonic atrazine exposure and later in life behavioral and brain transcriptomic, epigenetic, and pathological alterations in adult male zebrafish. **Cell Biol. Toxicol.** 37(3):421-439. DOI: 10.1007/s10565-020-09548-y.
5. Wasel, O., K.M. Thompson, Y. Gao, A.E. Godfrey, J. Gao, C. Mahaptra, L.S. Lee, M.S. Sepúlveda, and **J.L. Freeman*.** 2021. Comparison of zebrafish in vitro and in vivo developmental toxicity assessments of perfluoroalkyl acids (PFAAs). **J. Toxicol. and Environ. Health Part A.** 84(3):125-136. https://doi.org/10.1080/15287394.2020.1842272 (IF: 2.649)

6. Xie, J., L. Lin, O. Sanchez, C. Bryan, **J.L. Freeman,** and C. Yuan. 2021. Pre-differentiation exposure to low-dose of atrazine results in persistent phenotypic changes in human neuronal cell lines. **Environ. Pollution**. 271:116379. DOI: 10.1016/j.envpol.2020.116379
7. Ahkin Chin Tai, J.,K.A. Horzmann, J. Franco, A.S. Jannasch, B.R. Cooper, and **J.L. Freeman.***. 2021. Developmental atrazine exposure in zebrafish produces the same major metabolites as mammals along with altered behavioral outcomes. **Neurotoxicology and Teratology**. 85: 106971. https://doi.org/10.1016/j.ntt.2021.106971
8. Stradtman, S. and **J.L. Freeman*.** 2021. Mechanisms of neurotoxicity associated with exposure to the herbicide atrazine. **Toxics.** 9:207. *(invited review)*
9. Wasel, O. and **J.L. Freeman*.** 2020. Chemical and genetic zebrafish models to define mechanisms of and treatments for dopaminergic neurodegeneration. **International Journal of Molecular Sciences.** 21(17):5981. https://doi.org/10.3390/ijms21175981 *(invited review)*
10. Lee, J. and **J.L. Freeman***. 2020. Exposure to the heavy metal lead induces DNA copy number alterations in zebrafish cells. **Chem. Res. Toxicol.** 33:2047-2053. doi: 10.1021/acs.chemrestox.0c00156.
11. Ahkin Chin Tai, J. and **J.L. Freeman*.** 2020. Zebrafish as an integrative vertebrate model to identify miRNA mechanisms regulating toxicity. **Toxicology Reports.** 7:559-570. *(invited review)*
12. Sanchez, O., L. Lin, C. Bryan, J. Xie, **J.L. Freeman**, and C. Yuan. 2020. Profiling epigenetic changes in human cell lines induced by atrazine exposure. **Environmental Pollution**. 258:113712.
13. Horzmann, K.A., A.M. Portales, K.G. Batcho, and **J.L. Freeman**. 2020. Developmental toxicity of trichloroethylene in zebrafish (*Danio rerio*). **Environmental Science: Processes & Impacts**. 22:728-739.
14. Zhang, R., M.R. Silic, A. Schaber, O. Wasel, **J.L. Freeman**, and M.S. Sepulveda. 2020. Exposure route affects the distribution and toxicity of polystyrene nanoplastics in zebrafish. **Science of the Total Environment**. 724:138065.
15. Cassar, S., I. Adatto, **J.L. Freeman,** J.T. Gamse, I. Iturria, C. Lawrence, A. Muriana, R.T. Peterson, S. Van Cruchten, and L.I. Zon. 2020. Use of zebrafish in drug discovery toxicology. **Chemical Research in Toxicology**. 33:95-118. ***ACS Editors' Choice** *(invited review)*
16. Filippelli, G.M., **J.L. Freeman,** J. Gibson, S. Jay, M.J. Moreno-Madriñán, I. Ogashawara, F. Rosenthal, and E. Wells. The current and future impacts of climate change on human health in Indiana. 2020. **Climatic Change.** https://doi.org/10.1007/s10584-020-02710-9.
17. Pitchai, A., R.R. Kannan, and **J.L. Freeman***. 2019. Zebrafish as an emerging model for bioassay- guided natural product drug discovery in neurological disorders. **Medicines**. 6(2):61. *(invited review)*
18. Runyan, R.B., O.I. Selmin, S.M. Smith, and **J.L. Freeman**. 2019. Letter to the Editor: TCE developmental outcomes. **Birth Defects Res.** 111(16):1234-1236.
19. **Freeman, J.L.*** and A. Pitchai. 2019. Zebrafish: Neurological diseases and natural product discovery. Encyclopedia. V1. 206. *(invited review)*
20. Horzmann, K.A. and **J.L. Freeman***. 2018. Making waves: New developments in toxicology with the zebrafish. **Toxicol. Sci**. 163:5-12. *(invited review)*
21. Horzmann, K.A., L.S. Reidenbach, D.H. Thanki, A.E. Winchester, B.A. Qualizza, G.A. Ryan, K.E. Egan, V.E. Hedrick, T.J.P. Sobreira, S.M. Peterson, G.J. Weber, S.E. Wirbisky, M.S. Sepulveda, and **J.L. Freeman*.** 2018. Embryonic atrazine exposure elicits proteomic, behavioral, and brain abnormalities with developmental time specific gene expression signatures. **J. Proteomics.** 186:71-82.
22. Zhou, W., A.S. Pal, A.Y.H. Hsu, T. Gurol, X. Zhu, S.E. Wirbisky-Hershberger, **J.L. Freeman**, A.L. Kasinski, and Q. Deng. 2018. MicroRNA-223 suppresses the canonical NF-kB pathway in basal keratinocytes to dampen neutrophilic inflammation. **Cell Reports**. 22:1810-1823.
23. Caballero-Gallardo, K., S.E. Wirbisky-Hershberger, J. Olivero-Verbel, J. de la Rosa, and **J.L. Freeman***. 2018. Embryonic exposure to an aqueous coal dust extract results in gene expression alterations associated with development and function of connective tissue and the hematological system, immunological and inflammatory disease, and cancer in zebrafish. **Metallomics**. 10: 463-473.
24. Lee, J., K.A. Horzmann, and **J.L. Freeman***. 2018. An embryonic 100 µg/L lead exposure results in sex-specific expression changes in genes associated with the neurological system in female or cancer in male adult zebrafish brains. **Neurotox. Teratol**. 65:60-69.
25. Oprescu, S.N., K.A. Horzmann, F. Yue, **J.L. Freeman**, and S. Kuang. 2018. Microarray, IPA, and GSEA analysis in mice models. **Bio-Protocol.** 8(17): e2999. DOI: 10.21769/BioProtoc.2999.
26. Wasel, O. and **J.L. Freeman***. 2018. Comparative assessment of tungsten toxicity in the absence or presence of other metals. **Toxics.** 6:66. *(invited review)*

27. Horzmann, K.A., C. de Perre, L.S. Lee, A.J. Whelton, and **J.L. Freeman***. 2017. Comparative analytical and toxicological assessment of methylcyclohexanemethanol (MCHM) mixtures associated with the Elk River chemical spill. **Chemosphere.** 188:599-607.
28. Sanchez, O.F., J. Lee, N.Y.K. Hing, S.E. Kim, **J.L. Freeman***, and C. Yuan*. 2017. Lead (Pb) exposure reduces global DNA methylation by non-competitive inhibition and alteration of *dnmt* expression. **Metallomics**. 9:149-160.
29. Wirbisky, S.E. and **J.L. Freeman***. 2017. Atrazine exposure elicits copy number alterations in the zebrafish genome. **Comparative Biochemistry and Physiology - Part C: Toxicology and Pharmacology**. 194:1-8.
30. Lee, J., S.M. Peterson, and **J.L. Freeman*.** 2017. Sex-specific characterization and evaluation of the Alzheimer's disease genetic risk factor *sorl1* in zebrafish during aging and in the adult brain following an embryonic lead exposure. **J. Appl. Toxicol.** 37:400-407.
31. Godfrey, A., B. Hooser, A. Abdel-moneim, K.A. Horzmann, **J.L. Freeman**, and M.S. Sepúlveda. 2017. Thyroid disrupting effects of halogenated and next generation chemicals on the swim bladder development of zebrafish. **Aquatic Toxicol.** 193:228-235.
32. Elsayed, M.S.A., Y. Su, P. Wang, T. Sethi, K. Agama, A. Ravji, C. Redon, E. Kiselev, Y. Pommier, K.H. Horzmann, **J.L. Freeman**, and M. Cushman. 2017. Design and synthesis of chlorinated and fluorinated 7-Azaindenoisoquinolines as potent cytotoxic anticancer agents that inhibit Topoisomerase I. **J. Medicinal Chem.** 60:5364-5376.
33. Damayanti, N., K. Buno, Y. Cui, S. Voytik-Harbin, R. Pili, **J.L. Freeman**, and J. Irudayaraj. 2017. Real-time multiplex kinase phosphorylation sensors in living cells. **ACS Sensors**. 2:1225-1230.
34. Wirbisky, S.E., O.F. Sanchez, K.A. Horzmann, D. Thanki, C. Yuan, and **J.L. Freeman***. 2017. Atrazine exposure decreases the activity of DNMTs, global DNA methylation levels, and *dnmt* expression. **Food Chem. Toxicol.** 109:727-734.
35. Horzmann, K.A. and **J.L. Freeman*.** 2017. Toxicogenomic evaluation using the zebrafish model system. **Encyclopedia of Analytical Chemistry**. 1-19. DOI: 10.1002/9780470027318.a9628 *(invited review)*
36. Wirbisky, S.E., G.J. Weber, K.E. Schlotman, M.S. Sepulveda, and **J.L. Freeman***. 2016. Embryonic atrazine exposure alters zebrafish and human miRNAs associated with angiogenesis, cancer, and neurodevelopment. **Food Chem. Toxicol.** 98:25-33.
37. Lee, J. and **J.L. Freeman***. 2016. Embryonic exposure to 10 µg/L lead results in female-specific expression changes in genes associated with nervous system development and function and Alzheimer's disease in aged adult zebrafish brain. **Metallomics**. 8:589-596.
38. Lee. J., S.M. Peterson, and **J.L. Freeman***. 2016. Alzheimer's disease risk genes in wild-type zebrafish exhibit gender-specific expression changes during aging. **Neurogenetics**. 17:197-199.
39. Austin, R.N., **J.L. Freeman**, and T.R. Guilarte. 2016. Neurochemistry of lead and manganese. **Metallomics**. 8:561-562.
40. Wirbisky, S.E., G.J. Weber, M.S. Sepulveda, T.L. Lin, A.S. Jannasch, and **J.L. Freeman***. 2016. An embryonic atrazine exposure results in reproductive dysfunction in adult zebrafish and morphological alterations in their offspring. **Scientific Reports**. 6:21337.
41. Wirbisky, S.E., N.P. Damayanti, C. T. Mahapatra, M.S. Sepulveda, J. Irudayaraj, and **J.L. Freeman***. 2016. Mitochondrial dysfunction, disruption of F-actin polymerization, and transcriptomic alterations in zebrafish larvae exposed to trichloroethylene. **Chem. Res. Toxicol.** 29(2):169-179.
42. Horzmann, K. and **J.L. Freeman*.** 2016. Zebrafish get connected: investigating neurotransmission targets and alterations in chemical toxicity. **Toxics.** 4:19. *(invited review)*
43. Wirbisky, S.E., M.S. Sepulveda, G.J. Weber, A.S. Jannasch, K. Horzmann, and **J.L. Freeman***. 2016. Embryonic atrazine exposure elicits alterations in genes associated with neuroendocrine function in adult male zebrafish. **Toxicol. Sci.** 153:149-164.
44. Bi, P., F. Yue, A. Karki, B. Castro, S.E. Wirbisky, C. Wang, A. Durkes, B. Elzey, O.M. Andrisani, C. Bidwell, **J.L. Freeman**, S.F. Konieczny, and S. Kuang. 2016. Notch activation drives adipocyte dedifferentiation and tumorigenic transformation in mice. **J. Experimental Medicine.** 213(10):2019-2037. doi: 10.1084/jem.20160157
45. Cui, Y., J. Li, L. Weng, S.E. Wirbisky, **J.L. Freeman**, J. Liu, Q. Liu, X. Yuan, and J. Irudayaraj. 2016. Regulatory landscape and clinical implication of MBD3 in human malignant glioma. **Oncotarget**. 7:81698-81714. doi: 10.18632/oncotarget.13173

46. Caballero-Gallardo, K., J. Olivero-Verbel, and **J.L. Freeman***. 2016. Toxicogenomics to evaluate endocrine disrupting effects of environmental chemicals using the zebrafish model. **Current Genomics.** 17(6):515-527.
47. Bi, P., F. Yue, Y. Sato, S.E. Wirbisky, W. Liu, T. Shan, Y. Wen, D. Zhou, **J.L. Freeman**, and S. Kuang. 2016. Stage-specific effects of Notch activation during skeletal myogenesis. **eLIFE**. doi. 10.7554/eLife.17355.
48. Wirbisky, S.W., G.J. Weber, M.S. Sepulveda, C. Xiao, J.R. Cannon, and **J.L. Freeman***. 2015. Developmental origins of neurotransmitter and transcriptome alterations in adult female zebrafish exposed to atrazine during embryogenesis. **Toxicology**. 333:156-167.
49. Bault, Z.A., S.M. Peterson, and **J.L. Freeman***. 2015. Directional and color preference in adult zebrafish: Implications in behavioral and learning assays in neurotoxicology studies. **J. Appl. Toxicol.** 35:1502-1510.
50. Wirbisky, S.E. and **J.L. Freeman***. 2015. Atrazine exposure and reproductive dysfunction through the hypothalamus-pituitary-gonadal (HPG) axis. **Toxics.** 3(4):414-450. *(invited review)*
51. Peterson, S.M. and **J.L. Freeman***. 2014. Chemical exposure generates DNA copy number variants and impacts gene expression. **Advances in Toxicology**. 2014:984319.
52. Lee, J. and **J.L. Freeman***. 2014. Zebrafish as a model for investigating developmental lead (Pb) neurotoxicity as a risk factor in adult neurodegenerative disease: a mini-review. **NeuroTox**. 43:57-64. **– #7 Hottest Article in NeuroToxicology from Oct.-Dec. 2014** *(invited review)*
53. **Freeman, J.L.*,** G.J. Weber, S.M. Peterson, and L.H. Nie. 2014. Embryonic ionizing radiation exposure results in expression alterations of genes associated with cardiovascular and neurological development, function, and disease and modified cardiovascular function. **Front. Genet.** 5: 268.
54. Wirbisky, S., G.J. Weber, J.W. Wang, J.R. Cannon, and **J.L. Freeman***. 2014. Novel dose-dependent alterations in excitatory GABA during embryonic development associated with lead (Pb) neurotoxicity. **Toxicol Letters.** 229:1-8.
55. Lee, J. and **J.L. Freeman*.** 2014. Zebrafish as a model for developmental neurotoxicity assessment: the application of the zebrafish in defining the effects of arsenic, methylmercury, or lead on early neurodevelopment. **Toxics.** 2:464-495. *(invited review)*
56. Edwards, N., A. Ellingwood, M. Hebdon, K. Foli, and **J.L. Freeman**. 2014. Guiding patient decision-making regarding bone marrow donation. **Journal for Nurse Practitioners**. 10(2):113-119.
57. Weber, G.J., M.S. Sepúlveda, S.M. Peterson, S.S. Lewis, and **J.L. Freeman***. 2013. Transcriptome alterations following developmental atrazine exposure in zebrafish are associated with disruption of neuroendocrine and reproductive system function, cell cycle, and carcinogenesis. **Toxicol. Sci.** 132:458-466.
58. Peterson, S.M., J. Zhang, and **J.L. Freeman***. 2013. Developmental reelin expression and time point-specific alterations from lead exposure in zebrafish. **Neurotox. Teratol.** 38C:53-60.
59. Brown, K.H., K.P. Dobrinski, A.S. Lee, O. Gokcumen, R.E. Mills, X. Shi, W.W.S. Chong, J.Y.H. Chen, P. Yoo, S. David, S.M. Peterson, T. Raj, K.W. Choy, B. Stranger, R.E. Williamson, L.I. Zon, **J.L. Freeman***[†], and C. Lee[†]. 2012. Extensive genetic diversity and strain sub-structuring among zebrafish strains revealed through copy number variant analysis. **Proc. Natl. Acad. Sci. USA.** 109:529-534. [†]Equal contributions from senior authors
60. Zhang, J., S.M. Peterson, G.J. Weber, X. Zhu, W. Zheng, and **J.L. Freeman***. 2011. Decreased axonal density and altered expression profiles of axonal guidance genes underlying lead (Pb) neurodevelopmental toxicity at early embryonic stages in the zebrafish. **Neurotox. Teratol.** 33:715-720.
61. Peterson, S.M., J. Zhang, G.J. Weber, and **J.L. Freeman***. 2011. Global gene expression analysis reveals dynamic and developmental stage dependent enrichment of lead (Pb)-induced neurological gene alterations. **Environ. Health Perspect.** 119:615-621.
62. Dobrinski, K.P., K.H. Brown, **J.L. Freeman**, and C. Lee. 2011. Molecular cytogenetic methodologies and a BAC probe panel resource for genomic analyses in the zebrafish. **Methods Cell Biol.** 104:237-257.
63. Peterson, S.M. and **J.L. Freeman***. 2009. RNA isolation from embryonic zebrafish and cDNA synthesis for gene expression analysis. **J. Vis. Exp.** 30. http://www.jove.com/index/details.stp?id=1470, doi: 10.3791/1470.
64. Peterson, S.M. and **J.L. Freeman***. 2009. Global gene expression analysis using a zebrafish oligonucleotide microarray platform. **J. Vis. Exp**. 30. http://www.jove.com/index/details.stp?id=1471, doi: 10.3791/1471.

65. Peterson, S.M. and **J.L. Freeman***. 2009. Cancer cytogenetics in the zebrafish. **Zebrafish**. 6:355-360. *(invited review)*
66. **Freeman, J.L**., C. Ceol, H. Feng, D.M. Langenau, C. Belair, H.M. Stern, A. Song, B.H. Paw, A.T. Look, Y. Zhou, L.I. Zon, and C. Lee. 2009. Construction and application of a zebrafish array CGH platform. **Genes Chromosomes Cancer** 48:155-170. PMCID: PMC2605212
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78. **Freeman, J.L.** and A.L. Rayburn. 2004. *In vivo* genotoxicity of atrazine to anuran larvae. **Mutat. Res. – Gen. Tox. En.** 560:69-78.
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Peer-reviewed study reports

80. Dorman, D.C., H.A. Barton, K. Blackburn, J. Bucher, J.L. Daniels, **J.L. Freeman**, K. Mansouri, C. Messerlian, D.M. Reif, G.M. Solomon, and C. Yang, Committee to Develop a Scoping Plan to Assess the Hazards of Organohalogen Flame Retardants. **National Academies of Sciences, Engineering, and Medicine**. 2019. A Class Approach to Hazard Assessment of Organohalogen Flame Retardants. Washington, DC: The National Academies Press. https://doi.org/10.17226/25412.
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Peer-reviewed invited book chapters

82. Kaucic, C., A. Lakshmi Dharmavathi, and **J.L. Freeman*.** 2022. Using the zebrafish for understanding the effects of pharmaceutical pollution. In: **Contemporary Chemical Approaches for Green and Sustainable Drugs (Advances in Green Chemistry):** Part I. Health Concerns, Risk Assessment and Environmental Monitoring of Pharmaceutical Pollutants. Ed. M. Torok. Elsevier.
83. Suku, A.S., P.V. Mohanan, and **J.L. Freeman*.** 2022. Characterization of genomic and epigenomic biomarkers of nanoparticle toxicity using the zebrafish model system. In: **Genomic and Epigenomic Biomarkers of Toxicology and Disease: Clinical and Therapeutic Actions**. Ed. S. Sahu, Johns Wiley and Sons Ltd. Chapter 20.
84. Xie, J., H. Zhao, **J.L. Freeman,** and C. Yuan. 2022. The role of dynamic epigenetic changes in modulating homeostasis after exposure to low-dose environmental chemicals. In: **Genomic and Epigenomic Biomarkers of Toxicology and Disease: Clinical and Therapeutic Actions**. Ed. S. Sahu, Johns Wiley and Sons Ltd. Chapter 10.
85. Pitchai, A., R.R. Kannan, and **J.L. Freeman*.** 2022. Toxicity testing of natural products using the zebrafish model system. In: **Biomedical Product and Materials Evaluation: Standards and Ethics**. Ed. P.V. Mohanan. Elsevier. https://www.elsevier.com/books/biomedical-product-and-materials-evaluation/mohanan/978-0-12-823966-7
86. Ahkin Chin Tai, J. and **J.L. Freeman***. 2021. Developmental neurotoxicity of the herbicide atrazine. In: **Diagnosis, Management and Modelling of Neurodevelopmental Disorders: The Neuroscience Of Development.** Academic Press. 219-228. https://doi.org/10.1016/B978-0-12-817988-8.00019-1.
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89. **Freeman, J.L.*** 2018. Human health concerns of drinking water chemical contaminants in eastern India. In: **Water and Wellness: Multidimensional Technological Innovations for Human Health.** Panigrahi, S. and R.K. Panda (eds). Purdue University Press, West Lafayette, IN. pages 22-27.
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91. **Freeman, J.L.*,** G.J. Weber, and M.S. Sepúlveda. 2013. Fishing for microRNAs in toxicology. In: **Micro-RNA in Toxicology and Medicine**. S.C. Sahu (ed). Wiley.
92. Lewis, S.S., G.J. Weber, **J.L. Freeman**, and M.S. Sepúlveda. 2012. Molecular epigenetic changes caused by environmental pollutants. In: **Toxicology and Epigenetics**. S.C. Sahu (ed). Wiley.
93. Lee, C., D. Palmer, **J.L. Freeman**, and K.H. Brown. 2009. Molecular cytogenetic methodologies and a second generation BAC probe panel resource for zebrafish genomic analysis. In: **Essentials of Zebrafish Methods: Cell and Developmental Biology.** Westerfield, M., L.I. Zon, and H. Detrich (eds). Elsevier Academic Press, London.

TEACHING AND MENTORING

Courses Taught

Lead Instructor

1. Essentials of Environmental, Occupational, and Radiological Health Sciences (HSCI 20200) [University Foundational Core Course in Science, Technology, and Society]
2. School of Health Sciences Undergraduate Research Honors Program (a series of 8 courses: HSCI 19501, 19601, 29501, 29601, 39501, 39601, 49501, and 49601)
3. Introduction to Environmental Health (HSCI 57500) [Core course in Masters of Public Health Program]
4. Advanced Techniques in Molecular Toxicology (HSCI 59000)
5. Toxicology Laboratory: Undergraduate Research Experience (HSCI 29000, HSCI 39000, and HSCI 49000)

Guest Lecturer

- Toxicology (HSCI 56000)
- Analytical Toxicology and Pathology (HSCI 56200)

- Health In The Time Of Pandemics: An Introduction (PUBH 20200)
- Ecotoxicology (FNR 52700)
- Biological Targets for Drug Discovery: Neuronal Function and Neurodegeneration (MCMP 61700)
- Human Genetics (BIOL 44400)
- Introduction to Health Sciences Professions (HSCI 10100)
- Introduction to Occupational and Environmental Health Sciences (HSCI 34500)
- Everyday Toxicology: Poisonings from Clinics to Courtrooms (HSCI 36000)

Graduate Students

Major Professor

Name	*Dates*	*Degree*	*Specialization*	*Graduation*	*Current Position*
Sydney Stradtman	2021-present	Ph.D.	Toxicology		
Ola Wasel	2018-present	Ph.D.	Toxicology		
Janiel Chin Tai	2018-2021	Ph.D.	Toxicology	August 2021	Toxicologist, PepsiCo
Keturah Kiper	2017-present	Ph.D.	Toxicology		
Katie Horzmann	2014-2018	Ph.D.	Toxicology	May 2018	Asst. Prof., Auburn U.
Sara Wirbisky	2013-2016	Ph.D.	Toxicology	May 2016	Toxicologist, CRO
Jinyoung Lee	2012-2016	Ph.D.	Toxicology	May 2016	Toxicologist, Chevron
Gregory Weber	2010-2013	Ph.D.	Toxicology	August 2013	Academic Res. Sci.
Sam Peterson	2008-2012	Ph.D.	Toxicology	August 2012	Academic Res. Sci.
Vasisht Sridhar	2021-present	M.S. (thesis)	Toxicology		
Brian Sumprer	2017-2020	M.S. (thesis)	Toxicology	Dec. 2020	
Ola Wasel	2016-2018	M.S. (thesis)	Toxicology	August 2018	Ph.D student
Sara Wirbisky	2012-2013	M.S. (thesis)	Toxicology	August 2013	Ph.D. student

Committee Member

Name	*Dates*	*Degree*	*Specialization*	*Graduate Advisor*
Josephine Brown	2021-present	Ph.D.	Toxicology	Jason Cannon
Xueqi Tang	2020-present	Ph.D.	Toxicology	Aaron Bowman
Li Xia	2020-present	Ph.D.	Toxicology	Jonathan Shannahan
Ridhi Deo	2018-present	Ph.D.	Technology	Suranjan Panigrahi
Lizz Allmon	2018-2021	Ph.D.	FNR	Maria Sepulveda
Lisa Kobos	2016-2020	Ph.D.	Toxicology	Jonathan Shannahan
Gary Hoover	2016-2018	Ph.D.	FNR	Maria Sepulveda
Christelene Horton	2015-2018	Ph.D.	Epidemiology	Ellen Wells
Oscar Sanchez-Medina	2015-2017	Ph.D.	Chem Eng.	Chongli Yuan
Xinxin Liu	2014-2018	Ph.D.	Toxicology	Wei Zheng / Preeti Sivasankar
Amy Godfrey	2014-2017	Ph.D.	FNR	Maria Sepulveda
Aparna Shinde	2014-2019	Ph.D.	Cancer Biology	Michael Wendt
Eric Ward	2014-2017	Ph.D.	Occ Health Sci	Ulrike Dydak
Ahmed El-Mehrezy	2013-2016	Ph.D.	FNR	Maria Sepulveda
Christopher Bates	2010-2014	Ph.D.	Toxicology	Wei Zheng
Xue (Sherleen) Fu	2008-2013	Ph.D.	Toxicology	Wei Zheng
Tianyuan (Lara) Sang	2020-present	M.S.	Toxicology	Wei Zheng
Edgar Ramiro Perez	2019-2021	M.S.	Toxicology	Maria Sepulveda
Po-Yu (Sam) Chou	2016-2017	M.S.	Technology	Suranjan Panigrahi
Angela Cruz-Hernandez	2015-2017	M.S.	Toxicology	Jason Cannon
Lee Alleman	2014-2016	M.S.	Health Physics	Linda Nie
Menghan Liu	2013-2015	M.S.	Toxicology	Jason Cannon
Cindy Ding	2013-2015	M.S.	Toxicology	Jason Cannon
Timothy Beenen	2012-2015	M.S.	MCMP	Eric Barker

Amy Ellingwood	2011-2012	M.S.	Nursing	Nancy Edwards
Shirisha Chittiboyina	2009-2011	M.S.	Toxicology	Wei Zheng

Post-doctoral Researchers

1. Abdullah Bayram: Oct. 2018-June 2019 (UNSAAC Project)
2. Karina Caballero-Gallardo: Oct. 2014-April 2015 (University of Cartagena, Colombia)
3. Solange Lewis: Aug. 2010-Dec. 2011
4. Jun Zhang: March 2010-March 2011 (Zhejian University, China)

Visiting Scholars

1. Karthikeyan Chelladurai: Jan. 2022-Jan. 2023 (PhD student, Centre for Nanoscience and Nanotechnology, Sathyabama Institute of Science and Technology, Chennai, India)
2. Athira Sairathry Suku: Jan. 2021-Jan. 2022 (PhD student, Toxicology Division of Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum, Kerala, India)
3. Arjun Pitchai: Jan. 2019-June 2020 (PhD student, Molecular Nanomedicine Research Unit, Centre for Nanoscience and Nanotechnology, Sathyabama Institute of Science and Technology, Chennai, India)

Serving as Major Professor for Masters of Public Health project

Name	*Dates*	*Degree Level*	*Specialization*	*Graduation Date*
Matthew Paarlberg	2019-2020	M.P.H.	Environ. Health	May 2020
Amy Rupp	2017-2018	M.P.H.	Environ. Health	May 2018
Amanda Kaiser	2017-2018	M.P.H.	Environ. Health	May 2018
Ola Wasel	2016-2017	M.P.H.	Environ. Health	May 2017
Victoria Leffel	2016-2017	M.P.H.	Environ. Health	May 2017

International PhD student theses external examiner

Name	*Dates*	*Degree Level*	*International Institution*
Arjun Pitchai	2021	Ph.D.	Sathyabama Instit. of Science & Technol., Chennai, India
S. Kalaiarasi	2020	Ph.D.	Sathyabama Instit. of Science & Technol., Chennai, India
Safina Kaousar	2014	Ph.D.	University of Agriculture, Faisalabad, Pakistan

PhD graduate student rotations and PULSe interdisciplinary graduate program preliminary committees

Name	*Dates*	*Degree Level*	*Mentoring role*
Hanna King	Spring 2022	Ph.D.	PULSe Student Rotation
Siyuan Sun	Spring 2021	Ph.D.	PULSE Ph.D. Preliminary Exam Committee
Sidney Stradtman	Fall 2020	Ph.D.	HSCI Student Rotation
Zhiyu Yang	Spring 2018	Ph.D.	PULSe Ph.D. Preliminary Exam Committee
Janiel Ahkin Chin Tai	Fall 2017	Ph.D.	PULSe Student Rotation
Emily Malek	Fall 2017	Ph.D.	PULSe Student Rotation
Lisa Kobos	Fall 2016	Ph.D.	HSCI Student Rotation
Saranya Radhakrishnan	Spring 2016	Ph.D.	PULSe Student Rotation
Shishir Pouydal	Spring 2013	Ph.D.	PULSe Student Rotation
Jennifer Antonides	Fall 2012	Ph.D.	PULSe Student Rotation
Kourtney Fultz	Fall 2011	Ph.D.	PULSe Student Rotation
Amy Funk	Fall 2011	Ph.D.	PULSe Student Rotation
Soumitra Ghosh	Spring 2010	Ph.D.	PULSe Student Rotation

Postbaccalaureate Research Education Program (PREP) for Translational Biomedical Sciences Mentoring

Nicholas Nelson July 2021-June 2022

Medical Student Research Mentoring

Briana Grisby Summer 2018

Mentoring of Undergraduate Researchers

Student Name (Post-graduation destination if graduated)	Semester(s)	Course / Research Experience	Credits	Funding and/or Awards	Presentations/Publications
Jenna Schultheis (went to Medical School)	Fall 2009	HSCI 29000	1.0	Funding from Purdue Center for Cancer Research for Summer Undergraduate Research Program (2010)	(1) Platform presentation to Carroll County Cancer Association (October 2010) (2) Poster presented with her work at the 50th Annual Society of Toxicology Meeting (March 2011) (3) Poster presented with her work at the Purdue University Chronic Disease Research Symposium (April 2011)
	Spring 2010	HSCI 29000	1.0		
	Summer 2010	SURP	X		
Dave Robbins (went to Optometry School)	Spring 2010	HSCI 29000	1.0	Summer Research Internship (2010)	(1) Poster presentation at Ohio Valley-Society of Environmental Toxicology and Chemistry Regional Meeting (October 2010) (2) Poster presented with his work at the 50th Annual Society of Toxicology Meeting (March 2011) (3) Poster presentation at the Purdue University Chronic Disease Research Symposium (April 2011)
	Summer 2010	Research Internship	X		
	Fall 2010	HSCI 39000	1.0		
	Spring 2011	HSCI 39000	1.0		
Megan Fisch (went to work in industrial laboratory)	Spring 2011	HSCI 39000	1.0		
	Fall 2011	HSCI 49000	1.0		
Zachary Bault (went to Veterinary School)	Spring 2011	BIOL 49900	1.0	(1) Summer Undergraduate Research Fellowship Program (2011) (2) **1st place** poster presentation at the Tri-Beta District Convention, West Lafayette, IN (March 2012)	(1) Poster presentation at the Purdue University Chronic Disease Research Symposium (April 2011) (2) Platform presentation at the Purdue SURF Symposium (August 2011) (3) Poster presentation at the Ohio Valley Society of Toxicology (OV-SOT) Meeting (September 2011) (4) Poster presentation at the Tri-Beta District Convention, West Lafayette, IN (March 2012) (5) Poster presentation at the Purdue University Chronic Disease Research Symposium (March 2012) (6) **First author publication: Bault et al. 2015. J. Appl. Toxicol. 35:1502-1510.**
	Summer 2011	SURF	X		
	Fall 2011	BIOL 49900	1.0		
	Spring 2012	BIOL 49900	1.0		
Nelson Wong (went to work as a medical data analyst)	Spring 2011	NA	X		
	Fall 2011	HSCI 29000	1.0		
Kaitlyn Egan (went to Medical School)	Summer 2011	DURI-CPIP	X	(1) Cancer Prevention Interdisciplinary Education Program (Summer 2011-Spring 2012) (2) **1st place** undergraduate poster	(1) Poster presentation at the Discovery Learning Research Center Undergraduate Student Recognition Symposium (July 2011) (2) Poster presentation at the Ohio Valley Society of Toxicology (OV-SOT) Meeting (September 2011)
	Fall 2011	HSCI 49000	2.0		

	Spring 2012	HSCI 49000	2.0	presentation at the OV-SOT Meeting (September 2011) (3) School of Health Sciences Distinguished Student Award (April 2012)	(3) Poster presentation at the Purdue University Chronic Disease Research Symposium (March 2012) (4) **Co-author on Horzmann et al. 2018. J. Proteomics. 186:71-82.**
Mary Mengel (went to work in pathology laboratory)	Fall 2011	HSCI 49000	1.0		
	Spring 2012	HSCI 49000	2.0		
Anna Winchester (went to Medical School)	Spring 2012	HSCI 195H	1.0	(1) Paul L. Ziemer Scholarship for Outstanding Freshman Scholastic Performance (April 2012) (2) Richard Vetter Scholarship for Outstanding Sophomore Scholastic Performance (April 2013) (3) Purdue Center for Cancer Research Summer Undergraduate Research Program (2014) (4) HHS Undergraduate Compton Travel Award (2015) (5) HSCI Distinguished Student Award (2015)	(1) Poster presentation at the Ohio Valley Society of Toxicology (OV-SOT) Meeting (September 2012) (2) Poster presentation at the Oncological Sciences Center Retreat and Poster Session (November 2012) (3) Poster presentation at the Purdue University Chronic Disease Research Symposium (January 2013) (4) Poster presentation at the Purdue University Undergraduate Research Symposium (April 2013) (5) Poster presentation at the College of Health and Human Sciences Undergraduate Honors Poster Session (April 2013) (6) Poster presentation at the Ohio Valley Society of Toxicology (OV-SOT) Meeting (2014) (7) Poster presentation at the Purdue Undergraduate Research Symposium (April 2014) (8) Poster presentation at 54th Annual Meeting of the Society of Toxicology and ToxExpo, San Diego, CA (March 2015) (9) Poster presentation at the Purdue Undergraduate Research Symposium (April 2015) (10) **Co-author on Horzmann et al. 2018. J. Proteomics. 186:71-82.**
	Fall 2012	HSCI 29601	1.0		
	Spring 2013	HSCI 29601	1.0		
	Fall 2013	HSCI 39601	1.0		
	Spring 2014	HSCI 39601	1.0		
	Summer 2014	SURP	X		
	Fall 2014	HSCI 49601	1.0		
	Spring 2015	HSCI 49601	1.0		
Geoffrey Ryan (went to Medical School)	Summer 2012	DURI-CPIP	X	(1) Cancer Prevention Interdisciplinary Education Program (Summer 2012-Spring 2013) (2) Sally Mason Scholarship (February 2013) (3) HHS Undergraduate Compton Travel Award (2014) (4) **Best Undergraduate Poster Award**, Purdue Undergraduate Research Symposium (2014)	(1) Poster presentation at the Discovery Learning Research Center Undergraduate Student Recognition Symposium (July 2012) (2) Poster presentation at the Ohio Valley Society of Toxicology (OV-SOT) Meeting (September 2012) (3) Poster presentation at the Oncological Sciences Center Retreat and Poster Session (November 2012) (4) Poster presentation at 52nd Annual Meeting of the Society of Toxicology and ToxExpo, San Antonio, TX (March 2013) (5) Poster presentation at the Ohio Valley Society of Toxicology (OV-SOT) Meeting (September 2013)
	Fall 2012	HSCI 39000	2.0		
	Spring 2013	HSCI 39000	2.0		
	Fall 2013	HSCI 49000	2.0		
	Spring 2014	HSCI 49000	2.0		

					(6) Poster presentation at the Purdue Undergraduate Research Symposium (April 2014) (7) Poster presentation at 53rd Annual Meeting of the Society of Toxicology and ToxExpo, Phoenix, AZ (March 2014) (8) **Co-author on Horzmann et al. 2018. J. Proteomics. 186:71-82.**
Kelly Schlotman (went to Medical School)	Fall 2012	HSCI 39000	1.0	(1) Cancer Prevention Interdisciplinary Education Program (Summer 2013-Spring 2014) (2) **Best Undergraduate Student Poster Award** at the OVSOT Meeting (September 2013) (3) **Pfizer SOT Undergraduate Travel Award** (2014) (4) HSCI Distinguished Student Award (2014)	(1) Poster presentation at the Discovery Learning Research Center Undergraduate Student Recognition Symposium (July 2013) (2) Poster presentation at the Ohio Valley Society of Toxicology (OV-SOT) Meeting (September 2013) (3) Poster presentation Purdue Center for Cancer Research Scientific Retreat (2013) (4) Poster presentation at the Purdue Undergraduate Research Symposium (April 2014) (5) Poster presentation at 53rd Annual Meeting of the Society of Toxicology and ToxExpo, Phoenix, AZ (March 2014) (6) Poster presentation at the Purdue Undergraduate Research Symposium (April 2014) (7) Research article published in JPUR (2014) (8) **Co-author on Wirbisky et al. 2016. Food. Chem. Toxicol. 98:25-33.**
	Spring 2013	HSCI 39000	1.0		
	Summer 2013	DURI-CPIP	X		
	Fall 2013	HSCI 49000	2.0		
	Spring 2014	HSCI 49000	2.0		
Isha Kaul [co-mentored with Dr. Linda Nie] (went to Medical School)	Spring 2013	HSCI 29601	1.0	(1) Summer Internship (2013)	(1) Poster presentation at the Ohio Valley Society of Toxicology (OV-SOT) Meeting (2014) (2) Poster presentation at the Purdue Undergraduate Research Symposium (April 2014) (3) Poster presentation at the Purdue Undergraduate Research Symposium (April 2015) (4) **Snapshot published in JPUR** (2015)
	Summer 2013	Research Internship	X		
	Fall 2013	HSCI 39601	1.0		
	Spring 2014	HSCI 39601	1.0		
	Fall 2014	HSCI 49601	1.0		
	Spring 2015	HSCI 49601	1.0		
Kendel Weger (went to Medical School)	Spring 2014	HSCI 19601	1.0	(1) Paul L. Ziemer Scholarship for Outstanding Freshman Scholastic Performance (2014) (2) **3rd Place Poster Award**, Purdue Undergraduate Research Symposium (2015) (3) Richard Vetter Scholarship (2016) (4) HHS Outstanding Senior in Health Sciences (2017)	(1) Poster presentation at the Purdue Undergraduate Research Symposium (April 2015) (2) Poster presentation at the Purdue Undergraduate Research Symposium (April 2016) (3) Poster presentation at the Purdue Undergraduate Research Symposium (April 2017) (4) **Snapshot published in JPUR** (2017)
	Fall 2014	HSCI 29601	1.0		
	Spring 2015	HSCI 29601	1.0		
	Fall 2015	HSCI 39601	1.0		
	Spring 2016	HSCI 39601	1.0		
	Fall 2016	HSCI 49601	1.0		
	Spring 2017	HSCI 49601	1.0		

				(5) HSCI Distinguished Student Award (2017)	
Brad Qualizza (went to PA School)	Summer 2014	CPIP	X	(1) Cancer Prevention Interdisciplinary Education Program (Summer 2014-Spring 2015) (2) HHS Undergraduate Compton Travel Award (2015) (3) Sally Mason Scholarship (2015)	(1) Poster presentation Purdue Center for Cancer Research Scientific Retreat (2014) (2) Poster presentation at the Purdue Undergraduate Research Symposium (April 2015) (3) Poster presentation at 54th Annual Meeting of the Society of Toxicology and ToxExpo, San Diego, CA (March 2015) **(4) Co-author on Horzmann et al. 2018. J. Proteomics. 186:71-82.**
	Fall 2014	HSCI 49000	1.0		
	Spring 2015	HSCI 49000	1.0		
Devang Thanki (went to Medical School)	Fall 2014	BIOL 49900	1.0	(1) Cancer Prevention Interdisciplinary Education Program (Summer 2015-Spring 2016) (2) Purdue Center for Cancer Research Summer Undergraduate Research Program (2016) (3) **Best Abstract Award**, Purdue Undergraduate Research Symposium (2016) (4) **Best Undergraduate Poster Award**, OV-SOT Meeting, Indianapolis, IN (2016)	(1) Poster presentation at the Purdue Undergraduate Research Symposium (April 2015) (2) Poster presentation at the Purdue Undergraduate Research Symposium (April 2016) (3) Poster presentation Purdue Center for Cancer Research Scientific Retreat (2016) (4) Poster presentation at the Ohio Valley Society of Toxicology (OV-SOT) Meeting, Indianapolis, IN (2016) (5) Poster presentation at the Purdue Undergraduate Research Symposium (April 2017) (6) **Research article published in JPUR** (2017) **(7) Co-author on Wirbisky et al. 2017. Food Chem. Toxicol. 109:727-734.** (8) **Co-author on Horzmann et al. 2018. J. Proteomics. 186:71-82.**
	Spring 2015	BIOL 49900	1.0		
	Summer 2015	CPIP	X		
	Fall 2015	BIOL 49900	1.0		
	Spring 2016	BIOL 49900	1.0		
	Summer 2016	SURP	X		
	Fall 2016	BIOL 49900	1.0		
	Spring 2017	BIOL 49900	1.0		
Leeah Reidenbach (went to Medical School)	Spring 2015	HSCI 19601	1.0	(1) Cancer Prevention Interdisciplinary Education Program (Summer 2016-Spring 2017)	(1) Poster presentation at the Purdue Undergraduate Research Symposium (April 2016) (2) Poster presentation at the Purdue Undergraduate Research Symposium (April 2017) (3) Poster presentation at the Ohio Valley Society of Toxicology (OV-SOT) Meeting, Purdue University (2017) (4) Poster presentation at the Purdue Undergraduate Research Conference (April 2018) (5) **Snapshot published in JPUR** (2018) **(6) Co-author on Horzmann et al. 2018. J. Proteomics. 186:71-82.**
	Fall 2015	HSCI 29601	1.0		
	Spring 2016	HSCI 29601	1.0		
	Summer 2016	CPIP	X		
	Fall 2016	HSCI 39601	1.0		
	Spring 2017	HSCI 39601	1.0		
	Fall 2017	HSCI 49601	1.0		
	Spring 2018	HSCI 49601	1.0		
Alyce Baron (went to Medical School)	Fall 2015	HSCI 49601	1.0	*Competed Honors College Senior Project*	(1) Poster presentation at the Purdue Undergraduate Research Symposium (April 2016)
	Spring 2016	HSCI 49601	1.0		

Taylor Creighton	Spring 2016	HSCI 19000	1.0	*Lab Shadow Experience*	
Phoebe Beiderhake	Spring 2016	HSCI 19601	1.0	*Lab Shadow Experience*	
Jose Betancourt Toro (from Univ. of Puerto Rico, Mayaguez)	Summer 2016	SROP	X	*Participant in the Purdue Summer Research Opportunity Program (SROP)*	
Nudar Bhuiya (went to Medical School)	Spring 2017	HSCI 29601	1.0	(1) Honors College Scholarship for research supplies (2017) (2) Honors College Grant for research supplies (2019) (3) **Purdue Office of Undergraduate Research Grant ($500)** (2019) (4) HHS Outstanding Senior in Health Sciences (2019)	(1) Poster presentation at the Purdue Undergraduate Research Conference (April 2018) (2) Poster presentation at the Purdue Undergraduate Research Conference (April 2019) (3) **Research article published in JPUR** (2019)
	Fall 2017	HSCI 39601	1.0		
	Spring 2018	HSCI 39601	1.0		
	Fall 2018	HSCI 49601	1.0		
	Spring 2019	HSCI 49601	1.0		
Boghos Taslakjian (went to Medical School)	Spring 2017	HSCI 39000	1.0	(1) **3rd Place Undergraduate Poster Award**, OVSOT Meeting, Purdue University (2017) (2) OUR Scholarship (2018) (3) Bootsma Distinguished Student Scholarship (2018)	(1) Poster presentation at the C4E mixer (2017) (2) Poster presentation at the Ohio Valley Society of Toxicology (OV-SOT) Meeting, Purdue University (2017) (3) Oral presentation at the Purdue Undergraduate Research Conference (April 2018) (4) **Snapshot published in JPUR** (2018) (5) **Co-author on Horzmann et al. 2021. Cell Biol Toxicol. 37:421-439.**
	Fall 2017	HSCI 49000	1.0		
	Spring 2018	HSCI 49000	1.0		
Lucas Turner	Summer 2017	CPIP	X	(1) Cancer Prevention Interdisciplinary Education Program (Summer 2017-Spring 2018) (2) **1st Place Poster**, PURC (April 2018) (3) **2nd Place Poster**, OVSOT (Dec. 2018) (4) **2nd Place Poster**, PURC (April 2019) (5) HSCI Distinguished Student Award (2019) (6) HHS Graduation Responder (May 2019)	(1) Poster presentation at the Ohio Valley Society of Toxicology (OV-SOT) Meeting, Purdue University (2017) (2) Poster presentation at the Purdue Undergraduate Research Conference (April 2018) (3) Poster presentation at the Ohio Valley Society of Toxicology (OV-SOT) Meeting, Louisville University (2018) (4) Poster presentation at the Purdue Undergraduate Research Conference (April 2019) (5) **Snapshot published in JPUR** (2019)
	Fall 2017	HSCI 39000	1.0		
	Spring 2018	HSCI 39000	1.0		
	Fall 2018	HSCI 49000	1.0		
	Spring 2019	HSCI 49000	1.0		
Christina	Spring 2018	HSCI 19601	1.0	(1) **Purdue Office of**	(1) Poster presentation at the Purdue

Kaucic	Fall 2018	HSCI 29601	1.0	**Undergraduate Research Grant ($500)** (Fall 2019) (2) **Purdue Office of Undergraduate Research Grant ($500)** (Fall 2020)	Undergraduate Research Conference (April 2019) (2) Poster presentation at the Purdue Undergraduate Research Conference (April 2020) (3) Poster presentation at the Ohio Valley Society of Toxicology (OV-SOT) Meeting (virtual) (Nov. 2020) (4) Poster presentation at the Purdue Undergraduate Research Conference (April 2021) (5) **Snapshot published in JPUR** (2021) (6) **Co-author on book chapter** titled "Using the zebrafish for understanding the effects of pharmaceutical pollution (2022)
	Spring 2019	HSCI 29000	1.0		
	Fall 2019	HSCI 39000	1.0		
	Spring 2020	HSCI 39000	1.0		
	Fall 2020	HSCI 49000	2.0		
	Spring 2021	HSCI 49000	2.0		
Lauren Brulinski (working in medical laboratory)	Summer 2018	CPIP	X	(1) Cancer Prevention Interdisciplinary Education Program (Summer 2018-Spring 2019) (2) Bootsma Distinguished Student Scholarship (2019) (3) HHS Undergraduate Travel Award (2019) (4) **Purdue Office of Undergraduate Research Grant ($500)** (2019)	(1) Poster presentation at the Ohio Valley Society of Toxicology (OV-SOT) Meeting, Louisville University (2018) (2) Poster presentation at 58th Annual Meeting of the Society of Toxicology and ToxExpo, Baltimore, MD (March 2019) (3) Poster presentation at the Purdue Undergraduate Research Conference (April 2019) (4) **Snapshot published in JPUR** (2019)
	Fall 2018	HSCI 49000	1.0		
	Spring 2019	HSCI 49000	1.0		
Anusha Kotapalli	Spring 2019	HSCI 29601	1.0	(1) **Purdue Office of Undergraduate Research Grant ($500)** (Fall 2019) (2) HHS REACH Scholar (Summer 2019-Spring 2020) (3) Purdue Center for Cancer Research Summer Undergraduate Research Program (2021)	(1) Poster presentation at the Purdue Undergraduate Research Fall Conference (November 2019) (2) Poster presentation at the Purdue Undergraduate Research Conference (April 2020) (3) Poster presentation at the Ohio Valley Society of Toxicology (OV-SOT) Meeting (virtual) (Nov. 2020) (4) **Society of Toxicology Undergraduate Research Award** (March 2021) (5) Poster presentation at 60th Annual Meeting of the Society of Toxicology and ToxExpo (virtual) (March 2021) (6) Poster presentation at the Purdue Undergraduate Research Conference (April 2021) (7) **Co-author on book chapter** titled "Using the zebrafish for understanding the effects of pharmaceutical pollution (2022) (8) **Full research article published in JPUR** (2022)
	Summer 2019	HHS REACH			
	Fall 2019	HSCI 39601	1.0		
	Spring 2020	HSCI 39601	1.0		
	Fall 2020	HSCI 49601	1.0		
	Spring 2021	HSCI 49601	1.0		
	Summer 2021	SURP			
	Fall 2021 (graduated)	HSCI 49601	1.0		

Hanna King (PhD student)	Summer 2019	HSCI 49000	1.0	(1) **Purdue Office of Undergraduate Research Grant ($500)** (Fall 2019)	(1) Poster presentation at the Purdue Undergraduate Research Conference (April 2020) (2) **Snapshot published in JPUR** (2020)
	Fall 2019	HSCI 49000	1.0		
	Spring 2020	HSCI 49000	1.0		
Jenny Chen (current)	Fall 2019	HSCI 29601	1.0	(1) **Purdue Office of Undergraduate Research Grant ($500)** (Fall 2021)	(1) Poster presentation at the Ohio Valley Society of Toxicology (OV-SOT) Meeting (virtual) (Nov. 2020) (2) **Society of Toxicology Undergraduate Research Award** (March 2021) (3) Poster presentation at 60th Annual Meeting of the Society of Toxicology and ToxExpo (virtual) (March 2021) (4) Poster presentation at the Purdue Undergraduate Research Conference (April 2021)
	Spring 2020	HSCI 29601	1.0		
	Fall 2020	HSCI 39601	1.0		
	Spring 2021	HSCI 39601	1.0		
	Fall 2021	HSCI 49601	1.0		
	Spring 2022	HSCI 49601	1.0		
Briana Potter (transferred from Purdue in Fall 2020)	Fall 2019	HSCI 29601	1.0		
	Spring 2020	HSCI 29601	1.0		
Shaina Godfrey	Fall 2019	HSCI 29000	1.0		
	Spring 2020	HSCI 29000	1.0		
Isabelle Akoro (current)	Spring 2020	HSCI 19601	1.0		(1) Poster presentation at the Purdue Undergraduate Research Conference (April 2021) (2) Poster presentation at the Ohio Valley Society of Toxicology (OV-SOT) Meeting (virtual) (Nov. 2021)
	Fall 2020	HSCI 29601	1.0		
	Spring 2021	HSCI 29601	1.0		
	Fall 2021	HSCI 39601	1.0		
	Spring 2022	HSCI 39601	1.0		
Aditya Kotapalli	Spring 2020	HSCI 19601	1.0	(1) HHS REACH Scholar (Summer 2020-Spring 2021)	(1) Poster presentation at the Purdue Undergraduate Research Conference (Summer 2020) (2) Poster presentation at the Purdue Undergraduate Research Conference (April 2021)
	Summer 2020	HHS REACH	X		
	Fall 2020	HSCI 29601	1.0		
	Spring 2021	HSCI 29601	1.0		
Ryker Bond (current)	Spring 2021	HSCI 19601	1.0		
	Fall 2021	HSCI 29601	1.0		
	Spring 2022	HSCI 29601	1.0		
Kaylin Moore (current)	Spring 2021	HSCI 19601	1.0		
	Fall 2021	HSCI 29601	1.0		
	Spring 2022	HSCI 29601	1.0		
Breeann Mild (current)	Spring 2022	HSCI 29601	1.0		

Mentoring URM and First Generation Undergraduate Students (participation in the Purdue Horizons Mentoring Program)

- Tyniqua Taylor: 2017-2018 (MLAB)
- Lizeth Ulloa: 2016-2017 (HSPP)
- Jaslin Martinez: 2020-2021 (Public Health)
- Jada Moore: 2021-2022 (HSPP)

K-12 Research Activities and Mentoring

- Lane Worthing and Hillary Foxx (Sidwell Friends School, Washington, D.C.) mentored on zebrafish behavior research project (May 2020)
- Mentored high school research project for Carolyn Smith, Cor Jesu Academy, St. Louis, MO (Fall 2017)
- Presentation on environmental health and atrazine to High School Honors Science Class, Manchester Junior-Senior High School, Manchester, IN (May 2016)
- Mentored high school research project for Karina Ramos, Frankfort High School, IN (Spring 2014)
- College of Health and Human Sciences, Middle School Event to showcase environmental and molecular toxicology research with zebrafish (Nov. 22, 2013)

PROFESSIONAL AFFILIATIONS, ENGAGEMENT, AND SERVICE

National and International Societies

- Society of Toxicology (Member, 2008-present)
    - Nominating Committee (Member, 2019-21)
    - Specialty Section Collaboration and Communication Group (Member, 2019-21)
    - Program Committee (Member, 2015-19)
    - Ohio-Valley Regional Chapter (Member, 2008-present); Councilor (2012-2015); Vice-President Elect (2015-16); Vice-President (2016-17); President (2017-18); Past President (2018-19)
    - Metals Specialty Section (Member, 2010-present); Councilor (2013-2015); Vice-President Elect (2018-19); Vice-President (2019-20); President (2020-2021); Past-President (2021-2022
    - In Vitro Specialty Section (Member, 2009-present)
    - Women in Toxicology Special Interest Group (Member, 2011-present)
    - Undergraduate Research Special Interest Group (Member, 2011-present)
    - Reproductive and Developmental Toxicology Specialty Section (Member, 2012-present)
- Environmental Mutagen Society (Member, May 2009-present)
    - Women in EMS Specialty Section (Member, 2009-present)
- International Neurotoxicology Association (Member, 2010-present)
- Society of Environmental Toxicology and Chemistry (Member, April 2003-present)
    - Ozark-Prairie Regional Chapter (Member, 2003-2007)
    - Ohio-Valley Regional Chapter (Member, 2007-present)
- Rosalind Franklin International Honor Society (Member, 2012-present)
- American Chemical Society (Member, 2016-present)
- American Association for the Advancement of Science (Member, 2016-present)

Interdisciplinary Programs

- Executive Board Member, Center for the Environment, Discovery Park, Purdue University (2007-present; Executive Board 2012-present)
    - Convener, Chemical Exposures Signature Research Area (2017-present)
    - Reviewer for C4E Summer Undergraduate Research Application (2015 and 2016)
    - Reviewer for Purdue Honors College Udall Scholarships (2014, 2016, 2017)
- Steering Committee, Center on Aging and the Life Course, Purdue University (2019-2021; Member: 2013-present)
    - Symposium Organizer, Health Across Generation (9/15/17)
- Faculty Advisory Board, Certificate in Environmental and Sustainability Studies (2017-2020)

- Faculty Advisory Board, HHS REACH Undergraduate Research Scholars Program (2019-2021)
- Advisory Board Member, Genomics Core, Purdue University (2015-present)
- Faculty Advisory Board, Cancer Prevention Internship Program (2015-2019; program ended)
    - Reviewer for CPIP Graduate Program (2012, 2013, 2017, 2018)
- Member, PULSe - Purdue University Interdisciplinary Life Sciences Graduate Program,
    - Molecular Signaling and Cancer Biology Training Group (2012-present)
    - Integrative Neuroscience Training Group (2009-present)
    - Computational and Systems Biology Training Group (2018-present)
- Member, Purdue Center for Cancer Research (NCI funded center) (Jan. 2010-present)
- Member, Purdue Institute for Integrative Neuroscience (founded 2015-present)
- Member, Purdue University Drug Discovery Center (2012-present)
- Member, Oncological Sciences Center, Discovery Park, Purdue University (Oct. 2009-present)
- Member, Purdue Climate Change Research Center (2011-present)
- Member, Global Women's Health Institute, Purdue University (2012-present)
- Member, Ecological Sciences and Engineering Interdisciplinary Graduate Program (2008-present)

Grant Review Committees

International grant review committees

- March 25, 2021: Genome Quebec, Genomics Integration Program, Gran Review Panel, member
- Sept. 1, 2020: Genome Canada, 2020 LSARP Genomic Solutions for Natural Resources and the Environment Grant Review Panel, member
- June 22, 2020: European Science Foundation, panel member for Projects of the Research Foundation Flanders
- January 17, 2020: Natural Sciences and Engineering Research Council of Canada (NSERC)
- October 1, 2019: Fund for Scientific Research-FNRS Review Panel (Belgium)
- May 6, 2019: French Nat'l Research Agency, Contaminants, Ecosystems, & Health Panel
- May 21, 2018: French National Research Agency, Contaminants, Ecosystems, and Health Panel
- July 31, 2017: Czech Science Foundation Grant Review Panel
- August 22, 2016: Parkinson's UK Grant Review Panel
- May 2, 2016: French National Research Agency, DisruptScreen Panel
- March 28, 2013: Scientific Research Review Panel for ZonMw-Veni Innovational Research Incentive Scheme, the Netherlands Organization for Health Research and Development
- March 2008: External Reviewer for the Competitive Earmarked Research Grant, 2008-2009: The Chinese University of Hong Kong

National grant review committees

- Feb. 17-18, 2022: NIH, Neurotoxicology and Alcohol (NAL) Study Section, ad hoc member
- Oct. 4-6, 2021: NIH/NIEHS Environmental Health Sciences Core Centers (P30) Panel
- July 14, 2021: NIH/NIEHS Pathway to Independence Award (K99/R00) Grant Review Panel
- July 15, 2021: NIH/NIEHS Scientific Peer Review of Career Awards (Ks) Panel
- March 31, 2021: NIH/NIEHS Virtual Consortium for Translational/Transdisciplinary Environmental Research ViCTER) R01 Grant Review Panel, member
- March 29, 2021: NIH/NCI, Pre-Clinical Toxicological Evaluations of Investigational Drugs for the Treatment of Cancer and other Diseases, Grant Review Panel, member
- March 26, 2021: DoD CDMRP, Military Operational Medicine Research Program, Contamination Exposure Monitoring Grant Review Panel, member
- March 24, 2021: US Army Corps of Engineers, Engineer Research and Development Center's Grant Review Panel
- Nov. 19, 2020: NIH/NIEHS Environmental Health Training Grants (T32) Review Panel
- Nov. 12, 2020: NIH/NIEHS Revolutionizing Innovative, Visionary Environmental Health Research (RIVER) Award (R35) Review Committee, member
- October 21-23, 2020: NIH/NIEHS Environmental Health Sciences Core Centers P30

- July 17, 2020: NIH Summer Research Experience Programs (R25) Review Committee, member
- July 2, 2020: Department of Defense (DoD) Congressionally Directed Medical Research Programs (CDMRP) Peer Reviewed Medical Research (PRMRP) Discovery Metal Toxicity Award Panel (DIS-MT)
- March 25-26, 2020: NIH/NIEHS Virtual Consortium for Translational/Transdisciplinary Environmental Research (ViCTER) R01 Grant Review Panel
- March 10-12, 2020: NIH/NIMHD Specialized Centers of Excellence on Environmental Health Disparities Research (P50) Special Emphasis Panel
- March 4, 2020: National Science Foundation, Excellence in Research Grant Review Panel
- October 31, 2019: NIH/NIEHS Grant Review Panel, T32: Training Grants in EHS (standing member)
- August 16-17, 2019: NIH/NIEHS Grant Review Panel, P30: Environmental Health Sciences Core Centers (standing member)
- February 25, 2019: NIH Grant Review Panel, R15 DKUS, Toxicology and Digestive, Kidney and Urological Systems AREA Review
- December 5, 2018: NIH Grant Review Panel, R15 DKUS, Toxicology and Digestive, Kidney and Urological Systems AREA Review
- November 1, 2018: NIH/NIEHS Grant Review Panel, T32: Training Grants in EHS (standing member)
- August 21-22, 2018: NIH/NIEHS Grant Review Panel, P30: Environmental Health Sciences Core Centers (standing member)
- June 28-29, 2018: NIH SIEE Study Section (ad hoc)
- November 14, 2017: NIH/NIEHS Grant Review Panel, T32: Training Grants in EHS (standing member)
- October 16, 2017: National Science Foundation, CAREER Grant Review Panel
- August 25-26, 2017: NIH/NIEHS Grant Review Panel, P30: Environmental Health Sciences Core Centers (standing member)
- August 12-13, 2016: NIH/NIEHS Grant Review Panel, P30: Environmental Health Sciences Core Centers (standing member)
- August 14-15, 2014: NIH/NIEHS Grant Review Panel, P30: Environmental Health Sciences Core Centers (ad hoc)
- April 9, 2014: CDC Special Emphasis Grant Review Panel, Pilot Interventions to Promote the Health of People with Blood Disorders
- April 2, 2014: NIH/NIEHS Grant Review Panel, Research Training through Environmental Health Science Conference and Meetings (R13)
- March 18-19, 2014: NIH/NIEHS Grant Review Panel, Neurodegenerative Disorders
- Dec. 1, 2013: University of Wisconsin-Milwaukee, NIEHS Children's Environmental Health Sciences Core Center Pilot Project Review Committee
- April 27, 2011: Special Emphasis Grant Review Panel on Family History and Diamond Blackfan Anemia (U01) for the CDC
- June 7-9, 2011: Special Emphasis Grant Review Panel on Health Affordable Care Act (ACA): Childhood Obesity Research Demonstration (CORD) (DP11-007) for the CDC
- May 2, 2011: Alzheimer's Association 2011 Grant Review Panel
- May 24, 2010: Special Emphasis Panel for NIH Director's Opportunity for Research in Five Thematic Areas (RC4) for Genomics and Genetics in Health and Disease
- May 25, 2010: Special Emphasis Panel for National Center for Chronic Disease Prevention and Health Promotion for the CDC for "Knowledge Synthesis Center for Evaluating Genomic Application in Practice and Prevention"
- August 18, 2010: NIH/NIEHS Special Emphasis Panel for Gulf Oil Spill R21 time-sensitive grant applications
- February 2009: Alzheimer's Association Grant Review Panel
- August 25-27, 2009: NIH/NIEHS P30 Core Centers Grant Review Panel (ad hoc)
- July 14, 2008: CDC Review Panel for Public Health Research Dissertation Awards (R36)

Regional and local grant review committees

- Jan. 6, 2022: Purdue Center for Cancer Research TSD Collaborative Idea Projects Grant Review
- Dec. 16, 2021: Purdue Research Instrumentation Grant Review Panel

- May 7, 2021: Purdue Center for Cancer Research Pilot Grant Awards Review Panel
- February 14, 2020: Indiana Brain and Spinal Cord Injury Research Fund (ISCBIR)
- December 13, 2017: Indiana Water Resource Research Center Small Grants Review Panel
- November 12, 2017: Purdue Ismail Travel Grants Review Panel
- March 10, 2017: CPIP-DURI Graduate Student Proposals, Purdue University
- November 11, 2016: Purdue EVPRP Internal Grant Initiative Targeting New NIH Grants
- April 4, 2016: Purdue C4E reviewer for Summer Undergraduate Research Applications
- Feb. 18, 2013: CPIP-DURI Graduate Student Proposals, Purdue University
- Feb. 26, 2013: Purdue Center for Cancer Research Innovative Cancer Research Pilot Project, Challenge Award, and Graduate Travel Awards Review Panel
- Feb. 7, 2012: CPIP-DURI Graduate Student Proposals, Purdue University
- November 29, 2012: Indiana CTSI Pilot Funding for Research Use of Core Facilities Grant Review Committee
- Dec. 2007: Collaboration in Biomedical Research Pilot Grant Program-Round 4 (CBR4)

Academic Program Review Committees

- November 3-4, 2016: Academic External Program Review for the College of Health Sciences, University of Kentucky

National Advisory Panels

- November 2021-October 2022: National Academies of Sciences, Engineering, and Medicine Committee to Review the DODs Revised Approach to Deriving an Occupational Exposure Level for Trichloroethylene (TCE)
- July 2018-July 2019: National Academy of Sciences, Committee to Develop a Scoping Plan to Assess the Hazards of Organohalogen Flame Retardants within the Board of Environmental Studies and Toxicology, Member
- May 2015-April 2019: Society of Toxicology Scientific Program Committee, Member
- June 25-28, 2013: US EPA Federal Insecticide, Fungicide, and Rodenticide Act Scientific Advisory Panel (FIFRA SAP) to consider and review a set of Scientific Issues Related to Tier 2 testing of endocrine disrupting chemicals, Arlington, VA, Member

Leadership and participation in conferences and other activities

- Chair, Toxicology Session, Zebrafish Disease Models Conference (ZDM14), virtual, October 2021.
- Chair, Toxicology Session, International Zebrafish Conference (IZFC), virtual, June 2021.
- Symposium Chair, Leveraging Zebrafish to Support Global Toxicity Challenges, IUTOX, Honolulu, Hawaii. July 2019.
- Chair, Platform Session on “SPC Highlights Emerging Scientists: Mechanistic Toxicology to Decode Injury and Repair”. 58th Annual Meeting of the Society of Toxicology, Baltimore, MD. March 2019.
- Hosted and planned “PFAS: Ubiquitous Environmental Contamination and the Risks to Human Health” 2-day event at Purdue University, West Lafayette, IN. (including research talk by Dr. Jamie DeWitt, ECU, screening of “The Devil We Know”, and expert panel with Drs. DeWitt, Linda Lee (AGRY), and Jason Hoverman (FNR).
- Society of Toxicology Scientific Program Committee (2015-2019)
- Chair, Workshop on “Defining Domains of Applicability for Zebrafish within Toxicology: A Retrospective and Prospective Workshop” at the 57th Annual Meeting of the Society of Toxicology, San Antonio, TX, March 2018.
- Chair, Platform Session on “Mechanistic and Translational Toxicology: SPC Highlights Emerging Scientists” at the 57th Annual Meeting of the Society of Toxicology, San Antonio, TX, March 2018.
- Host and organizer for the OV-SOT Regional Chapter Meeting at Purdue University, West Lafayette, IN, Dec. 1, 2017.
- Organizing Committee, Center on Aging and the Life Course Symposium on Health Across Generation, Sept. 15, 2017.

- Chair, Platform Session on "Multi-Omic Connections in Chemical Toxicity" at the 56th Annual Meeting of the Society of Toxicology, Baltimore, MD, March 13, 2017.
- Chair, Symposium titled "Using Multi- and Transgenerational Effects of Environmental Exposures in Diverse Animal Models for Assessment of Human Health Risks" at the 55th Annual Meeting of the Society of Toxicology and ToxExpo, New Orleans, LA. March 2016.
- Organizer (led all student judging activities): OV-SOT Regional Chapter Meeting, Eli Lilly-Indianapolis, October 2016.
- Organizer (led all judging activities): OV-SOT Regional Chapter Meeting, Northern Kentucky University, November 2015.
- Organizer: Center for the Environment Engaging Communities Workshop, Purdue University, West Lafayette, IN. 2015.
- Organizer: A TEDx PurdueU Breakout Session: Confronting our Environmental Health Risks, Purdue University, November 2014.
- Organizer (led all judging activities): OV-SOT Regional Chapter Meeting, Dayton, OH, September 2014.
- Chair, Symposium on the "Application of Systems Biology to Identify Molecular Mechanisms and Biomarkers of Lead Neurotoxicity: Implications in the Developmental Origin of Alzheimer's Disease" at the 52nd Annual Meeting of the Society of Toxicology and ToxExpo, San Antonio, TX, March 10-14, 2013.
- Organizer (led all judging activities): OV-SOT Regional Chapter Meeting, Louisville, KY, 2013.

Offices held in State, National, or International Societies

- Ohio Valley Regional Chapter of the Society of Toxicology
    - Past-President (2018-2019)
    - President (2017-2018)
    - Vice-President (2016-2017)
    - Vice-President Elect (2015-2016)
    - Councilor (2012-2015)
- Metals Specialty Section of the Society of Toxicology
    - Past-President (2021-2022)
    - President (2020-2021)
    - Vice-President (2019-2020)
    - Vice-President Elect (2018-2019)
    - Councilor (2013-2015)
- International Society for Trace Element Research in Humans (ISTERH)
    - Vice-President Elect (2022-present)

International Program Participation

- **Collaborations with Indian Institutions:** Through participation in the Overseas Visiting Doctoral Student Program between Purdue University and INDO-SERB, research collaborations have been established with faculty at the Sathyabama Institute of Science and Technology (Chennai) and the Toxicology Division of Sree Chitra Tirunal Institute for Medical Sciences and Technology (Trivandrum, Kerala). Three PhD students have been co-mentored to date through this program by Dr. Freeman and the student's mentor at their home institution.
- **Peru:** Starting in 2018, Dr. Freeman joined a group of Purdue faculty in establishing research collaborations with several universities in Peru.
- **Dublin Institute of Technology** (now known as Technological University of Dublin): In fall 2014, Dr. Freeman traveled with colleagues from Purdue University to establish a semester exchange program with Dublin Institute of Technology.
- **Polytechnic of Namibia:** In the summer of 2012, Dr. Freeman traveled to the Polytechnic of Namibia in Windhoek, Namibia with the Head of the School of Health Sciences for an initial visit to assess the potential to establish an international program with this university.

Membership and Leadership Roles on National, University, College, and School Committees
(Leadership roles are underlined)
National committees

- Specialty Section Collaboration and Communication Group (Member, 2019-21)
- Society to Toxicology Regional Chapter Collaboration and Communication Committee (RC4) member (2017-2018)

University committees

- Executive Board Member, Center for the Environment (2012-present; currently leading the Chemical Exposures Group and serving as Interim Director)
- Member, Purdue University Senate (HSCI Representative) (2020-present)
- Member, Educational Policy Committee, Purdue University Senate (2020-present)
- Member, Purdue University Undergraduate Curriculum Committee (Senate EPC Representative) (2020-2021)
- Faculty Governance Committee, Purdue Honors College (2019-2021)
- Member, Center on Aging and the Lifecourse (CALC) Faculty Steering Committee (Fall 2019-2021)
- Member, Purdue University Dispute Resolution Policy Committee (2020-2022)
- Member, 150th Festival Committee, Purdue University (2018-2019)
- C4E Director Search Committee (2018)
- Advisory Board Member, Genomics Core, Purdue University (2015-2019)
- Faculty Advisory Board, Cancer Prevention Internship Program (CPIP), (2015-2019)
- Faculty Leadership Team for the Certificate in Environmental and Sustainability Studies (2017-present)
- Member, Purdue Honors College Udall Scholarship Review Committee (2014-present)
- Member, Purdue Animal Care and Use Committee (PACUC) Laboratory Animal Facility Advisory Committee (2013-2018)
- Member, Most Outstanding Interdisciplinary Project Award Review Panel (Spring 2013)
- Recruitment Chair, Molecular Signaling and Cancer Biology Training Group, PULSe (2012-2015)
- Executive Board Member, Purdue Water Community (2012-2016; PWC folded into C4E)
- Member, Epigenetics Faculty Search Committee, Department of Horticulture and Landscape Architecture, College of Agriculture (2012-2013)
- Member, Purdue University Honors College Task Force (2011-2012)
- Member, PULSe Outstanding Graduate Student Researcher Award Review Panel (2011,2014)
- Team Leader, Purdue Water Community, Research Infrastructure Team (2010)

College committees

- Faculty Advisory Board, College of Health and Human Sciences, HHS Undergraduate REACH Scholars Program (2019-2021; program ended in 2021)
- Member, College of Health and Human Sciences Honors Programs Coordinating Committee (2013-2021)
- Member, College of Health and Human Sciences Research Advisory Committee (2020-2021)
- Member, College of Health and Human Sciences Undergraduate Educational Policy and Curriculum Committee (2013-2019)
- Member, HHS Strategic Planning Work Group #3, (2019-2020)
- Member, College of Health and Human Sciences Global Health Committee (2013)
- Chair, College of Pharmacy, Nursing, and Health Sciences, Grievance Committee (2009-2010)
- Member, College of Pharmacy, Nursing, and Health Sciences, Grade Appeals Committee (2009-2010)

School committees

- Member, Computational Toxicology Faculty Search Committee (2021-2022)
- Director, School of Health Sciences Undergraduate Honors Program (2012-2021)
- Chair, HSCI Undergraduate Curriculum Committee (2013-2019; Member 2019-present)
- Member, Health Physics Faculty Search Committee (2020-2021)
- Member, Dual Career Hire Faculty Search Committee (2020-2021)

- Leader, Group 3 for HSCI Academic Review (2019-2020)
- Member, HSCI Awards Committee (2019-2020)
- Member, Computational Toxicology Faculty Search Committee (2019-2020)
- Member, Committee on International Exchange Program, School of Health Sciences (2012-present)
- Member, HSCI Head Search Committee (2017-2018)
- Member, HSCI Lead Academic Advisor Search Committee (2017)
- Member, HSCI OHS-HP Faculty Search (2015)
- Member, HSCI Secretary Search (2015)
- Member, HSCI- EEE Faculty Search (2014-2015)
- Member, HSCI OET Faculty Search (2014-2015)
- Member, HSCI Academic Advisor and Director of Medical Laboratory Sciences Program Search Committee (2013)
- Member, Occupational Health Faculty Search Committee, School of Health Sciences (2012-13)
- Member, Environmental Epidemiology Faculty Search Committee, School of Health Sciences (2012-13)
- Member, School of Health Sciences Landolt Teaching Award Committee (Spring 2012)
- Chair, School of Health Sciences Honors Program Task Force (2011-2012)
- Faculty Advisor, School of Health Sciences Graduate Student Organization (2011-2013)
- Member, School of Health Sciences, Graduate Committee on Curricula, Admissions, and Research Policy (2011-2012)
- Member, Toxicology Faculty Search Committee, School of Health Sciences (2011)
- Team Leader, DHS CFATS (Department of Homeland Security Chemical Inventory, School of Health Sciences (2011)
- Member, Committee for Accreditation Board for Engineering and Technology (ABET) reaccreditation for of the School's undergraduate and graduate programs in Occupational and Environmental Health (2010-2011)
- Faculty Advisor, School of Health Sciences Student Council (2009-2013)
- Member, School of Health Sciences, Undergraduate Curriculum Committee (2008-2011 [Secretary of committee: Feb. 2009-Aug. 2010]; 2012-2013)
- Member, School of Health Sciences, Safety Committee (2008-2011)

Other Publications and Statements

- Gaberell, L., **J.L. Freeman**, et al. 2020. Atrazine Toxicity Statement to the World Health Organization.
- News article in *Environmental Health Perspectives* (Dec. 2020): https://ehp.niehs.nih.gov/doi/10.1289/EHP8665
- Interview with ***National Geographic*** on atrazine toxicity (Sept. 2020): https://www.nationalgeographic.com/animals/article/wallaby-sexual-development-impaired-by-atrazine-herbicide?_ga=2.20674488.1015446202.1614271451-1932512799.1563808953
- **Freeman, J.L.** and C. Lee. 2006. Your Genes or Mine, How Different Are We? Project Syndicate: An Association of Newspapers around the World. http://www.project-syndicate.org/commentary/freeman1.

Undergraduate Student Snapshots in JPUR (Journal of Purdue Undergraduate Research)

1. Kaucic, C. 2021. The effects of environmental copper exposure on the behavior and morphology of developing zebrafish. **Journal of Purdue Undergraduate Research.** 11:8-9. (research snapshot)
2. King, H. 2020. Comparative developmental toxicity of perfluorooctanesulfonic acid (PFOS) and its alternative perfluorobutanesulfonic acid (PFBS). **Journal of Purdue Undergraduate Research.** 10:31. (research snapshot)
3. Bhuiya, N. 2019. Binding interactions between graphene nanoplatelets and the herbicides atrazine and glyphosate. **Journal of Purdue Undergraduate Research**. 9:2-8. (Full research article)
4. Brulinski, L.E. 2019. Toxicity interaction of the two most common agricultural herbicides: atrazine and glyphosate. **Journal of Purdue Undergraduate Research**. 9:23. (research snapshot)
5. Turner, L.W. 2019. Defining the mixture toxicity of the herbicides glyphosate and dicamba. **Journal of Purdue Undergraduate Research.** 9:30. (research snapshot)

6. Taslakjian, B. 2018. Synergistic toxicity of the heavy metal lead and radiation. **Journal of Purdue Undergraduate Research.** 8:17 (research snapshot)
7. Reidenbach, L. 2018. Gene expression consistent during zebrafish embryonic development for *rnf14* and *ttc3* with expression altered with atrazine exposure at 60 hpf for *ttc3*. **Journal of Purdue Undergraduate Research.** 8:16 (research snapshot)
8. Thanki, D. 2017. Water contaminated with the herbicide atrazine alters expression of cancer associated tumor protein D52-like 1 (*tpd52l1*) gene using the zebrafish model. **Journal of Purdue Undergraduate Research.** 7:57-64. (Full research article)
9. Weger, K. 2017. The effect of arsenic concentration of water on rice samples. **Journal of Purdue Undergraduate Research.** 7:15 (research snapshot)
10. Kaul, I. 2015. A larval exposure to ionizing radiation results in an increase in brain weight in adult female zebrafish, but no immediate or latent expression changes in the glutamate receptor genes. Journal of Purdue Undergraduate Research. 5:36. (research snapshot)
11. Schlotman, K.E. 2014. An epigenetic look at atrazine toxicity: An analysis of microRNA-126 expression in developing zebrafish exposed to the herbicide atrazine. **Journal of Purdue Undergraduate Research**. 4:48-57. (Full research article)

Abstracts Published in Conference or Symposia Proceedings

1. Sridhar, V.V., L.W. Turner, L.S. Reidenbach, K.M. Thompson, K.A. Horzmann, and **J.L. Freeman**. 2022. Developmental toxicity testing of acidic environmental chemical pollutants in aquatic systems: Are reported findings based on direct chemical toxicity or indirect changes in pH? 61st Meeting of the Society of Toxicology and ToxExpo. San Diego, CA. Abstract #3882.
2. Stradtman, S.C. and **J.L. Freeman**. 2022. Effects of Embryonic Atrazine Exposure on Zebrafish Neuroendocrine Molecular Targets. 61st Meeting of the Society of Toxicology and ToxExpo. San Diego, CA. Abstract #4322.
3. Wasel, O., H. King, Y.J. Choi, L.S. Lee, and **J.L. Freeman**. 2022. Developmental neurotoxicity of GenX and PFBS using Zebrafish Model. 61st Meeting of the Society of Toxicology and ToxExpo. San Diego, CA. Abstract #3073.
4. Kiper, K.G., W. Zheng, and **J.L. Freeman.** 2022. Developmental Arsenic (As) and Lead (Pb) Exposure in Zebrafish Results in Neurotoxicity. 61st Meeting of the Society of Toxicology and ToxExpo. San Diego, CA. Abstract #3762.
5. Suku, A.S., P.V. Mohanan, and **J.L. Freeman**. 2021. Neurotoxic potential of titanium dioxide nanotubes in the zebrafish model system. Ohio Valley-Society of Toxicology Annual Meeting (Virtual). page 12.
6. Wasel, O., H. King, K. Thompson, and **J.L. Freeman**. 2021. Comparative Toxicity Assessment of Perfluoroalkyl Substances (PFAS) Using Zebrafish Model. Ohio Valley-Society of Toxicology Annual Meeting (Virtual). page 12.
7. Kiper, K.G., W. Zheng, and **J.L. Freeman.** 2021. Using the zebrafish to elucidate developmental neurotoxicity after a binary arsenic and lead mixture exposure. Ohio Valley-Society of Toxicology Annual Meeting (Virtual). page 15.
8. Akoro, I., S. Stradtman, J.Ahkin Chin Tai, and **J.L. Freeman**. 2021. Parentally Exposed Zebrafish Larvae Have Altered Craniofacial Measurements. Ohio Valley-Society of Toxicology Annual Meeting (Virtual). page 17.
9. Sridhar, V.V., L.W. Turner, L.S. Reidenbach, K.M. Thompson, K.A. Horzmann, and **J.L. Freeman**. 2021. Developmental toxicity testing of acidic environmental chemical pollutants in aquatic systems: Are reported findings based on direct chemical toxicity or indirect changes in pH? Ohio Valley-Society of Toxicology Annual Meeting (Virtual). page 21.
10. Stradtman, S.C. and **J.L. Freeman**. 2021. Analysis of Neuroendocrine Molecular Targets Following an Embryonic Atrazine Exposure in Zebrafish. Ohio Valley-Society of Toxicology Annual Meeting (Virtual). page 22.
11. Wasel, O., H. King, K. Thompson, and **J.L. Freeman**. 2021. Comparative Toxicity Assessment of Legacy and Emerging Perfluoroalkyl Substances Using Zebrafish Model. 14th Zebrafish Disease Models Conference (Virtual).
12. Kiper, K.G., E. Wells, W. Zheng, and **J.L. Freeman.** 2021. Using the zebrafish to elucidate the developmental toxicity of a binary mixture of arsenic and lead. 14th Zebrafish Disease Models Conference (Virtual).

13. Akoro, I., S. Stradtman, J.Ahkin Chin Tai, and **J.L. Freeman**. 2021. Evaluating Atrazine Neuroendocrine Toxicity on the Hypothalamus. Purdue Undergraduate Research Conference. West Lafayette, IN. Abstract #135.
14. Chen, J., K.G. Kiper, and **J.L. Freeman.** 2021. Developmental behavioral alterations following lead (Pb) exposure in the zebrafish model system. Purdue Undergraduate Research Conference. West Lafayette, IN. Abstract #142.
15. Kaucic, C.N., K. Kiper, and **J.L. Freeman**. 2021. The effects of environmental copper exposure on the behavior and morphology of developing zebrafish. Purdue Undergraduate Research Conference. West Lafayette, IN. Abstract #157.
16. Kotapalli, Anusha, J. Ahkin Chin Tai, K. Kiper, and **J.L. Freeman**. 2021. Behavioral Alterations following Exposure to a Lead and Atrazine Mixture during Early Development in the Zebrafish Model System. Purdue Undergraduate Research Conference. West Lafayette, IN. Abstract #159.
17. Kotapalli, Aditya, O. Wasel, and **J.L. Freeman**. 2021. Neurotoxicity of Per- and Polyfluoroalkyl Substances (PFAS): Examination of recent studies in humans and animals. Purdue Undergraduate Research Conference. West Lafayette, IN. Abstract #160.
18. Wasel, O., H. King, K. Thompson, and **J.L. Freeman**. 2021. Developmental toxicity of legacy and emerging perfluoroalkyl substances using zebrafish model. 16th International Zebrafish Conference (Virtual). 1046.
19. Kiper, K.G., E. Wells, W. Zheng, and **J.L. Freeman.** 2021. Developmental toxicity characterization of a binary mixture of arsenic and lead using the zebrafish. 16th International Zebrafish Conference (Virtual). 1048.
20. Ahkin Chin Tai, J, K.A. Horzmann, and **J.L. Freeman**. 2021. Metabolism, morphological effects, and behavioral alterations following a developmental atrazine exposure in zebrafish. 60th Meeting of the Society of Toxicology and ToxExpo, Virtual. Abstract #2498.
21. Chen, J., K.G. Kiper, and **J.L. Freeman.** 2021. Developmental behavioral alterations following lead (Pb exposure) in the zebrafish model system. 60th Meeting of the Society of Toxicology and ToxExpo, Virtual. Abstract #2077.
22. Kiper, K.G. and **J.L. Freeman.** 2021. Characterization of Developmental Toxicity of Arsenic and Lead Mixture: Additive and Potential Synergistic Interaction of Metal Mixture. 60th Meeting of the Society of Toxicology and ToxExpo, Virtual. Abstract #2080.
23. Wasel, O., H. King, K. Thompson, and **J.L. Freeman**. 2021. DComparative Toxicity Assessment of Perfluoroalkyl Substances (PFAS) Using Zebrafish Model System. 60th Meeting of the Society of Toxicology and ToxExpo, Virtual. Abstract #2671.
24. Kotapalli, A., J. Ahkin Chin Tai, K. Kiper, and **J.L. Freeman**. 2021. Behavioral Alterations following Exposure to a Lead and Atrazine Mixture during Early Development in the Zebrafish Model System. 60th Meeting of the Society of Toxicology and ToxExpo, Virtual. Abstract #2456.
25. Ahkin Chin Tai, J, K.A. Horzmann, and **J.L. Freeman**. 2020. Metabolism, morphological effects, and behavioral alterations following a developmental atrazine exposure in zebrafish. Ohio Valley-Society of Toxicology Annual Meeting (Virtual). page 17.
26. Chen, J., K.G. Kiper, and **J.L. Freeman.** 2020. Developmental behavioral alterations following lead (Pb exposure) in the zebrafish model system. Ohio Valley-Society of Toxicology Annual Meeting (Virtual). page 23.
27. Kaucic, C.N., K.G. Kiper, and J.L. Freeman. 2020. The effects of environmental copper exposure on the behavior and morphology of developing zebrafish. Ohio Valley-Society of Toxicology Annual Meeting (Virtual). page 26.
28. Kiper, K.G. and **J.L. Freeman.** 2020. Using the zebrafish model system to study the developmental toxicity of arsenic and lead mixtures. Ohio Valley-Society of Toxicology Annual Meeting (Virtual). page 31.
29. Wasel, O., H. King, K. Thompson, and **J.L. Freeman**. 2020. Developmental Toxicity of Perfluoroalkyl Substances Using Zebrafish Model System. Ohio Valley-Society of Toxicology Annual Meeting (Virtual). page 49.
30. Kotapalli, A., J. Ahkin Chin Tai, K. Kiper, and **J.L. Freeman**. 2020. Behavioral alterations of a lead and atrazine mixture exposure during early development in the zebrafish model system. Ohio Valley-Society of Toxicology Annual Meeting (Virtual). page 52.
31. Kiper, K.G. and **J.L. Freeman.** 2020. Using the zebrafish model system to determine the toxicity interaction of arsenic and lead. 59th Meeting of the Society of Toxicology and ToxExpo. Anaheim, CA. Abstract #2636. (Meeting cancelled due to COVID-19 but abstracts published in meeting proceedings.)

32. Wasel, O., H. King, K. Thompson, and **J.L. Freeman**. 2020. Developmental toxicity of perfluoroalkyl substances using zebrafish. 59th Meeting of the Society of Toxicology and ToxExpo. Anaheim, CA. Abstract #3152. (Meeting cancelled due to COVID-19 but abstracts published in meeting proceedings.)
33. Ahkin Chin Tai, J, K.A. Horzmann, and **J.L. Freeman**. 2020. Atrazine exposure produces the same major metabolites as mammals along with adverse developmental effects. 59th Meeting of the Society of Toxicology and ToxExpo. Anaheim, CA. Abstract #1602. (Meeting cancelled due to COVID-19 but abstracts published in meeting proceedings.)
34. Kotapalli, A., J. Ahkin Chin Tai, K. Kiper, and **J.L. Freeman**. 2020. Toxicity of lead and atrazine mixture using the larval zebrafish model system. Purdue Undergraduate Research Conference. West Lafayette, IN. Abstract #156. (virtual conference for COVID-19)
35. Kaucic, C.N., K. Kiper, and **J.L. Freeman**. 2020. The behavioral and morphological effects of developmental copper exposure on zebrafish. Purdue Undergraduate Research Conference. West Lafayette, IN. Abstract #152.
36. King, H., O. Wasel, and **J.L. Freeman**. 2020. Comparative developmental toxicity of acute toxicity of perfluorooctane sulfonate (K-PFOS) and perfluorobutane sulfonate (K-PFBS). Purdue Undergraduate Research Conference. West Lafayette, IN. Abstract #155.
37. **Freeman, J.L.** 2019. Molecular and epigenetic mechanisms of the developmental origins of toxicity of the endocrine disrupting herbicide atrazine. Experimental Biology 2019 ASIP Epigenetic Regulation in Development and Disease Symposium. Orlando, FL. Abstract #40050.
38. Thompson, K.M., O. Wasel, E. Gao, S.E. Wirbisky, L.S. Lee, M.S. Sepulveda, and **J.L. Freeman**. 2019. Comparative Developmental Toxicity of Perfluorooctanoic Acid (PFOA) and Shorter Chain Perfluorocarboxylic Acids Using the Zebrafish Model System. Environmental Risk Assessment of Per-and Polyfluoroalkyl Substances (PFAS). SETAC North America Focused Topic Meeting. Durham, NC. Abstract #TP042.
39. Brulinski, L.E., J.A.C. Tai, and **J.L. Freeman.** 2019. Toxicity interaction of the two most common agricultural herbicides: atrazine and glyphosate. 58th Meeting of the Society of Toxicology and ToxExpo. Baltimore, MD. Abstract #2405.
40. Sumprer, B.A. and **J.L. Freeman.** 2019. Developmental thyrotoxicosis via dietary iodine: identifying genetic vulnerabilities using the zebrafish model. 58th Meeting of the Society of Toxicology and ToxExpo. Baltimore, MD. Abstract #2636.
41. Kiper, K.K. and **J.L. Freeman.** 2019. Using the zebrafish model system to define arsenic developmental toxicity. 58th Meeting of the Society of Toxicology and ToxExpo. Baltimore, MD. Abstract #2330.
42. Wasel, O., K.A. Horzmann, K. Thompson, and **J.L. Freeman**. 2019. Effect of cobalt and nickel mixtures on tungsten toxicity in zebrafish (*Danio rerio*). 58th Meeting of the Society of Toxicology and ToxExpo. Baltimore, MD. Abstract #2354.
43. Tai, J.A.C., K.A. Horzmann, and **J.L. Freeman**. 2019. Adverse developmental effects in progeny of zebrafish that were exposed to atrazine during embryogenesis. 58th Meeting of the Society of Toxicology and ToxExpo. Baltimore, MD. Abstract #2389.
44. Balachandran, R.C., L.M. Prince, O. Wasel, M.D. Neely, **J.L. Freeman**, and A.B. Bowman. 2019. Neurotoxicity of perfluorooctane-sulfonic acid (PFOS) and perfluorooctanic acid (PFOA) in human neuroprogenitor development. 58th Meeting of the Society of Toxicology and ToxExpo. Baltimore, MD. Abstract #3411.
45. Kotapalli, A., J.A.C. Tai, K. Kiper, and **J.L. Freeman**. 2019. Toxicity of lead and atrazine mixture using the larval zebrafish model system. Purdue Undergraduate Research Fall Conference. West Lafayette, IN. Abstract #87.
46. Brulinski, L.E., J.A.C. Tai, and **J.L. Freeman.** 2019. Toxicity interaction of the two most common agricultural herbicides: atrazine and glyphosate. Purdue Undergraduate Research Conference. West Lafayette, IN. Abstract #95a.
47. Turner, L.W., D. Thanki, L.S. Reidenbach, O. Wasel, and **J.L. Freeman**. 2019. Defining the mixture toxicity of the herbicides glyphosate and dicamba. Purdue Undergraduate Research Conference. West Lafayette, IN. Abstract #120b.
48. Kaucic, C.N., K. Kiper, and **J.L. Freeman**. 2019. The effects of environmental copper exposure on developing zebrafish. Purdue Undergraduate Research Conference. West Lafayette, IN. Abstract #100b.

49. Bhuiya, N., J. Shannahan, and **J.L. Freeman**. 2019. Binding interactions between graphene nanoplatelets and the herbicides atrazine and glyphosate. Purdue Undergraduate Research Conference. West Lafayette, IN. Abstract #93a.
50. O'Connell, R., **J.L. Freeman**, and E. Wells. 2019. An investigation of environmental health risks in the Cusco Region of Peru. Purdue Undergraduate Research Conference. West Lafayette, IN. Abstract #113a.
51. Brulinski, L.E., J.K.A.C. Tai, and **J.L. Freeman**. 2018. Toxicity interaction of the two most common agricultural herbicides: atrazine and glyphosate. Ohio Valley-Society of Toxicology Annual Meeting. University of Louisville, Louisville, KY. Abstract #1, page 17.
52. Turner, L.W., L.S. Reidenbach, K.A. Horzmann, K.M. Thompson, and **J.L. Freeman**. 2018. Influence of pH in LC50 calculations of the herbicide glyphosate. Ohio Valley-Society of Toxicology Annual Meeting. University of Louisville, Louisville, KY. Abstract #6, page 22.
53. Sumprer, B.A. and **J.L. Freeman**. 2018. Developmental thyrotoxicosis via dietary iodine: identifying genetic vulnerabilities using the zebrafish model. Ohio Valley-Society of Toxicology Annual Meeting. University of Louisville, Louisville, KY. Abstract #10, page 26.
54. Kiper, K.G. and **J.L. Freeman**. 2018. Using the zebrafish model system to define arsenic developmental toxicity. Ohio Valley-Society of Toxicology Annual Meeting. University of Louisville, Louisville, KY. Abstract #17, page 33.
55. Wasel, O., K.A. Horzmann, K. Thompson, and **J.L. Freeman**. 2018. Effect of cobalt and nickel mixtures on tungsten toxicity in zebrafish (Danio rerio). Ohio Valley-Society of Toxicology Annual Meeting. University of Louisville, Louisville, KY. Abstract #23, page 39.
56. Tai, J.K.A.C., K.A. Horzmann, and **J.L. Freeman**. 2018. Adverse developmental effects in progeny of zebrafish that were exposed to atrazine during embryogenesis. Ohio Valley-Society of Toxicology Annual Meeting. University of Louisville, Louisville, KY. Abstract #32, page 43.
57. Reidenbach, L., K. Horzmann, and **J.L. Freeman**. 2018. *rnf14* and *ttc3* expression during zebrafish embryonic development with or without exposure to the agricultural herbicide atrazine. Purdue Undergraduate Research Conference. West Lafayette, IN. Abstract #4050.
58. Tasklakjian, B., K. Horzmann, K. Thompson, L.H. Nie, and **J.L. Freeman.** 2018. Synergistic toxicity of the heavy metal lead and radiation. Purdue Undergraduate Research Conference. West Lafayette, IN. Abstract #10.
59. Turner, L.W., L.S. Reidenbach, K.A. Horzmann, K.M. Thompson, and **J.L. Freeman**. 2018. Influence of pH in LC50 calculations of the herbicide glyphosate. Purdue Undergraduate Research Conference. West Lafayette, IN. Abstract #4397.
60. Bhuiya, N., J. Shannahan, and **J.L. Freeman.** 2018. Binding interactions between the herbicide atrazine and functionalized or nonfunctionalized graphene nanoplatelets, Purdue Undergraduate Research Conference. West Lafayette, IN. Abstract #4051.
61. Thompson, K.M., S.E. Wirbisky, L.S. Lee, M.S. Sepulveda, and **J.L. Freeman**. 2018. Comparative transcriptomic analysis of an embryonic exposure to perfluorooctanoic acids in zebrafish. 57th Meeting of the Society of Toxicology and ToxExpo. San Antonio, TX. Abstract #2780.
62. Horzmann, K.A., B. Tasklakjian, and **J.L. Freeman**. 2018. Sex-specific behavioral, transcriptomic, and pathological alterations in adult zebrafish brain after developmental atrazine exposure. 57th Meeting of the Society of Toxicology and ToxExpo. San Antonio, TX. Abstract #1857.
63. Wasel, O., K.A. Horzmann, K. Thompson, and **J.L. Freeman**. 2018. Investigating the effect of cobalt and nickel on tungsten toxicity in zebrafish (Danio rerio). 57th Meeting of the Society of Toxicology and ToxExpo. San Antonio, TX. Abstract #2995.
64. Thompson, K.M., S.E. Wirbisky, L.S. Lee, M.S. Sepulveda, and **J.L. Freeman**. 2018. Comparison of transcriptomic alterations in zebrafish embryos exposed to perfluorooctanoic acid and two shorter derivatives. Health and Disease: Science, Technology, Culture and Policy Research Poster Session. Purdue University. West Lafayette, IN. Abstract #70.
65. Horzmann, K.A., B. Tasklakjian, and **J.L. Freeman**. 2018. Embryonic atrazine exposure elicits age and sex-specific alterations in zebrafish behavior, brain transcriptome, and body and brain weights. Health and Disease: Science, Technology, Culture and Policy Research Poster Session. Purdue University. West Lafayette, IN. Abstract #34.
66. Wasel, O., K.A. Horzmann, K. Thompson, and **J.L. Freeman**. 2018. Studying the influence of cobalt and nickel on tungsten toxicity in zebrafish (*Danio rerio*). Health and Disease: Science, Technology, Culture and Policy Research Poster Session. Purdue University. West Lafayette, IN. Abstract #37.

67. Thompson, K.M., S.E. Wirbisky, L.S. Lee, M.S. Sepulveda, and **J.L. Freeman**. 2017. Comparison of transcriptomic alterations in zebrafish embryos exposed to perfluorooctanoic acid and two shorter derivatives. Ohio Valley-Society of Toxicology Annual Meeting. Purdue University. West Lafayette, IN. Abstract #40, page 62.
68. Horzmann, K.A., B. Tasklakjian, and **J.L. Freeman**. 2017. Developmental atrazine exposure elicits age and sex-specific alterations in zebrafish behavior, the adult brain transcriptome, adult body and brain size. Ohio Valley-Society of Toxicology Annual Meeting. Purdue University. West Lafayette, IN. Abstract #PhdGradPlatform3, page 15.
69. Reidenbach, L., K. Horzmann, and **J.L. Freeman**. 2017. Expression of rnf14 and ttc3 are consistent during zebrafish embryonic development with expression only altered for ttc3 at 60 hpf with atrazine exposure. Ohio Valley-Society of Toxicology Annual Meeting. Purdue University. West Lafayette, IN. Abstract #11, page 33.
70. Tasklakjian, B., K. Horzmann, K. Thompson, L.H. Nie, and **J.L. Freeman.** 2017. Synergistic toxicity of the heavy metal lead and radiation. Ohio Valley-Society of Toxicology Annual Meeting. Purdue University. West Lafayette, IN. Abstract #12, page 34.
71. Turner, L.W., L.S. Reidenbach, K.A. Horzmann, K.M. Thompson, and **J.L. Freeman**. 2017. Influence of pH in LC50 calculations of the herbicide glyphosate. Ohio Valley-Society of Toxicology Annual Meeting. Purdue University. West Lafayette, IN. Abstract #13, page 35.
72. Wasel, O., K.A. Horzmann, K. Thompson, and **J.L. Freeman**. 2017. Studying the influence of cobalt and nickel on tungsten toxicity in zebrafish (*Danio rerio*). Ohio Valley-Society of Toxicology Annual Meeting. Purdue University. West Lafayette, IN. Abstract #19, page 41.
73. Godfrey, A., B. Hooser, A. Abdelmoneim, K.A. Horzmann, **J.L. Freeman**, and M.S. Sepulveda. 2017. Thyroid disrupting effects of halogenated and next generation chemicals on developing fish. Ohio Valley-Society of Toxicology Annual Meeting. Purdue University. West Lafayette, IN. Abstract #25, page 47.
74. **Freeman, J.L.** 2017. Developmental origins of toxicity of the endocrine disrupting herbicide atrazine in zebrafish. ZDM10, San Diego, CA. Abstract #28.
75. Thompson, K.M., S.E. Wirbisky, and **J.L. Freeman**. 2017. Comparison of perfluorocarboxylic acid developmental exposure alterations in morphology and behavior in zebrafish. 56th Meeting of the Society of Toxicology and ToxExpo. Baltimore, MD. Abstract #1221.
76. Horzmann, K.A. and **J.L. Freeman**. 2017. Developmental toxicity of trichloroethylene (TCE) exposure in zebrafish (Danio rerio). 56th Meeting of the Society of Toxicology and ToxExpo. Baltimore, MD. Abstract #1219.
77. Weger, K., Horzmann, K.A., and **J.L. Freeman**. 2017. Detection of atrazine in embryonic tissue of zebrafish. Undergraduate Research and Poster Symposium, Purdue University. West Lafayette, IN. Abstract #137.
78. Reidenbach, L., K. Horzmann, and **J.L. Freeman**. 2017. Expression of rnf14 and ttc3 are consistent during zebrafish embryonic development with expression only altered for ttc3 at 60 hpf with atrazine exposure. Undergraduate Research and Poster Symposium, Purdue University. West Lafayette, IN. Abstract #127.
79. Thanki, D., J. Lee, S.E. Wirbisky, and **J.L. Freeman**. 2017. An embryonic atrazine exposure alters expression of the tumor protein D52-Like 1 (TPD52L1) gene in the zebrafish model. Undergraduate Research and Poster Symposium, Purdue University. West Lafayette, IN. Abstract #258.
80. Thanki, D.H., J. Lee, S.E. Wirbisky, and **J.L. Freeman**. 2016. Water contaminated with atrazine alters expression of TPD52L1 with the zebrafish model. Ohio Valley-Society of Toxicology Annual Meeting. Indianapolis, IN. Abstract #undergraduate1.
81. Thompson, K.M., S.E. Wirbisky, and **J.L. Freeman**. 2016. Comparison of the morphological and behavioral effects of developmental exposure to three perfluorocarboxylic acids in zebrafish. Ohio Valley-Society of Toxicology Annual Meeting. Indianapolis, IN. Abstract #PhdGrad26.
82. Horzmann, K.A. and **J.L. Freeman**. 2016. Developmental toxicity after embryonic trichloroethylene (TCE) exposure in zebrafish (Danio rerio). Ohio Valley-Society of Toxicology Annual Meeting. Indianapolis, IN. Abstract #PhDGrad21.
83. Thanki, D.H., J. Lee, S.E. Wirbisky, and **J.L. Freeman**. 2016. Water contaminated with atrazine alters expression of TPD52L1 with the zebrafish model. Purdue University Center for Cancer Research, Research Day. West Lafayette, IN. Abstract #16A.

84. Thompson, K.M., S.E. Wirbisky, and **J.L. Freeman**. 2016. Developmental PFOA exposure causes morphological and transcriptomic alterations in zebrafish. Purdue University Center for Cancer Research, Research Day. West Lafayette, IN. Abstract #16B.
85. **J.L. Freeman.** 2016. Multigenerational effects of the endocrine disrupting herbicide atrazine in zebrafish. 55th Meeting of the Society of Toxicology and ToxExpo. New Orleans, LA. Abstract #2517.
86. Wirbisky, S.E., M.S. Sepulveda, G.J. Weber, A.S. Jannasch, and **J.L. Freeman.** 2016. Embryonic atrazine exposure elicits alterations in genes associated with neuroendocrine function in adult male zebrafish. 55th Meeting of the Society of Toxicology and ToxExpo. New Orleans, LA. Abstract #1792.
87. Lee, J. and **J.L. Freeman.** 2016. Embryonic exposure to 100 µg/L lead results in expression changes in genes associated with nervous system development and function in the aged adult zebrafish brain with sex-specific alteration in p38 MAPK. 55th Meeting of the Society of Toxicology and ToxExpo. New Orleans, LA. Abstract #1588.
88. Horzmann, K.A., A.J. Whelton, and **J.L. Freeman.** 2016. Acute developmental toxicity of crude MCHM in zebrafish (Danio rerio) and observed neurobehavioral alterations. 55th Meeting of the Society of Toxicology and ToxExpo. New Orleans, LA. Abstract #1793.
89. Thompson, K.M., S.E. Wirbisky, L.S. Lee, M.S. Sepulveda, and **J.L. Freeman.** 2016. Developmental PFOA exposure causes morphological and transcriptomic alterations in zebrafish. 55th Meeting of the Society of Toxicology and ToxExpo. New Orleans, LA. Abstract #3683.
90. Caballero-Gallardo, K., S.E. Wirbisky, J. Olivero-Verbel, and **J.L. Freeman.** 2016. Effects of aqueous coal dust extract on developmental toxicity and gene expression profiling of zebrafish (Danio rerio). 55th Meeting of the Society of Toxicology and ToxExpo. New Orleans, LA. Abstract #2946.
91. Weger, K., S.E. Wirbisky, and **J.L. Freeman**. 2016. Developing a LC/MS method for measuring atrazine in zebrafish embryos. Undergraduate Research and Poster Symposium, Purdue University. West Lafayette, IN. Abstract #101.
92. Reidenbach, L., K. Horzmann, and **J.L. Freeman**. 2016. Expression of rnf14 is consistent during embryonic development of zebrafish with expression only changed at 72 hpf by atrazine exposure. Undergraduate Research and Poster Symposium, Purdue University. West Lafayette, IN. Abstract #108.
93. Baron, A., K. Horzmann, and **J.L. Freeman**. 2016. Assessment of trichloroethylene developmental toxicity in the zebrafish model system. Undergraduate Research and Poster Symposium, Purdue University. West Lafayette, IN. Abstract #127.
94. Thanki, D., J. Lee, S.E. Wirbisky, and **J.L. Freeman**. 2016. Water contaminated with atrazine alters expression of TPD52L1 with the zebrafish model. Undergraduate Research and Poster Symposium, Purdue University. West Lafayette, IN. Abstract #234.
95. Wirbisky, S.E., G.J. Weber, M.S. Sepulveda, C. Xiao, J.R. Cannon and **J.L. Freeman**. 2015. Serotonin and transcriptome alterations in brain tissue of adult female zebrafish exposed to atrazine during embryogenesis. 54th Annual Meeting of the Society of Toxicology and ToxExpo. San Diego, CA. Abstract #1700.
96. Lee, J., S.M. Peterson, and **J.L. Freeman**. 2015. Characterization of the Alzheimer's disease risk gene *SORL1* in the zebrafish: assessment of expression differences by sex, age, and influences of an embryonic lead (Pb) exposure. 54th Annual Meeting of the Society of Toxicology and ToxExpo. San Diego, CA. Abstract #1501.
97. Qualizza, B., S.E. Wirbisky, and **J.L. Freeman.** 2015. Consistent and unaltered expression of glyoxylase 1 (*GLO1*) during zebrafish embryogenesis and following exposure to the agricultural herbicide atrazine. 54th Annual Meeting of the Society of Toxicology and ToxExpo. San Diego, CA. Abstract #2667.
98. Winchester, A., S.E. Wirbisky, and **J.L. Freeman**. 2015. *SIK2* expression is consistent throughout zebrafish embryonic development and is not altered by exposure to atrazine through 60 hours post fertilization. 54th Annual Meeting of the Society of Toxicology and ToxExpo. San Diego, CA. Abstract #2671.
99. Thompson, K.M., Y. Gao, C.T. Mahaptra, M.M. Sepúlveda, and **J.L. Freeman**. 2015. Comparative survival of zebrafish whole embryos to embryonic fibroblasts exposed to PFOA and its derivatives. 54th Annual Meeting of the Society of Toxicology and ToxExpo. San Diego, CA. Abstract #1764.
100. Lee, J. and **J.L. Freeman.** 2015. Embryonic exposure to 100 µg/L lead results in expression changes in genes associated with nervous system development and function in the aged adult zebrafish brain with sex-specific alteration in p38 MAPK. Ohio Valley-Society of Toxicology Annual Meeting. Northern Kentucky University, Highland Heights, KY. Abstract #37.

101. Horzmann, K.A., A.J. Whelton, and **J.L. Freeman**. 2015. Zebrafish (*Danio rerio*) with developmental exposure to crude MCHM: acute toxicity and observed neurobehavioral alterations. Northern Kentucky University, Highland Heights, KY. Abstract #34.
102. Thompson, K.M., S.E. Wirbisky, and **J.L. Freeman.** 2015. Developmental PFOA exposure causes morphological and transcriptomic alterations in zebrafish. Northern Kentucky University, Highland Heights, KY. Abstract #44.
103. Wirbisky, S.E., M.S. Sepulveda, G.J. Weber, A.S. Jannasch, and **J.L. Freeman.** 2015. Genetic alterations associated with neuroendocrine function elicited by an embryonic atrazine exposure in adult male zebrafish. Northern Kentucky University, Highland Heights, KY. Abstract #48.
104. Lee, J., S.M. Peterson, and **J.L. Freeman**. 2015. Characterization of the Alzheimer's disease risk gene *SORL1* in the zebrafish: assessment of expression differences by sex, age, and influences of an embryonic lead (Pb) exposure. Purdue University Health and Disease: Science, Culture, and Policy Research Poster Session. West Lafayette, IN. Abstract #1.
105. Thompson, K.M., Y. Gao, C.T. Mahaptra, M.M. Sepúlveda, and **J.L. Freeman**. 2015. Comparative survival of zebrafish whole embryos to embryonic fibroblasts exposed to PFOA and its derivatives. Purdue University Health and Disease: Science, Culture, and Policy Research Poster Session. West Lafayette, IN. Abstract #4.
106. Thanki, D.H., S.E. Wirbisky, and **J.L. Freeman**. 2015. *TPD521L1* expression during development and time point-specific alterations of an atrazine exposure with the zebrafish model. Undergraduate Research and Poster Symposium, Purdue University. West Lafayette, IN. Abstract #192.
107. Qualizza, B., S.E. Wirbisky, and **J.L. Freeman**. 2015. Consistent and unaltered expression of glyoxylase 1 (*GLO1*) during zebrafish embryogenesis and following exposure to the agricultural herbicide atrazine. Undergraduate Research and Poster Symposium, Purdue University. West Lafayette, IN. Abstract #93.
108. Kaul, I., S.E. Wirbisky, L. Nie, and **J.L. Freeman**. 2015. A larval exposure to ionizing radiation results in an increase in brain weight in adult female zebrafish, but no immediate or latent expression changes in the glutamate receptor genes. Undergraduate Research and Poster Symposium, Purdue University. West Lafayette, IN. Abstract #84.
109. Winchester, A., S.E. Wirbisky, and **J.L. Freeman**. 2015. *SIK2* expression is consistent throughout zebrafish embryonic development and is not altered by exposure to atrazine through 60 hours post fertilization. Undergraduate Research and Poster Symposium, Purdue University. West Lafayette, IN. Abstract #100.
110. Weger, K., S.E. Wirbisky, S. Panagrahi, and **J.L. Freeman**. 2015. The effect of arsenic concentration of water on rice samples. Undergraduate Research and Poster Symposium, Purdue University. West Lafayette, IN. Abstract #99.
111. Wirbisky, S.E., G.J. Weber, J.W. Lee, J.R. Cannon and **J.L. Freeman**. 2014. Lead induced alterations within the excitatory GABAergic pathway during early embryonic zebrafish development. Purdue University Chapter: The Society of Sigma Xi. Graduate Student Research Poster Competition. West Lafayette, IN. Abstract L-17.
112. Ryan, G.A. G.J. Weber, S.M. Peterson, M. Sepúlveda, and **J.L. Freeman**. 2014. Expression of glyoxylase 1 (*glo1*) throughout zebrafish embryonic development and alterations following atrazine exposure. 53rd Annual Meeting of the Society of Toxicology and ToxExpo. Phoenix, AZ. Abstract #203.
113. Wirbisky, S.E., G.J. Weber, J.W. Lee, J.R. Cannon and **J.L. Freeman**. 2014. Lead induced alterations within the excitatory GABAergic pathway during early embryonic zebrafish development. 53rd Annual Meeting of the Society of Toxicology and ToxExpo. Phoenix, AZ. Abstract #1338.
114. Lee, J., S.M. Peterson, and **J.L. Freeman**. 2014. Spatial localization and altered quantitative expression of genes associated with Alzheimer's disease in zebrafish brains during normal senescence and with a developmental lead exposure. 53rd Annual Meeting of the Society of Toxicology and ToxExpo. Phoenix, AZ. Abstract #1277.
115. Schlotman, K.E., S.E. Wirbisky, G.J. Weber, and **J.L. Freeman.** 2014. Deregulation of miRNA-126 expression in developing zebrafish exposed to the herbicide atrazine. 53rd Annual Meeting of the Society of Toxicology and ToxExpo. Phoenix, AZ. Abstract #204.
116. **Freeman, J.L.,** G.J. Weber, S.E. Wirbisky, and M. Sepúlveda. 2014. Transgenerational effects of the endocrine disrupting herbicide atrazine in zebrafish. 53rd Annual Meeting of the Society of Toxicology and ToxExpo. Phoenix, AZ. Abstract #221.

117. Wirbisky, S.E., G.J. Weber, J.W. Lee, J.R. Cannon and **J.L. Freeman**. 2014. Lead induced alterations within the excitatory GABAergic pathway during early embryonic zebrafish development. Purdue University Health and Disease: Science, Culture, and Policy Research Poster Session. West Lafayette, IN. Abstract #45.
118. Lee, J., S.M. Peterson, and **J.L. Freeman**. 2014. Spatial localization and altered quantitative expression of genes associated with Alzheimer's disease in zebrafish brains during normal senescence and with a developmental lead exposure. Purdue University Health and Disease: Science, Culture, and Policy Research Poster Session. West Lafayette, IN. Abstract #21.
119. Winchester, A., S.M. Peterson, and **J.L. Freeman**. 2014. Effects of a developmental atrazine exposure on *CYP17A1* expression. DiscoverU Undergraduate Research Poster Symposium, Purdue University. West Lafayette, IN. Abstract #26.
120. Schlotman, K.E., S.E. Wirbisky, G.J. Weber, and **J.L. Freeman.** 2014. Deregulation of miRNA-126 expression in developing zebrafish exposed to the herbicide atrazine. DiscoverU Undergraduate Research Poster Symposium, Purdue University. West Lafayette, IN. Abstract #28.
121. Ryan, G.A. G.J. Weber, S.M. Peterson, M. Sepúlveda, and **J.L. Freeman**. 2014. Expression of glyoxylase 1 (*glo1*) throughout zebrafish embryonic development and alterations following atrazine exposure. DiscoverU Undergraduate Research Poster Symposium, Purdue University. West Lafayette, IN. Abstract #29.
122. Kaul, I., S.E. Wirbisky, L. Nie, and **J.L. Freeman**. 2014. Neurogenetic effects of low-dose ionizing radiation. DiscoverU Undergraduate Research Poster Symposium, Purdue University. West Lafayette, IN. Abstract #34.
123. **Freeman, J.L.** 2014. Using the zebrafish model system and –omic tools in DNT studies. DNT4: Developmental Neurotoxicity: Advancing the Science of Developmental Neurotoxicity Testing for Better Safety Evaluation. Philadelphia, PN. Abstract #5.
124. Winchester, A., S. Wirbisky, and **J.L. Freeman**. 2014. Effects of a developmental atrazine exposure on *SIK2* expression. Ohio Valley-Society of Toxicology Annual Meeting. Wright State University, Dayton, OH. Abstract #16.
125. Kaul, I., S. Wirbisky, and **J.L. Freeman**. 2014. Neurogenetic effects of low-dose ionizing radiation. Ohio Valley-Society of Toxicology Annual Meeting. Wright State University, Dayton, OH. Abstract #11.
126. Lee, J. and **J.L. Freeman**. 2014. Age-dependent and sex-specific expression alteration of genes associated with Alzheimer's disease with or without a developmental lead exposure in zebrafish. Ohio Valley-Society of Toxicology Annual Meeting. Wright State University, Dayton, OH. Abstract #33.
127. Wirbisky, S.E., M. Sepulveda, and **J.L. Freeman**. 2014. Developmental origins of transcriptomic alterations in adult male zebrafish following embryonic atrazine exposure. Ohio Valley-Society of Toxicology Annual Meeting. Wright State University, Dayton, OH. Abstract #41.
128. Wirbisky, S.E. and **J.L. Freeman**. 2014. Developmental origins of neurotransmitter and transcriptome alterations in adult female zebrafish exposed to atrazine during embryogenesis. PPTOX IV: Environmental Stressors in Disease and Implications for Human Health. Boston, MA. Abstract #MON-34.
129. **Freeman, J.L.,** S.E. Wirbisky, G.J. Weber, and M.S. Sepulveda. 2014. A developmental origin of adult reproductive dysfunction in the zebrafish associated with an embryonic exposure to the herbicide atrazine. PPTOX IV: Environmental Stressors in Disease and Implications for Human Health. Boston, MA. Abstract #TUES-54.
130. Lee, J. and **J.L. Freeman**. 2014. Sex-specific expression patterns of genes associated with Alzheimer's disease during normal aging and with a developmental lead exposure in zebrafish. PPTOX IV: Environmental Stressors in Disease and Implications for Human Health. Boston, MA. Abstract #MON-28
131. Wirbisky, S.E., A.E. Winchester, and **J.L. Freeman**. 2014. Effects of a developmental atrazine exposure on *SIK2* expression. Purdue University Center for Cancer Research Annual Retreat. West Lafayette, IN. Abstract #49.
132. Qualizza, B.A., S.E. Wirbisky, and **J.L. Freeman**. 2014. Effects of developmental atrazine exposure on *GLO1* expression. Purdue University Center for Cancer Research Annual Retreat. West Lafayette, IN. Abstract #75.
133. Weber, G.J., M.S. Sepúlveda, S.E. Wirbisky, S.M. Peterson, and **J.L. Freeman**. 2013. Linking genetic mechanisms of atrazine embryonic toxicity with a developmental origin of adult disease and dysfunction using the zebrafish model system. Purdue Center for Cancer Research, Annual Scientific Retreat, West Lafayette, IN. Abstract #49.

134. Schlotman, K.E., S.E. Wirbisky, G.J. Weber, M.S. Sepúlveda, and **J.L. Freeman.** 2013. MicroRNA deregulation in developing zebrafish exposed to the herbicide atrazine. Purdue Center for Cancer Research, Annual Scientific Retreat, West Lafayette, IN. Abstract #48
135. Lee, J., S.M. Peterson, and **J.L. Freeman.** 2013. Sex-specific expression alterations of Alzheimer's disease associated genes in young and aged zebrafish (*Danio rerio*) brains during the aging process and with a developmental lead exposure. Ohio Valley-Society of Toxicology Annual Meeting. University of Louisville, Louisville, KY. Abstract #25.
136. Ryan, G., G.J. Weber, S.M. Peterson, M.S. Sepúlveda, and **J.L. Freeman**. 2013. Expression of glyoxylase 1 (*glo1*) throughout zebrafish embryonic development and alterations following atrazine exposure. Ohio Valley-Society of Toxicology Annual Meeting. University of Louisville, Louisville, KY. Abstract #32.
137. Schlotman, K.E., G.J. Weber, S.E. Wirbisky, and **J.L. Freeman.** 2013. The effects of developmental atrazine exposure on miRNA-126 expression in zebrafish. Ohio Valley-Society of Toxicology Annual Meeting. University of Louisville, Louisville, KY. Abstract #33.
138. Wirbisky, S.E., G.J. Weber, and **J.L. Freeman**. 2013. Dose-dependent alterations in excitatory GABA during embryonic development associated with lead (Pb) neurotoxicity. Ohio Valley-Society of Toxicology Annual Meeting. University of Louisville, Louisville, KY. Abstract #46.
139. **J.L. Freeman**. 2013. Linking genetic mechanisms of embryonic environmental chemical toxicity with a developmental origin of adult disease and dysfunction using the zebrafish model system. 6th Aquatic Animal Models for Human Disease and Midwest Zebrafish Conference. Milwaukee, WI. Abstract pg. 30.
140. **J.L. Freeman**. 2013. Developmental lead neurotoxicity: Genetic mechanisms and lasting impacts on the adult central nervous system in zebrafish. 14th Biennial Meeting of the International Neurotoxicology Association, Egmond aan Zee, the Netherlands. Abstract #35.
141. Winchester, A., S.M. Peterson, and **J.L. Freeman**. 2013. Synergistic toxicity assessment of heavy metal tungsten alloy components. Undergraduate Research Poster Symposium, Purdue University. Abstract #24.
142. Wirbisky, S., G.J. Weber, and **J.L. Freeman**. 2013. The effects of lead exposure on the GABAergic system in developing zebrafish. 52nd Annual Meeting of the Society of Toxicology and ToxExpo. San Antonio, TX. Abstract #2695.
143. Xiao, C., G.J. Weber, S. Watson, **J.L. Freeman**, and J.R. Cannon. 2013. Linking developmental atrazine exposure in zebrafish to long-term neurotransmission alterations. 52nd Annual Meeting of the Society of Toxicology and ToxExpo. San Antonio, TX. Abstract #1408.
144. Weber, G.J., S.M. Peterson, S.S. Lewis, M.S. Sepulveda, and **J.L. Freeman**. 2013. Transcriptomic profiling of embryos and adult female brain tissue links a developmental origin of atrazine-induced reproductive alterations in zebrafish. 52nd Annual Meeting of the Society of Toxicology and ToxExpo. San Antonio, TX. Abstract #988.
145. Ryan, G., G.J. Weber, S.M. Peterson, M.S. Sepulveda, and **J.L. Freeman**. 2013. Characterization of glo1 gene expression during development and alterations induced by atrazine exposure in zebrafish. 52nd Annual Meeting of the Society of Toxicology and ToxExpo. San Antonio, TX. Abstract #324.
146. **Freeman, J.L.** 2013. Genetic mechanisms of developmental lead neurotoxicity and links to adult neurodegenerative disease pathogenesis. 52nd Annual Meeting of the Society of Toxicology and ToxExpo. San Antonio, TX. Abstract #1582.
147. Weber, G.J., S.M. Peterson, S.S. Lewis, M.S. Sepulveda, and **J.L. Freeman**. 2013. Transcriptomic profiling of embryos and adult female brain tissue links a developmental origin of atrazine-induced reproductive alterations in zebrafish. Purdue University Chronic Disease Research Poster Session. West Lafayette, IN. Abstract #19.
148. Winchester, A., S.M. Peterson, and **J.L. Freeman**. 2013. Synergistic toxicity assessment of heavy metal tungsten alloy components. Purdue University Chronic Disease Research Poster Session. West Lafayette, IN. Abstract #20.
149. Weber, G.J., S.M. Peterson, S.S. Lewis, M.S. Sepulveda, and **J.L. Freeman**. 2012. Transcriptomic profiling of embryos and adult female brain tissue links a developmental origin of atrazine-induced reproductive alterations in zebrafish. College of Health and Human Sciences Research Afternoon. Purdue University. West Lafayette, IN.

150. Winchester, A., S.M. Peterson, and **J.L. Freeman**. 2012. Synergistic toxicity assessment of heavy metal tungsten alloy components. Cancer Prevention and Control Group Retreat and Poster Session. Purdue University, West Lafayette, IN. Abstract #20.
151. Ryan, G., G.J. Weber, S.M. Peterson, M.S. Sepulveda, and **J.L. Freeman**. 2012. Expression of *glo1* after developmental atrazine exposure in zebrafish. Cancer Prevention and Control Group Retreat and Poster Session. Purdue University, West Lafayette, IN. Abstract #18.
152. Weber, G.J., C. Xiao, S. Watson, **J.L. Freeman**, and J.R. Cannon. 2012. Developmental atrazine exposure in zebrafish leads to long-term neurotransmitter deficits. Society for Neuroscience, Neuroscience 2012. New Orleans, LA. Abstract #354.23.
153. Winchester, A., S.M. Peterson, and **J.L. Freeman**. 2012. Synergistic toxicity assessment of heavy metal tungsten alloy components. Ohio Valley-Society of Toxicology Annual Meeting. The Research Institute at Nationwide Children's, Columbus, OH. Abstract #9.
154. Weber, G.J., S.M. Peterson, S.S. Lewis, M.S. Sepulveda, and **J.L. Freeman**. 2012. Transcriptomic profiling of embryos and adult female brain tissue links a developmental origin of atrazine-induced reproductive alterations in zebrafish. Ohio Valley-Society of Toxicology Annual Meeting. The Research Institute at Nationwide Children's, Columbus, OH. Abstract #28.
155. Ryan, G., G.J. Weber, S.M. Peterson, M.S. Sepulveda, and **J.L. Freeman**. 2012. Expression of *glo1* after developmental atrazine exposure in zebrafish. Ohio Valley-Society of Toxicology Annual Meeting. The Research Institute at Nationwide Children's, Columbus, OH. Abstract #7.
156. Weber, G.J., S.M. Peterson, T.L. Lin, M.S. Sepulveda, and **J.L. Freeman**. 2012. Genetic pathways underlying the immediate and lifespan impacts of a developmental exposure to the endocrine disrupting herbicide atrazine. PULSe (Purdue Interdisciplinary Life Sciences Program) Retreat. West Lafayette, IN. Abstract.
157. Xiao C., G.J. Weber, S. Watson, **J.L. Freeman**, and J.R. Cannon. 2012. Developmental atrazine exposure in zebrafish leads to long-term neurotransmitters deficits. PULSe (Purdue Interdisciplinary Life Sciences Program) Retreat. West Lafayette, IN. Abstract.
158. Weber, G.J., S.M. Peterson, S.S. Lewis, M.S. Sepulveda, and **J.L. Freeman**. 2012. Genetic pathways underlying the immediate and lifespan impacts of a developmental exposure to the endocrine disrupting herbicide atrazine. Joint Retreat between Obesity and Cancer Discovery Group and Cancer Prevention and Control Group. Purdue University. West Lafayette, IN. Abstract #6.
159. Bault, Z.A., S.M. Peterson, and **J.L. Freeman.** Behavioral learning changes in adult zebrafish exposed to lead (Pb) during development using a T-maze assay. 2012. Purdue University Chronic Disease Research Poster Session. West Lafayette, IN. Abstract #4.
160. Peterson, S.M. and **J.L. Freeman.** 2012. Neurological effects in the zebrafish model system caused by a developmental exposure to lead. Purdue University Chronic Disease Research Poster Session. West Lafayette, IN. Abstract #19.
161. Egan, K., G.J. Weber, and **J.L. Freeman.** 2012. Developmental stage sensitivity to gene expression alterations in *GLO1* following atrazine exposure. Purdue University Chronic Disease Research Poster Session. West Lafayette, IN. Abstract #9.
162. Weber, G.J., S.S. Lewis, S.M. Peterson, M.S. Sepulveda, and **J.L. Freeman**. 2012. Genetic pathways underlying the immediate and lifespan impacts of a developmental exposure to the endocrine disrupting herbicide atrazine. Purdue University Chronic Disease Research Poster Session. West Lafayette, IN. Abstract #25.
163. **Freeman, J.L.,** A. Funk, S.M. Peterson, G.J. Weber, and L.H. Nie. 2012. Genetic alterations and functional consequences of embryonic ionizing radiation exposure in zebrafish. 51st Annual Meeting of the Society of Toxicology and ToxExpo. San Francisco, CA. Abstract #213.
164. Weber, G.J., S.S. Lewis, S.M. Peterson, M.S. Sepulveda, and **J.L. Freeman**. 2012. Genetic pathways underlying the immediate and lifespan impacts of a developmental exposure to the endocrine disrupting herbicide atrazine. 51st Annual Meeting of the Society of Toxicology and ToxExpo. San Francisco, CA. Abstract #2216.
165. Peterson, S.M., J. Zhang, and **J.L. Freeman.** 2012. Neurological effects in the zebrafish model system caused by a developmental exposure to lead. 51st Annual Meeting of the Society of Toxicology and ToxExpo. San Francisco, CA. Abstract #2560.
166. Weber, G.J., S.S. Lewis, S.M. Peterson, M.S. Sepulveda, and **J.L. Freeman**. 2012. Genetic pathways underlying the immediate and lifespan impacts of a developmental exposure to the endocrine disrupting

herbicide atrazine. Purdue University Chapter: The Society of Sigma Xi. Graduate Student Research Poster Competition. West Lafayette, IN. Abstract L-37.

167. Brown, K.H., K.P. Dobrinski, A.S. Lee, O. Gokcumen, R.E. Mills, X. Shi, W.W.S. Chong, J.Y.H. Chen, P. Yoo, S. David, S.M. Peterson, T. Raj, K.W. Choy, B. Stranger, R.E. Williamson, L.I. Zon, **J.L. Freeman**, and C. Lee. 2012. Extensive genetic diversity and strain sub-structuring among zebrafish strains revealed through copy number variant analysis. International Plant and Animal Genome Conference XX. San Diego, CA. Abstract #4012.
168. **Freeman, J.L**., S.M. Peterson, J. Zhang, and G.J. Weber. 2011. Enrichment of lead (Pb)- induced neurological gene expression alterations are dynamic in developing zebrafish and are translated to the protein level. The 4th Strategic Conference of Zebrafish Investigators. Pacific Grove, CA. Abstract #189.
169. Weber, G.J., S.S. Lewis, S.M. Peterson, M.S. Sepulveda, and **J.L. Freeman**. 2011. Early developmental exposure to the herbicide atrazine results in enrichment of gene expression alterations associated with neuroendocrine development and carcinogenesis. Purdue University Chapter: The Society of Sigma Xi. Graduate Student Research Poster Competition. West Lafayette, IN. Abstract #L-08, p 24.
170. Weber, G.J., S.S. Lewis, S.M. Peterson, M.S. Sepulveda, and **J.L. Freeman**. 2011. Early developmental exposure to the herbicide atrazine results in enrichment of gene expression alterations associated with neuroendocrine development and carcinogenesis. Cancer Prevention Retreat for the Oncological Sciences Center, Purdue University. West Lafayette, IN. Abstract.
171. Zhang, J., S.M. Peterson, W. Zheng, and **J.L. Freeman**. 2011. Neurodevelopmental toxicity of lead (Pb): a morphologic study in the embryonic zebrafish brain. 50th Anniversary Meeting of the Society of Toxicology: Anniversary Annual Meeting and ToxExpo. Washington, D.C. Abstract #2144.
172. Peterson, S.M., J. Zhang, G.J. Weber, and **J.L. Freeman**. 2011. Developmental lead exposure causes time point specific alterations in nervous system related gene and protein expression levels. 50th Anniversary Meeting of the Society of Toxicology: Anniversary Annual Meeting and ToxExpo. Washington, D.C. Abstract #2142.
173. Lewis, S.S., G.J. Weber, S.M. Peterson, **J.L. Freeman**, and M.S. Sepulveda. 2011. Persistent life history effects of atrazine exposure in zebrafish: a multigenerational study encompassing gene expression, fitness, and epigenetic effects. 50th Anniversary Meeting of the Society of Toxicology: Anniversary Annual Meeting and ToxExpo. Washington, D.C. Abstract #1747.
174. Weber, G.J., S.S. Lewis, S.M. Peterson, M.S. Sepulveda, and **J.L. Freeman**. 2011. Early developmental exposure to the herbicide atrazine results in enrichment of gene expression alterations associated with neuroendocrine development and carcinogenesis. 50th Anniversary Meeting of the Society of Toxicology: Anniversary Annual Meeting and ToxExpo. Washington, D.C. Abstract #2090.
175. **Freeman, J.L.,** J.M. Schultheis, D.R. Robbins, and S.M. Peterson. 2011. Toxicity of tungsten and cobalt mixtures in embryonic zebrafish. 50th Anniversary Meeting of the Society of Toxicology: Anniversary Annual Meeting and ToxExpo. Washington, D.C. Abstract #2310.
176. Weber, G.J., S.S. Lewis, S.M. Peterson, M.S. Sepulveda, and **J.L. Freeman**. 2011. Early developmental exposure to the herbicide atrazine results in enrichment of gene expression alterations associated with neuroendocrine development and carcinogenesis. Office of Interdisciplinary Graduate Programs 2nd Annual Reception and Poster Session. West Lafayette, IN.
177. Robbins, D.R., J.M. Schultheis, S.M. Peterson, and **J.L. Freeman**. 2011. Toxicity of tungsten and cobalt mixtures in embryonic zebrafish. Purdue University Chronic Disease Research Poster Session. West Lafayette, IN. Abstract #26.
178. Weber, G.J., S.S. Lewis, S.M. Peterson, M.S. Sepulveda, and **J.L. Freeman**. 2011. Early developmental exposure to the herbicide atrazine results in enrichment of gene expression alterations associated with neuroendocrine development and carcinogenesis. Purdue University Chronic Disease Research Poster Session. West Lafayette, IN. Abstract #33.
179. Peterson, S.M., J. Zhang, G.J. Weber, and **J.L. Freeman**. 2011. Developmental lead exposure causes time point specific alterations in nervous system related gene and protein expression levels. Purdue University Chronic Disease Research Poster Session. West Lafayette, IN. Abstract # 23.
180. Bault, Z.A., S.M. Peterson, and **J.L. Freeman**. 2011. Behavioral learning changes in zebrafish exposed to lead (Pb) using a T-maze assay. Purdue University Chronic Disease Research Poster Session. West Lafayette, IN. Abstract #8.
181. Zhang, J., S.M. Peterson, G.J. Weber, X. Zhu, W. Zheng, and **J.L. Freeman**. 2011. Decreased axonal density and altered expression profiles of axonal guidance genes underlying lead (Pb) neurodevelopmental

toxicity at early embryonic stages in the zebrafish. 13th International Neurotoxicology Association Meeting and 11th International Symposium on Neurobehavioral Methods and Effects in Occupational and Environmental Health. Joint Conference on Neurotoxicity and Neurodegeneration: Local Effect and Global Impact. Xi'an, China. Abstract #048.

182. Weber, G.J., S.S. Lewis, S.M. Peterson, M.S. Sepulveda, and **J.L. Freeman**. 2011. Developmental origins of disease: A zebrafish screen for lifespan implications and epigenetic alterations of a developmental exposure to the herbicide atrazine in neuroendocrine alterations and carcinogenesis. 7th European Zebrafish Meeting. Edinburgh, Scotland. Abstract p. 359.
183. Egan, K. and **J.L. Freeman**. 2011. Life span impacts on *LHb* and *AVP* gene expression following developmental exposure to atrazine. Discovery Learning Research Center Undergraduate Student Recognition Symposium. West Lafayette, IN.
184. Weber, G.J, S.S. Lewis, S.M. Peterson, M.S. Sepulveda, and **J.L. Freeman**. 2011. Genetic pathways underlying the immediate and lasting impacts of a developmental exposure to the endocrine disrupting herbicide atrazine. PULSe (Purdue Interdisciplinary Life Sciences Program) Retreat. West Lafayette, IN.
185. Bault, Z.A., S.M. Peterson, and **J.L. Freeman**. 2011. Behavioral learning changes in zebrafish exposed to lead (Pb) using a T-maze assay. Purdue University Summer Undergraduate Research Fellowship (SURF) Symposium. West Lafayette, IN. Abstract p. 10.
186. Weber, G.J, S.S. Lewis, S.M. Peterson, M.S. Sepulveda, and **J.L. Freeman**. 2011. Genetic pathways underlying the immediate and lasting impacts of a developmental exposure to the endocrine disrupting herbicide atrazine. Purdue University Center for Cancer Research Annual Retreat. West Lafayette, IN. Abstract #11.
187. Weber, G.J, S.S. Lewis, S.M. Peterson, M.S. Sepulveda, and **J.L. Freeman**. 2011. Genetic biomarkers of developmental atrazine exposure indicate disruption of neuroendocrine function, cell cycle regulation, and carcinogenesis. Ohio Valley-Society of Toxicology Annual Meeting. Wright State University, Dayton, OH. Abstract C.
188. Bault, Z.A., S.M. Peterson, and **J.L. Freeman**. 2011. Behavioral learning changes in adult zebrafish exposed to lead (Pb) during development using a T-maze assay. Ohio Valley-Society of Toxicology Annual Meeting. Wright State University, Dayton, OH. Abstract #2.
189. Egan, K., G.J. Weber, S. Lewis, S.M. Peterson, M. Sepulveda, and **J.L. Freeman**. 2011. Life span impacts on *LHb* and *AVP* gene expression due to developmental exposure of atrazine. Ohio Valley-Society of Toxicology Annual Meeting. Wright State University, Dayton, OH. Abstract #3.
190. Peterson, S.M., J. Zhang, and **J.L. Freeman**. 2011. Genetic alterations and functional consequences of developmental Pb exposure in the zebrafish model organism. Ohio Valley-Society of Toxicology Annual Meeting. Wright State University, Dayton, OH. Abstract #27.
191. Lewis, S.S., G.J. Weber, **J.L. Freeman**, and M.S. Sepulveda. 2011. Persistent effects of a one-time embryonic exposure to the herbicide atrazine in adult zebrafish assessed using gene expression, gonad histology, and life history traits. Ohio Valley-Society of Toxicology Annual Meeting. Wright State University, Dayton, OH. Abstract G.
192. Weber, G.J, S.S. Lewis, S.M. Peterson, M.S. Sepulveda, and **J.L. Freeman**. 2011. Genetic biomarkers of developmental atrazine exposure indicate disruption of neuroendocrine function, cell cycle regulation and carcinogenesis. Society of Environmental Toxicology and Chemistry North America 32nd Annual Meeting. Boston, Massachusetts. Abstract #524.
193. Weber, G.J., S.S. Lewis, S.M. Peterson, M.S. Sepulveda, and **J.L. Freeman**. 2011. Genetic pathways underlying the immediate and lasting impacts of a developmental exposure to the endocrine disrupting herbicide atrazine. College of Health and Human Sciences Research Afternoon. Purdue University. West Lafayette, IN.
194. **Freeman, J.L.** and S. Peterson. 2010. Chemical exposure and the generation of copy number variants (CNVs). SOT 49th Annual Meeting and Tox Expo. Salt Lake City, UT. Abstract #1127.
195. Peterson, S. and **J.L. Freeman**. 2010. Characterization of gene expression alterations induced by developmental exposure of zebrafish to lead (Pb). SOT 49th Annual Meeting and Tox Expo. Salt Lake City, UT. Abstract #1843.
196. Peterson, S. and **J.L. Freeman**. 2010. Enrichment of lead (Pb)-induced neurological gene expression alterations are dynamic and dependent on developmental stage. Indiana Water Resources Symposium. West Lafayette, IN. Abstract.

197. Peterson, S. and **J.L. Freeman**. 2010. Enrichment of lead (Pb)-induced neurological gene expression alterations are dynamic and dependent on developmental stage. 9th International Meeting on Zebrafish Development and Genetics. Madison, WI. Abstract #61.
198. Weber, G.J., M.S. Sepulveda, and **J.L. Freeman**. 2010. Early developmental exposure to the herbicide atrazine results in enrichment of gene expression alterations associated with neuroendocrine development and carcinogenesis. Purdue University Center for Cancer Research Annual Retreat. West Lafayette, IN. Abstract #11.
199. Peterson, S. and **J.L. Freeman**. 2010. Enrichment of lead (Pb)-induced neurological gene expression alterations are dynamic in developing zebrafish. 5th Aquatic Animals Models for Human Disease, Oregon State University, Corvallis, OR. Abstract p. 79.
200. Zhang, J, S.M. Peterson, and **J.L. Freeman**. 2010. Morphologic study of lead (Pb) exposure on neurodevelopment in the embryonic zebrafish brain. 27th Annual Meeting of the Ohio Valley Chapter of the Society of Environmental Toxicology and Chemistry Meeting. West Lafayette, IN. Abstract #20.
201. Peterson, S.M. and **J.L. Freeman**. 2010. Gene expression alterations induced by developmental exposure to lead (Pb) in zebrafish embryos. 27th Annual Meeting of the Ohio Valley Chapter of the Society of Environmental Toxicology and Chemistry Meeting. West Lafayette, IN. Abstract #13.
202. Weber, G.J., M.S. Sepulveda, and **J.L. Freeman**. 2010. Early developmental exposure to the herbicide atrazine results in enrichment of gene expression alterations associated with neuroendocrine development and carcinogenesis. 27th Annual Meeting of the Ohio Valley Chapter of the Society of Environmental Toxicology and Chemistry Meeting. West Lafayette, IN. Abstract #19.
203. Robbins, D.R., J.M. Schultheis, S.M. Peterson, and **J.L. Freeman**. 2010. Toxicity of tungsten and cobalt mixtures in embryonic zebrafish. 27th Annual Meeting of the Ohio Valley Chapter of the Society of Environmental Toxicology and Chemistry Meeting. West Lafayette, IN. Abstract #16.
204. **Freeman, J.L.** and S. Peterson. 2009. The application of zebrafish genome-wide platforms to assess chromosomal structural alterations and changes in gene expression in toxicological-based studies. 3rd Strategic Conference of Zebrafish Investigators, Pacific Grove, CA. Abstract p. 128.
205. **Freeman, J.L.** and S. Peterson. 2009. Development and validation of an integrated genome-wide approach to detect chromosomal structural alterations. SOT 48th Annual Meeting and ToxExpo. Baltimore, MD. Abstract p. 193.
206. Brown, K.H., **J.L. Freeman**, and C. Lee. 2009. Chromosome painting of zebrafish chromosomes for the identification of inter-chromosomal rearrangements and marker chromosomes. 6th European Zebrafish Genetics and Development Meeting, Rome. Abstract p. 30.
207. **Freeman, J.L.** and S. Peterson. 2009. Development and validation of an integrated genome-wide approach to detect chromosomal structural aberrations. PULSe (Purdue Interdisciplinary Life Sciences Program) Retreat. Abstract.
208. **Freeman, J.L.** and S. Peterson. 2009. Development of an integrated genome-wide assay to detect copy number mutations generated by chemical stressors. Environmental Mutagen Society 40th Annual Meeting, St. Louis, MO. Environ. Mol. Mutagen. 50: Abstract p. 549.
209. **Freeman, J.L.** 2008. Development and application of an array CGH platform to assess the genotoxicity of environmental chemical contaminants in the zebrafish model system. 8th International Conference on Zebrafish Development and Genetics. Abstract p. 244.
210. **Freeman, J.L.** 2008. A zebrafish genome-wide array CGH platform to assess the genotoxicity of environmental contaminants. SETAC North America 29th Annual Meeting, Tampa, FL. Abstract MP38.
211. Peterson, S. and **J.L. Freeman**. 2008. Development of a genotoxicity assay to detect chromosomal aberrations using an integrated genome-wide microarray. Ecological Sciences and Engineering Graduate Program Symposium, Purdue University. Abstract.
212. **Freeman, J.L.** and C. Lee. 2007. Array comparative genomic hybridization platforms for the zebrafish. 5th European Zebrafish Genetics and Development Meeting. Abstract p. 460.
213. **Freeman, J.L.** and C. Lee. 2007. Array comparative genomic hybridization (array CGH) platform for the zebrafish: New tools in toxicogenomics. Society of Environmental Toxicology and Chemistry-Ohio Valley Chapter, Emerging contaminant workshop, Cincinnati, OH. Abstract.
214. **Freeman, J.L.** and C. Lee. 2006. Development and application of a validated array CGH platform for genomic imbalances in zebrafish tumor specimens. 7th International Meeting on Zebrafish Development and Genetics. Abstract p. 23.

215. **Freeman, J.L.** and A.L. Rayburn. 2004. Optimization of a flow cytometric genotoxicity assay in *Xenopus laevis* larvae. Joint Meeting of the Midwest and Ozark-Prairie Chapters of the Society of Environmental Toxicology and Chemistry. Abstract p. 16.
216. **Freeman, J.L.** and A.L. Rayburn. 2004. Using flow cytometry to investigate the effects of atrazine on the metamorphosis of *Xenopus laevis*. Fourth SETAC World Congress and 25th Annual Meeting in North America. Abstract p. 397.
217. **Freeman, J.L.,** S. Kotadia and A.L. Rayburn. 2004. Comparing the cytotoxicity and cell cycle effects of common food additives to agrochemicals contaminating potable water. ASB 65th Annual Meeting. Abstract p. 124.
218. Moody, D.D., **J.L. Freeman** and A.L. Rayburn. 2004. Comparing the cytotoxicity of field applied atrazine to technical grade atrazine. ASB 65th Annual Meeting. Abstract p. 218.
219. Musa, H.B., **J.L. Freeman** and A.L. Rayburn. 2004. Comparison of nuclei isolated from various organisms for use as internal standards for observing DNA content variation in plants. ASB 65th Annual Meeting. Abstract p. 202.
220. **Freeman, J.L.** and A.L. Rayburn. 2003. Assessing the environmental toxicity of atrazine to *Xenopus laevis* and *Bufo americanus* tadpoles. Illinois Lake Management Association 18th Annual Conference. Abstract p. 5.
221. **Freeman, J.L.** and A.L. Rayburn. 2003. Optimization of a flow cytometric genotoxicity assay in developing anurans. SETAC North America 24th Annual Meeting. Abstract p. 260.
222. **Freeman, J.L.** and A.L. Rayburn. 2003. Optimization of a flow cytometric genotoxicity assay in *Xenopus laevis* larvae. EC Expo 2003. Abstract p. 51.
223. Tatum, T.C., **J.L. Freeman**, N. Beccue and A.L. Rayburn. 2003. Correlation of call survey data with flow cytometric analysis of *Hyla* complex. Illinois Lake Management Association 18th Annual Conference. Abstract p. 5.
224. **Freeman, J.L.** and A.L. Rayburn. 2002. Assessing the genotoxicity of atrazine to *Xenopus laevis* and *Bufo americanus* tadpoles. Water 2002 Conference. Abstract p.63.
225. **Freeman, J.L.** and A.L. Rayburn. 2002. Assessing the genotoxicity of atrazine to anuran tadpoles. *In* Annual Meetings Abstracts [CD-ROM]. ASA, CSSA and SSSA, Madison, WI.
226. **Freeman, J.L.,** S.R. Kotadia and A.L. Rayburn. 2002. Comparing the cytotoxicity of common food additives to herbicides contaminating potable water supplies. Proceedings of the UIUC Environmental Horizons 2002 Conference. Abstract p. 39.
227. **Freeman, J.L.,** J. Murphy, V.R. Beasley and A.L. Rayburn. 2002. Amphibians as biological indicators of watershed health. Illinois Lake Management Association 17th Annual Conference. Abstract p. 14.
228. Kotadia, S., **J.L. Freeman** and A.L. Rayburn. 2002. Comparing the cytotoxicity of food additives to agrochemicals. *In* Annual Meetings Abstracts [CD-ROM]. ASA, CSSA and SSSA, Madison, WI.
229. Rayburn, A.L., W. Trinachartvanit and **J.L. Freeman**. 2002. Comparing *in vitro* toxicity of agrochemical contaminants with lake management herbicides. Illinois Lake Management Association 17th Annual Conference. Abstract p. 14.
230. Trinachartvanit, W., **J.L. Freeman**, B.M. Francis and A.L. Rayburn. 2002. Comparing *in vitro* toxicity of agrochemicals contaminating reservoirs with lake management herbicides. *In* Annual Meetings Abstracts [CD-ROM]. ASA, CSSA and SSSA, Madison, WI.
231. Trinachartvanit, W., **J.L. Freeman**, B.M. Francis and A.L. Rayburn. 2002. Comparing *in vitro* toxicity of agrochemicals contaminating reservoirs with lake management herbicides. Proceedings of the UIUC Environmental Horizons 2002 Conference. Abstract p. 38.
232. Trinachartvanit, W., **J.L. Freeman**, B.M. Francis and A.L. Rayburn. 2002. Comparing *in vitro* toxicity of agrochemicals and cell cycle disruption of agrochemicals contaminating reservoirs with lake management herbicides. Water 2002 Conference. Abstract p. 66.
233. **Freeman, J.L.** and A.L. Rayburn. 2001. Assessing the genotoxicity of an atrazine breakdown product to aquatic organisms. Proceedings of the UIUC Environmental Horizons 2001 Conference. Abstract p. 45.
234. **Freeman, J.L.** and A.L. Rayburn. 2001. Assessing the genotoxicity of atrazine to *Xenopus laevis* and *Bufo americanus* tadpoles. 21st International Symposium of the North American Lake Management Society. Abstract p. H-26.
235. Rayburn, A.L., **J.L. Freeman**, N. Beccue, J. Murphy and V. Beasley. 2001. Amphibians as biological indicators of watershed health. Proceedings of the UIUC Environmental Horizons 2001 Conference. Abstract p. 46.

INVITED LECTURES *(international underlined; other significant in bold)*

1. Defining developmental origins of neurotoxicity using the zebrafish model system. 2021. International Conference on Recent Advances in Applied Sciences, Technology and Health (Virtual). SRM Institute of Science and Technology, Kattankulathur, Tamilnadu, India. **(Keynote Speaker)**
2. Human adverse health effects of PFAS exposure. 2021. PFAS Research and Policy Forum. Virtual (sponsored by White River Alliance and Hoosier Environmental Council)
3. Defining mechanisms of developmental neurotoxicity of environmental chemicals using the zebrafish model system. 2020. DNT5: 5th International Conference on Developmental Neurotoxicity Testing. Konstanz, Germany. (postponed due to COVID-19 for 2021)
4. The zebrafish as a biomedical model to define developmental origins of chemical toxicity. 2020. International Webinar on Food, Chemical, and Nanomaterials Toxicity. Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum, India. **(Keynote Speaker)**
5. Adverse health outcomes of PFAS exposure. 2020. PFAS Community Collaboration, Rhinelander, WI
6. Molecular and epigenetic mechanisms of the developmental origins of toxicity of the endocrine disrupting herbicide atrazine. 2019. Experimental Biology 2019 Meeting. American Society for Investigative Pathology. Orlando, FL.
7. Using the zebrafish model system to define developmental origins of chemical toxicity. 2019. Sathyabama Institute of Science and Technology. Chennai, India.
8. Using the Zebrafish Model System to Define Developmental Origins of Environmental Chemical Toxicity". 2019. One Health Club. Purdue University. West Lafayette, IN.
9. Using the Zebrafish Model System to Define Developmental Origins of Environmental Chemical Toxicity". 2019. EEE Research Seminar. Purdue University. West Lafayette, IN.
10. Developmental origins of environmental chemical toxicity. 2018. The Jackson Laboratory for Genomic Medicine. Farmington, CT.
11. **Using the zebrafish model system to define developmental origins of atrazine toxicity. 2018. University of California-Riverside, NIEHS Training Program in Environmental Health Sciences Seminar Series, Riverside, CA.**
12. Developmental origins of toxicity of the endocrine disrupting herbicide atrazine. 2018. AEESP Distinguished Lecture Conference, Purdue University, West Lafayette, IN.
13. Using the zebrafish model system to define developmental origins of atrazine toxicity. 2018. Indiana University, Department of Pharmacology and Toxicology, School of Medicine, Indianapolis, IN.
14. Policy to Protect the Public from Exposure to Chemicals, Panel Member. 2018. Environmental and Ecological Engineering, Purdue University, West Lafayette, IN.
15. **Defining developmental lead neurotoxicity using the zebrafish model system: Alterations in neurotransmission targets. 2017. Neurotoxic Effects of Chronic Low Dose Lead Exposure in Childhood. NIH, Bethesda, MD.**
16. Developmental origins of toxicity of the endocrine disrupting herbicide atrazine in zebrafish. 2017. University of California-Davis, NIEHS Training Program in Environmental Health Sciences Seminar Series, Davis, CA.
17. Developmental origins of toxicity of the endocrine disrupting herbicide atrazine in zebrafish. 2017. International Zebrafish Disease Models Meeting (ZDM10), San Diego, CA.
18. Developmental origins of environmental chemical toxicity: Do chemical exposures during development influence health risks later in life. 2017. Purdue in the Know, Purdue Alumni Association, West Lafayette, IN.
19. Developmental origins of environmental chemical neurotoxicity. 2017. Purdue Institute for Integrative Neuroscience, Summer Retreat. St. Joseph, MI.
20. Developmental origins of environmental chemical toxicity: Do chemical exposures during development influence health risks later in life? 2017. Advanced Qualitative and Quantitative Methodologies for Social, Behavioral, and Health Sciences Cluster – Current Faculty Presentation, West Lafayette, IN.
21. **Multigenerational effects of the endocrine disrupting herbicide atrazine in zebrafish. 2016. 55th Annual Meeting of the Society of Toxicology and ToxExpo, New Orleans, LA**.
22. Development origins of environmental chemical toxicity and multigeneration effects. 2016. Environmental Science Club, Purdue University, West Lafayette, IN.

23. An embryonic exposure to an agricultural herbicide results in adverse health outcomes throughout the lifespan. 2015. University of Illinois, Toxicology Seminar. Urbana, IL.
24. Are There Health Concerns Associated with Current Allowable Limits of Chemical Contaminants in our Drinking Water: Fishing for Answers. 2014. Defining Indiana's Water Needs: Research and Solutions Conference, Indianapolis, IN.
25. **A New Paradigm in Environmental Health. 2014. A TEDx PurdueU Breakout Session: Confronting our Environmental Health Risks. West Lafayette, IN.**
26. Using the zebrafish model system to define mechanisms of environmental chemical toxicity in the developmental origin of adult health and disease paradigm. 2014. Center on Aging and the Life Course, Purdue University, West Lafayette, IN.
27. Mechanisms of Environmental Chemical Toxicity in the Developmental Origin of Health and Disease Paradigm. 2014. College of Health and Human Sciences Fall Research Day, West Lafayette, IN.
28. An embryonic exposure to an agricultural herbicide results in adverse health outcomes throughout the lifespan. 2014. Department of Medicinal Chemistry and Molecular Pharmacology Seminar. West Lafayette, IN.
29. Linking genetic and epigenetic mechanisms of embryonic environmental chemical toxicity with a developmental origin of adult health and disease using the zebrafish model system. 2014. Director's Advisory Board Meeting, Purdue University Center for Cancer Research, West Lafayette, IN.
30. **Using the zebrafish model system and –omic tools in DNT studies. 2014. 4th International Conference on Alternatives for Developmental Neurotoxicity Testing (DNT4): Developmental Neurotoxicity: Advancing the Science of Developmental Neurotoxicity Testing for Better Safety Evaluation. Philadelphia, PN.**
31. Linking genetic mechanisms of embryonic environmental chemical toxicity with a developmental origin of adult disease and dysfunction using the zebrafish model system. 2013. 6th Aquatic Animal Models for Human Disease & Midwest Zebrafish Conference, Milwaukee, WI.
32. Developmental lead neurotoxicity: Genetic mechanisms and lasting impacts on the adult nervous system. 2013. 14th Biennial Meeting of the International Neurotoxicology Association, Egmond aan Zee, the Netherlands.
33. Fishing for links between environmental chemical contaminant exposure and human health. 2013. The Wabash River Workshop, IUPUI, Indianapolis, IN.
34. Linking genetic and epigenetic mechanisms of embryonic environmental chemical toxicity with a developmental origin of adult health and disease using the zebrafish model system. 2013. Purdue University Cancer Center, External Advisory Committee Review, West Lafayette, IN.
35. Human health concerns of drinking water chemical contaminants. 2013. Multidimensional Technological Innovations for Water-Linked Health and Wellness, IIT Kharagpur, West Bengal, India.
36. **Genetic mechanisms of developmental lead neurotoxicity and links to adult neurodegenerative disease pathogenesis. 2013. 52nd Annual Meeting of the Society of Toxicology and ToxExpo, San Antonio, TX.**
37. An academic path in toxicology. 2012. University of Illinois at Urbana-Champaign Toxicology Open House, Urbana, IL.
38. **Role of chemical exposure in generating spontaneous Copy Number Variants (CNVs). 2012. The National Academies of Science, Exploring Human Genomic Plasticity and Environmental Stressors: Emerging Evidence on Telomeres, Copy Number Variation, and Transposons, Washington, D.C.**
39. The zebrafish as a model system for defining the impacts of a developmental chemical exposure on reproductive health. 2012. Global Women's Health Institute, Purdue University, West Lafayette, IN.
40. Genetic mechanisms of lead (Pb) neurotoxicity. 2012. Polytechnic of Namibia. Windhoek, Namibia.
41. Zebrafish as a vertebrate model to investigate the underlying genetic mechanisms of lead (Pb) neurotoxicity. 2011. DePauw University, Greencastle, IN.
42. Genetic mechanisms of toxicity: developmental origins of disease. 2011. College of Health and Human Sciences, Chronic Disease Research Interest Group, Purdue University, West Lafayette, IN.
43. The zebrafish as a model organism for toxicology. 2010. Department of Basic Medical Sciences Seminar Series, Purdue University, West Lafayette, IN.
44. Zebrafish as a vertebrate model for human disease and toxicology. 2010. Ingestive Behavior Seminar, Purdue University, West Lafayette, IN.

45. Zebrafish as a vertebrate model for human disease and toxicology: fetal origin of disease. 2010. Purdue University Center for Cancer Research, West Lafayette, IN.
46. **Enrichment of lead (Pb)-induced neurological gene expression alterations are dynamic in developing zebrafish. 2010. 5th Aquatic Animals Models for Human Disease, Oregon State University, Corvallis, OR.**
47. Zebrafish as a Vertebrate Model for Human Disease and Toxicology. 2010. Indiana University Biocomplexity Institute, Bloomington, IN.
48. Application of Genomics in Toxicology Studies: Novel Genetic Targets of Low Dose Lead (Pb) Neurotoxicity. 2010. 3rd Indiana CTSI Retreat: Panel Participant: Implementing "Omics" Research. Purdue University, West Lafayette, IN.
49. **Zebrafish as a model in environmental toxicology. 2009. 3rd Strategic Conference of Zebrafish Investigators, Monterey, CA.**
50. Zebrafish as a model system for human disease and toxicology. 2009. Purdue Cancer Center, Cell Growth and Differentiation Group, West Lafayette, IN.
51. Health effects of environmental stressors. 2009. USGS-Purdue University Symposium, Purdue Water Community, Purdue University, West Lafayette, IN.
52. Zebrafish model system. 2009. Indiana CTSI Retreat, Session on animal models, Purdue University, West Lafayette, IN.
53. **Development of an integrated genome-wide assay to detect copy number mutations generated by exposure to chemical stressors. 2009. Environmental Mutagen Society 40th Annual Meeting, St. Louis, MO.**
54. Water quality: Public and environmental health impacts. 2009. Purdue Water Community Fall 2009 Workshop, West Lafayette, IN.
55. The zebrafish model system. 2008. The 2008 Botanicals Research Centers Directors' Meeting, Purdue University, West Lafayette, IN.
56. Aquatic model organism systems to assess the potential impacts of environmental contaminants at developmental and genetic endpoints. 2007. The School of Public and Environmental Affairs. Indiana University, Bloomington, IN.
57. Zebrafish cytogenetics: A zebrafish cancer array for array CGH. 2006. Wellcome Trust Sanger Institute, Hinxton, U.K.
58. A zebrafish array CGH platform for assessing genomic imbalances in tumor specimens. 2006. Department of Pathology, Brigham and Women's Hospital, Boston, MA.
59. Detecting genomic imbalances in zebrafish using a validated array CGH platform. 2006. 7th International Meeting on Zebrafish Development and Genetics, Madison, WI.
60. Zebrafish array comparative genomic hybridization (array CGH). 2006. Howard Hughes Medical Institute, Division of Hematology/Oncology, Children's Hospital Boston, Boston, MA.
61. Array CGH on four matched T-ALL samples. 2006. Department of Pediatric Oncology, Dana-Farber Cancer Institute, Boston, MA.
62. Aquatic model organism systems to assess the potential impacts of environmental contaminants at developmental and genetic endpoints. 2006. School of Health Sciences. Purdue University, West Lafayette, IN.
63. Comparing the cytotoxicity and cell cycle effects of common food additives to agrochemicals contaminating potable water. 2004. Association of Southeastern Biologists 65th Annual Meeting, Memphis, TN.
64. Developmental impact of atrazine on metamorphing *Xenopus laevis* as revealed by nuclear analysis and morphology. 2004. Department of Crop Sciences, University of Illinois, Urbana, IL.
65. In vivo genotoxicity of atrazine to anuran larvae. 2004. Interdisciplinary Environmental Toxicology Seminar Series, University of Illinois, Urbana, IL.
66. Assessing the environmental toxicity of atrazine to *Xenopus laevis* and *Bufo americanus* tadpoles. 2003. Illinois Lake Management Association 18th Annual Conference, Bloomington, IL.
67. Using cytosine 1-ß-D-arabinofuranoside (Ara-c) to optimize a flow cytometric genotoxicity assay in *Xenopus laevis* larvae. 2003. Interdisciplinary Environmental Toxicology Seminar Series, University of Illinois, Urbana, IL.
68. Do levels of agrochemicals contaminating surface waters induce whole cell clastogenicity in tadpoles? 2002. Interdisciplinary Environmental Toxicology Seminar Series, University of Illinois, Urbana, IL.

NOTABLE GRANT AWARDS

National Institutes of Health (NIH) - National Institute of Environmental Health Sciences (NIEHS) / Developmental Origins of Neurotoxicity of the PFAS GenX
2 years (06/01/21-05/31/23), PI, $400,488

National Institutes of Health (NIH) - National Institute of Environmental Health Sciences (NIEHS) / Mechanisms of atrazine endocrine disruption
3 years (1/15/20-12/31/22), PI, $143,496

National Institutes of Health (NIH) - National Institute of Environmental Health Sciences (NIEHS) / Lead Exposure and Beta-Amyloid Transport by Brain Barriers (Diversity Supplement for Keturah Kiper)
2 years (7/17/20-7/31/22), MPI, $145,969

Indo-US SERB / Analysis of atrazine induced pathological variation associated with Alzheimer's Disease using a zebrafish genetic model
1 year (01/15/22-01/14/23), PI, $38,400

UNSA NEXUS / Arequipa Nexus Institute for Food, Energy, Water, and the Environment
2 years (01/01/18-06/30/21), co-I (PI: Filley), $14,987,293

AgSEED / Exposure to the herbicide atrazine and influence on mental health pathways
1 year (3/1/20-2/28/22), PI, $50,000

Purdue Institute for Drug Discovery and Integrative Neuroscience Alzheimer's Disease and other Dementias / Elucidating epigenome insults connecting embryonic lead (Pb) exposure and risks for late onset Alzheimer's Disease
1 year (01/01/21-12/31/21), PI, $25,000

Indo-US SERB / Neuroprotective activity of micocycline loaded TiO_2 nanotubes in adult zebrafish
1 year (02/01/21-01/31/22), PI, $38,400

Purdue Research Foundation Research Grant / Comparative toxicity of PFOA to its shorter chain derivatives proposed as replacements in commerce
1 year (08/10/20-08/09/21), $31,119

National Institute for Occupational Safety and Health, Occupational and Environmental Health and Safety Education and Research Center, University of Illinois at Chicago / Neurotoxicity of PFAS mixtures
1 year (7/1/19-12/31/20), PI, $20,000

National Institute for Occupational Safety and Health, Occupational and Environmental Health and Safety Education and Research Center, University of Cincinnati / Neurotoxicity of Polyfluoroalkyl Substance (PFAS) Mixtures in Firefighting Materials
1 year (7/1/19-6/30/20), PI, $5,811

Big Idea Challenge 2.0, Purdue University / From Cell Cultures to Community Cultures: Bringing Precision Health to Autism
2 years (7/1/19-6/30/21), co-I (PI: Tonnsen-Kelleher), $300,000

Indo-US SERB / Development of knockout zebrafish models to understand amyloid plaque formation and inhibition in sporadic Alzheimer's Disease
1.5 years (01/01/19-06/30/20), PI, $38,400

Purdue EVPRP / Multi-generation endocrine disruption associated with a developmental exposure to the herbicide atrazine
2 years (01/01/18-05/21/19), PI, $30,000

National Institute for Occupational Safety and Health, Occupational and Environmental Health and Safety Education and Research Center, University of Illinois at Chicago / Exposure to common agricultural herbicide and alterations in the brain serotonin system
1 year (7/1/16-6/30/17), PI, $20,000

National Institutes of Health (NIH) - National Institute of Environmental Health Sciences (NIEHS) / Molecular biomarkers of exposure to an endocrine disrupting herbicide (R15-renewal) (*following this award period Purdue was no longer eligible for the R15 award mechanism and the grant could then not be renewed)
3 years (9/4/13-8/31/16), PI, $450,144

Purdue University OVPR, 2012-2013 Incentive Grants, Category I, Encouraging & Stimulating Purdue's Emerging Research / Environmental and health assessment of perfluorinated compounds
2.8 years (7/31/13-5/31/16), PI (multi-PI grant with Sepúlveda and Lee), $457,475

Purdue University OVPR, 2012-2013 Incentive Grants, Category II, Encouraging & Stimulating Purdue's Emerging Research / Role of Exposure to Environmental Chemical Stressors in Generating Spontaneous Copy Number Variants (CNVs)
2.5 years (2/18/13-8/16/15), PI, $136,415

National Institutes of Health (NIH) - National Institute of Environmental Health Sciences (NIEHS) / Molecular biomarkers of exposure to an endocrine disrupting herbicide (R15)
3 years (6/10/10-5/31/13), PI, $441,124

Colgate-Palmolive Grant for Alternative Research / Development and application of an aged zebrafish model to assess the role of environmental chemicals in neurodegenerative disease pathogenesis
1 year (1/1/12-12/31/12), PI, $40,000

Showalter Trust Fund / Alteration of reelin – a nerve growth regulatory gene – by low dose lead (Pb) exposure: A novel mechanism of the fetal origin of neurological disorders
2 years (7/1/10-6/30/12), PI, $75,000

Past grants for support of undergraduate research

AWARD 1

1. Agency/Title of Grant:	Purdue Office of Undergraduate Research / The Effects of Pb (lead) exposure on Alzheimer's Disease with a focus on Sortilin-related Receptor 1 (SORL1)
2. Duration of Funding:	Fall 2021
3. Total Amount of Award:	$500
4. Role:	PI (for Jenny Chen research project)

AWARD 2

1. Agency/Title of Grant:	Purdue Center for Cancer Research Summer Undergraduate Research Award 2020-2021 / Investigating the role of atrazine toxicity on connections between aromatase, the Hedgehog pathway, and neuroendocrine tumorigenesis
2. Duration of Funding:	Summer 2021 (05/15/21-08/14/21)
3. Total Amount of Award:	$4,000
4. Role:	PI (Funds toward an undergraduate summer researcher – Anusha Kotapalli)

AWARD 3

1. Agency/Title of Grant: HHS REACH Scholars / Genetic and epigenetic mechanisms of the developmental origin of adult disease associated with exposure to environmental chemical contaminants
2. Duration of Funding: 1 year (05/16/20-05/15/21)
3. Total Amount of Award: $5,500
4. Role: PI (Funds undergraduate researcher for 1 year – Aditya Kotapalli)

AWARD 4
1. Agency/Title of Grant: HHS REACH Scholars / Genetic and epigenetic mechanisms of the developmental origin of adult disease associated with exposure to environmental chemical contaminants
2. Duration of Funding: 1 year (05/16/19-05/15/20)
3. Total Amount of Award: $5,500
4. Role: PI (Funds undergraduate researcher for 1 year – Anusha Kotapalli)

AWARD 5
1. Agency/Title of Grant: Purdue Office of Undergraduate Research / Toxicity of Lead and Atrazine Mixture Using the Larval Zebrafish Model System
2. Duration of Funding: Fall 2019
3. Total Amount of Award: $500
4. Role: PI (for Anusha Kotapalli research project)

AWARD 6
1. Agency/Title of Grant: Purdue Office of Undergraduate Research / Developmental Toxicity of Perfluorooctanesulfonic acid (K-PFOS) and Perfluorobutanesulfonic acid (K-PFBS)
2. Duration of Funding: Fall 2019
3. Total Amount of Award: $500
4. Role: PI (for Hanna King research project)

AWARD 7
1. Agency/Title of Grant: Cancer Prevention Internship Program / Assessing genetic and epigenetic mechanisms of the developmental origin of cancer associated with exposure to environmental chemical contaminants
2. Duration of Funding: 1 year (5/16/18-5/15/19)
3. Total Amount of Award: $5,500 (Funds undergraduate researcher for 1 year – Lauren Brulinski)
4. Role: PI

AWARD 8
1. Agency/Title of Grant: Purdue Office of Undergraduate Research / The effects of environmental copper exposure on developing zebrafish
2. Duration of Funding: Spring 2019
3. Total Amount of Award: $500
4. Role: PI (for Christina Kaucic research project)

AWARD 9
1. Agency/Title of Grant: Purdue Office of Undergraduate Research / Comparative toxicity of lead acetate and lead nanoparticles
2. Duration of Funding: Spring 2019
3. Total Amount of Award: $500
4. Role: PI (for Nudar Bhuiya research project)

AWARD 10
1. Agency/Title of Grant: Purdue Office of Undergraduate Research / Toxicity Interaction of the Two Most Common Agricultural Herbicides in the United States: Glyphosate and Atrazine

2. Duration of Funding: Spring 2019
3. Total Amount of Award: $500
4. Role: PI (for Lauren Brulinski research project)

AWARD 11
1. Agency/Title of Grant: Cancer Prevention Internship Program / Assessing genetic and epigenetic mechanisms of the developmental origin of cancer associated with exposure to environmental chemical contaminants
2. Duration of Funding: 1 year (5/16/17-5/15/18)
3. Total Amount of Award: $5,500 (Funds undergraduate researcher for 1 year – Lucas Turner)
4. Role: PI

AWARD 12
1. Agency/Title of Grant: Cancer Prevention Internship Program / Assessing genetic and epigenetic mechanisms of the developmental origin of cancer associated with exposure to an endocrine disrupting herbicide
2. Duration of Funding: 1 year (5/16/16-5/15/17)
3. Total Amount of Award: $5,500 (Funds undergraduate researcher for 1 year – Leeah Reidenbach)
4. Role: PI

AWARD 13
1. Agency/Title of Grant: Carroll County Cancer Association (Summer Undergraduate Research Fellowship) / Effects of a developmental atrazine exposure on the cancer associated tumor protein D52-like 1(*TPD52L1*) gene
2. Duration of Funding: Summer 2016 (05/15/16-08/14/16)
3. Total Amount of Award: $4,000
4. Role: PI (Funds toward an undergraduate summer researcher – Devang Thanki)

AWARD 14
1. Agency/Title of Grant: Purdue Center for Cancer Research / Summer Research Opportunities Program (Diversity Program)
2. Duration of Funding: Summer 2016 (05/15/16-08/14/16)
3. Total Amount of Award: $775
4. Role: PI (Funds towards an undergraduate summer researcher – Jose Betancourt)

AWARD 15
1. Agency/Title of Grant: Cancer Prevention Internship Program / Assessing genetic and epigenetic mechanisms of the developmental origin of cancer associated with exposure to an endocrine disrupting herbicide
2. Duration of Funding: 1 year (5/16/15-5/15/16)
3. Total Amount of Award: $5,500
4. Role: PI (Funds an undergraduate researcher for 1 year – Devang Thanki)

AWARD 16
1. Agency/Title of Grant: Cancer Prevention Interdisciplinary Education Program / Genetic and epigenetic mechanisms of toxicity the developmental origin of atrazine-induced cancer
2. Duration of Funding: 1 year (5/16/14-5/15/15)
3. Total Amount of Award: $5,500
4. Role: PI (Funds an undergraduate researcher for 1 year – Brad Qualizza)

AWARD 17
1. Agency/Title of Grant: Carroll County Cancer Association - Purdue Summer Undergraduate Research Program / Effects of a developmental atrazine exposure on *SIK2* expression: a gene important in mitotic regulation and a mediator of *MITF* expression
2. Duration of Funding: Summer 2014 (05/15/14-08/14/14)

3. Total Amount of Award: $4,000
4. Role: PI (Funds toward an undergraduate summer researcher – Anna Winchester)

AWARD 18
1. Agency/Title of Grant: Cancer Prevention Internship Program, Purdue University / Genetic and epigenetic mechanisms of toxicity the developmental origin of atrazine-induced cancer
2. Duration of Funding: 1 year (5/16/13-5/15/14)
3. Total Amount of Award: $5,500
4. Role: PI (Funds an undergraduate researcher for 1 year as part of NIH R25CA128770 to D. Teegarden – Kelly Schlotman)

AWARD 19
1. Agency/Title of Grant: Cancer Prevention Internship Program, Purdue University / Genetic and epigenetic mechanisms of toxicity the developmental origin of atrazine-induced cancer
2. Duration of Funding: 1 year (5/16/12-5/15/13)
3. Total Amount of Award: $5,500
4. Role: PI (Funds an undergraduate researcher for 1 year as part of NIH R25CA128770 to D. Teegarden – Geoffrey Ryan)

AWARD 20
1. Agency/Title of Grant: Cancer Prevention Internship Program, Purdue University / Genetic mechanisms of toxicity associated with exposure to the herbicide atrazine: implications in cancer risk
2. Duration of Funding: 1 year (5/16/11-5/15/12)
3. Total Amount of Award: $5,500
4. Role: PI (Funds an undergraduate researcher for 1 year as part of NIH R25CA128770 to D. Teegarden – Kaitlyn Egan)

AWARD 21
1. Agency/Title of Grant: Carroll County Cancer Association - Purdue Summer Undergraduate Research Program / Carcinogenicity risk of tungsten and tungsten heavy metal alloy: relative toxicity of tungsten and a tungsten heavy metal mixture
2. Duration of Funding: Summer 2010 (05/13/10-08/13/10)
3. Total Amount of Award: $4,000
4. Role: PI (Funds toward an undergraduate summer researcher – Jenna Schultheis)

Notable Awards to Graduate Students Mentored by Dr. Freeman (out of 100+ awards)

Keturah Kiper
2020-22 NIH Supplement to Promote Diversity in Health-Related Research Assistantship
2020-21 AGEP (Alliance for Graduate Education and the Professoriate) Scholarship
2020 Toxicologists of African Origin Special Interest Group Award
2019 2nd Place Poster Award, 2019 Indiana CTSI Annual Meeting, Indianapolis, IN
2019 HHS Compton Graduate Student Research Methods Training Award to attend CRISPR Training Workshop, Boston, MA
2019 Bruce and Becky Mallett Scholarship
2018 Sachs Scholarship
2017-19 Purdue Doctoral Fellowship

Janiel Ahkin Chin Tai
2019-20, 20-21 AGEP (Alliance for Graduate Education and the Professoriate) Scholarship
2020 HSCI Graduate for 1st place in thesis presentation
2019 SMDP (Scientist Mentoring and Diversity Program) in Biotech in Boston, MA (competitively chosen to participate)

2017-19 Purdue Doctoral Fellowship

Ola Wasel
2022 Wayne V. Kessler Graduate Student Award, School of Health Sciences, Purdue University
2021 Society of Toxicology STEP (Supplemental Training for Education Program) Award
2020 2nd Place Poster Award, Neuroscience and Neurodegenerative Disease Division, Health and Disease Poster Session
2019 Distinguished Poster Presentation, 2019 Pilot Research Project Symposium, University of Cincinnati NIOSH ERC
2018 Purdue University Global Ambassador

Katharine Horzmann
2018 Wayne V. Kessler Graduate Student Award, School of Health Sciences, Purdue University
2017 SOT Roger O. McClellan Student Endowment Award from TEPPS
2017 Graduate Student Service Award, School of Health Sciences, Purdue University

Kathryn Thompson
2016-17 Cancer Prevention Internship Program Fellowship, Purdue University

Sara Wirbisky
2016 College of Health and Human Sciences Outstanding Doctoral Student
2016 Wayne V. Kessler Graduate Student Award, School of Health Sciences, Purdue University

Jinyoung Lee
2014 Young Soo Choi Scholarship Endowment Award from Society of Toxicology Korean Toxicologists Association in America SIG

Greg Weber
2013 College of Health and Human Sciences Outstanding Doctoral Student
2013 PULSe Interdisciplinary Life Science Ph.D. Program Outstanding Graduate Student in Research
2013 Wayne V. Kessler Graduate Student Award, School of Health Sciences, Purdue University

Sam Peterson
2012 Wayne V. Kessler Graduate Student Award, School of Health Sciences, Purdue University
2010 Competitively selected to attend (only 22 students chosen from international pool): Zebrafish Development and Genetics Special Topics Course at Marine Biological Laboratory in Woods Hole, MA
2009 Colgate-Palmolive Award for Student Research Training in Alternative Methods, Society of Toxicology

Journal Editorial Board Member

- *Associate Editor, BMC Genomics* (2016-present)
- *Associate Editor, Ecotoxicology* (Jan. 2011-present)
- *Associate Editor, Frontiers in Genetics* (Jan. 2014-present)
- *Toxicological Sciences* (2019-present)
- *Journal of Purdue Undergraduate Research (2015-present)*

- Guest Editor Special Issue of *International Journal of Molecular Sciences* (2020)
- Guest Editor Special Issue of *Toxics* (2019)
- Guest Editor Special Issue of *Metallomics* (2015-2016)

Reviewer for Journals

- *African Journal of Biotechnology*

- *Alzheimer's and Dementia: The Journal of the Alzheimer's Association*
- *Aquatic Toxicology*
- *Archives of Toxicology*
- *Biochemistry and Cell Biology*
- *BMC Genomics*
- *Cell Biology and Toxicology*
- *Chemical Research and Toxicology*
- *Chemosphere*
- *Comparative Biochemistry and Physiology*
- *Computer Methods and Programs in Biomedicine*
- *Critical Reviews in Environmental Science and Technology*
- *Current Medicinal Chemistry*
- *Current Zoology*
- *Drug and Chemical Toxicology*
- *Ecotoxicology*
- *Ecotoxicology and Environmental Safety*
- *eNeuro*
- *Environmental Health Perspectives*
- *Environmental Pollution*
- *Environmental Research*
- *Environmental Science and Technology*
- *Environmental Toxicology*
- *Environmental Toxicology and Chemistry*
- *Environmental Toxicology and Pharmacology*
- *Epigenomics*
- *Evidence-Based Complementary and Alternative Medicine*
- *Food and Chemical Toxicology*
- *Genes, Brain, and Behavior*
- *Genome*
- *International Journal of Environmental Health Research*
- *International Journal of Molecular Sciences*
- *International Journal of Toxicology*
- *Journal of Cardiovascular Development and Disease*
- *Journal of Cancer Clinical Trials*
- *Journal of Proteomics*
- *Journal of Toxicology and Environmental Health, Part A: Current Issues*
- *JOVE*
- *Life Sciences*
- *Metabolic Brain Disease*
- *Molecular Reproduction and Development*
- *Mutation Research: Genetic Toxicology and Environmental Mutagenesis*
- *Nanotoxicology*
- *Nature Materials*
- *Nature Scientific Reports*
- *Neurotoxicology*
- *Neurotoxicology and Teratology*
- *Oncotarget*
- *Pakistan Journal of Zoology*
- *PeerJ*
- *PLOS One*
- *Progress in Neuropsychopharmacology and Biological Psychiatry*
- *Reviews on Environmental Health*

- *Science of the Total Environment*
- *Toxicological Sciences*
- *Toxicology and Applied Pharmacology*
- *Toxicology Reports*
- *Toxics*
- *Zebrafish*

Reviewer for tenure and promotion committees external to Purdue

- University of New Mexico (2020-2021)
- University of Massachusetts-Amherst (2017-2018)