Melissa M. Heintz, Ph.D.

ASSOCIATE DIRECTOR, HEALTH SCIENCES

MANAGING SCIENTIST

CONTACT INFORMATION

ToxStrategies, A BlueRidge Life Sciences Company
31 College Place, Suite 118
Asheville, NC 28801
Phone (828) 393-0389 x8007
mheintz@toxstrategies.com

PROFESSIONAL PROFILE

Dr. Melissa Heintz is a toxicologist in ToxStrategies' Health Sciences practice. Her primary areas of expertise include human health and ecological risk assessment, environmental chemical hazard screening, and mechanistic toxicology. Dr. Heintz has provided support to a diverse client base, including government (federal and state), chemical and consumer care product industries, and non-governmental organizations. She has experience evaluating health effects and developing health-based safety benchmarks for a wide range of substances, including environmental contaminants such as per- and polyfluoroalkyl substances (PFAS), phthalates, hydrocarbon solvents, and chlorinated chemistries, as well as food additives and select pharmaceuticals using weight of evidence (WoE) approaches that incorporate systematic literature reviews and meta-analyses, in addition to epidemiological, *in vitro, in vivo,* and *in silico* data.

Dr. Heintz is an expert in designing and implementing *in vitro* and *in vivo* studies that utilize new approach methodologies (NAMs) including 'omic applications to answer toxicity questions, including chemical prioritization and screening, mode of action, and transcriptomic reference value derivation for protecting ecological or human health. In addition, she has applied systematic review approaches to the benefit/risk analysis of food ingredients and contaminants, GRAS dossier submissions, and adverse outcome pathway (AOP) development.

Dr. Heintz has presented her research at national and international scientific meetings and reported her results in peer-reviewed scientific journals. She also has more than 15 years of experience in science communication, and has disseminated scientific research findings to students at all education levels, including K-12 and college students, as well as the general public.

EDUCATION AND DEGREES EARNED

2020 Ph.D., Environmental Toxicology, Clemson University, Clemson, SC

2013 M.S., Marine Biology, University of North Carolina, Wilmington, NC

2011 B.S., Biology (marine biology concentration), Saint Francis University, Loretto, PA

PROFESSIONAL ASSOCIATIONS

2017–present Society of Toxicology

- Computational Toxicology Specialty Section
- Risk Assessment Specialty Section
- Women in Toxicology Specialty Section
- Southeastern Regional Chapter (2016–2019)

2021–present Society of Environmental Toxicology and Chemistry

- OMIC Special Interest Group
- Endocrine Disrupter Testing and Risk Assessment
- Carolinas Regional Chapter (2011–2013; 2018–2020)

2021-present The Toxicology Forum

PROFESSIONAL ACTIVITIES, SERVICE, HONORS, AND AWARDS

2024-2027 SOT Continuing Education Committee Member

2024-2026 Junior Councilor for Risk Assessment Specialty Section

2021-2025 ICCF Expert Working Group member for the Environmental Safety Assessment of Animal Feed Ingredients

2022-2024 Risk Assessment Specialty Section Awards Committee Volunteer

2022-2024 Women in Toxicology Specialty Section Volunteer

2022-2023 Toxicology Forum Program Planning Committee Member

2022 SETAC 2022 Scientific Program Committee Member

2020 Student Ambassador for PRIMO20 conference, Charleston, SC

2020 Clemson Biological Sciences Commitment to Service Award

2020 Department of Biological Sciences Engagement Award

2020 Society of Toxicology Graduate Student Travel Award

2020 Clemson Graduate Travel Grant (spring)

2019 Organizing committee member for Clemson Biological Sciences Annual Student Symposium

2019 Clemson Graduate Travel Grant (summer)

2019	Clemson Biological Sciences Commitment to Service Award
2018–2021	Save Our Saluda (nonprofit to protect and restore the Upper Saluda Watershed): Board member and secretary
2018	American College of Toxicology North American Travel Grant
2018	Clemson Graduate Travel Grant (spring and fall)
2017	NIH grant to fund participation in Mount Desert Island Biological Laboratory's Environmental Genomics course
2013	UNCW Making a Difference in North Carolina Award

SELECTED PROFESSIONAL EXPERIENCE

Application of New Approach Methodologies (NAMs)

Conducted whole transcriptome analyses and data visualization of sample data from *in vitro* and *in vivo* studies using an established bioinformatic workflow, including quality control assessment of samples, data normalization, identification of differentially expressed genes using DESeq, gene set enrichment analyses, Ingenuity Pathway Analysis (IPA), and benchmark dose analysis using BMDExpress. Transcriptomic data were then utilized as part of a WoE approach to inform hazard characterization, toxicological mechanisms and mode of action analyses, and/or ecological or human health-based reference value derivation.

Interpreted large sets of *in vitro* high-throughput screening (HTS) assay data available through the ToxCast/Tox21 screening programs in support of chemical prioritization and screening assessments.

Developed case studies and workflows advancing NAMs application in ecological risk assessment to increase confidence across the industry and regulatory sectors. Assisted in developing a case study employing toxicogenomic technologies relevant to ecological receptors to understand how NAMs, specifically toxicogenomics, can be used to support ecological risk assessment. Existing regulatory frameworks that consider toxicogenomics in ecological risk assessment were first reviewed and evaluated, as well as the applications of those frameworks. A case study was then designed and conducted using transcriptomics data to fill identified data gaps and further define the applicability of transcriptomics technologies in ecological risk assessment.

Ecotoxicology

Led the development of over 250 acute and chronic proposed water quality values protective of aquatic life for contaminants of emerging concern for a state regulatory agency. To develop proposed thresholds, existing water quality criteria and benchmarks from federal and state agencies were reviewed. In addition, existing data from EPA's ECOTOX Knowledgebase and the peer-reviewed literature was reviewed and used to develop proposed aquatic life threshold values in compliance with existing guidance from a state regulatory agency.

Developed predicted no-effect concentrations (PNECs) protective of aquatic life for select short-chain PFAS.

Investigated endocrine disruption effects in *Menidia menidia* populations in the Lower Cape Fear River region of North Carolina. Sampled fish populations near paper mill and wastewater effluents, and livestock feedlot runoff, and examined exposure effects on endpoints that included vitellogenin, fecundity, gonad histology, and secondary sex characteristics.

Studied effects of EDC exposure on risk-taking and foraging behavior in freshwater fish (*Poecilia reticulata*) after exposure to the estrogenic compound, 17α-ethinylestradiol (EE2), and the androgenic compounds, 17α/β-trenbolone, individually and in mixtures.

Systematic Review

Conducted systematic reviews for environmental chemicals with large literature data sets, investigating a variety of endpoints and outcomes of interest. Responsible for initial scoping and problem formulation, developing search syntax, literature screening and full-text review using literature review tools (e.g., SWIFT, DistillerSR), analyzing reliability and strength of evidence, and reporting findings.

Developed standardized search syntax for classifying and identifying relevant literature for various toxicological endpoints and exposure (e.g., genotoxicity, nephrotoxicity, cancer, acute or chronic) using various search engines (e.g., PubMed; Embase).

Used systematic review to conduct a benefit/risk analysis for foods, where the hazards and safety of flavoring methods for consumer foods were compared and evaluated in a tiered assessment.

Conducted safety and exposure assessment for multiple GRAS dossiers, including literature searches and interpreting and summarizing toxicity, safety, and exposure data from publicly available literature and regulatory bodies, in both animal feed- and human-food-relevant contexts.

Utilized systematic review approaches to develop an AOP for neonatal mortality in rodents.

PEER-REVIEWER

Regulatory Toxicology and Pharmacology

Toxicological Sciences

Environmental Pollution

Aquatic Toxicology

Frontiers in Toxicology

Frontiers in Nutrition

Environmental Health Insights

Environmental Research

Computers in Biology and Medicine

PEER-REVIEWED PUBLICATIONS

Thompson CM, **Heintz MM**, Cullen JM, Haws LC. 2026. Evaluation of chronic toxicity and carcinogenicity of HFPO-DA in mice. Regul Toxicol Pharmacol 165(Feb):106014; doi: 10.1016/j.yrtph.2025.106014. PMID: 41391658.

Borghoff SJ, **Heintz MM**, Rivera BN, Haws L, Thompson C. 2025. Evaluation of an anti-thyroid mode of action for thyroid follicular cell adenomas in female mice exposed to tertiary butyl alcohol. Regul Toxicol Pharmacol 163(Dec):105936; doi: 10.1016/j.yrtph.2025.105936. PMID: 40914479.

Heintz MM, Buerger AN, Haws LC, Cullen JM, East AW, Thompson CM. 2025. Comparison of phenotypic and transcriptomic profiles between HFPO-DA and prototypical PPARα, PPARγ, and cytotoxic agents in wild-type and *Ppara*-null mouse livers. Toxicol Sci 206(1):183-201; doi: 10.1093/toxsci/kfaf049. PMID: 40216583.

Kennedy SB, **Heintz MM**, Klaren WD, Wikoff DS, Haws LC, Fitch SE. 2025. An integrated ecotoxicological study reliability framework for use in toxicity value development. Environ Tox Chem 44(4):1142-1153; doi: 10.1093/etojnl/vgaf030. PMID: 39873747.

Lea IA, Buerger AN, Feifarek D, Mihalchik A, **Heintz MM**, Haws LC, Nyambego H, Goyak K, Palermo C, Borghoff SJ. 2025. Evaluation of the endocrine disrupting potential of Di-isononyl phthalate. Curr Res Toxicol 8:100220; doi: 10.1016/j.crtox.2025.100220. Corrigendum 8:100233; doi: 10.1016/j.crtox.2025.100233.

Lea IA, Feifarek D, Mihalchik A, **Heintz M**, Haws L, Nyambego H, Goyak K, Palermo C, Borghoff SJ**.** 2025. Evaluation of the endocrine disrupting potential of Di-isodecyl phthalate. Curr Res Toxicol 8:1002221; doi: 10.1016/j.crtox.2025.100221.

Rogers JM, Buerger AN, **Heintz MM**, Palermo CM, Haws LC, Lea IA. 2025. Evaluation of a hypothesized Sertoli cell-based adverse outcome pathway for effects of diisononyl phthalate on the developing testis. Curr Res Toxicol 8:100219; doi: 10.1016/j.crtox.2025.100219.

Rogers JM, **Heintz MM**, Haws LC. 2025. Reproductive and developmental toxicity screen (OECD TG 421) and extended one generation reproductive toxicity study (OECD TG 443) of decahydronaphthalene in Sprague Dawley rats. Regul Toxicol Pharmacol 160(Aug):105829; doi: 10.1016/j.yrtph.2025.105829. PMID: 40222475.

Wikoff DS, Vincent MJ, **Heintz MM**, Pastula ST, Reichert H, Klaren WD, Haws LC. 2025. Application of a quantitative uncertainty assessment to develop ranges of plausible toxicity values when using observational data in risk assessment: A case study examining associations between PFOA and PFOS exposures and vaccine response. Toxicol Sci 204(1):96-115; doi: 10.1093/toxsci/kfae152. PMID: 39792025.

Heintz MM, Klaren WD, East AW, Haws LC, McGreal SR, Campbell RR, Thompson CM. 2024. Comparison of transcriptomic profiles between HFPO-DA and prototypical PPARα, PPARγ, and cytotoxic agents in wild-type and PPARα knockout mouse hepatocytes. Toxicol Sci 200(1):183–198; doi: 10.1093/toxsci/kfae045. PMID: 38574385.

Heintz MM, Klaren WD, East AW, Haws LC, McGreal SR, Campbell RR, Thompson CM. 2024. Comparison of transcriptomic profiles between HFPO-DA and prototypical PPARα, PPARγ, and cytotoxic agents in mouse, rat, and pooled human hepatocytes. Toxicol Sci 200(1):165–182; doi: 10.1093/toxsci/kfae044. PMID: 38574381.

Racz L, Gauthier A, Bare J, **Heintz M**, Feifarek D, Kennedy S, Panko J. 2024. Assessment of perfluorocarboxylic acids in fluorinated high-density polyethylene containers and estimation of potential non-cancer risks associated with anticipated use scenarios. Regul Toxicol Pharmacol 147(Feb):105560; doi: 10.1016/j.yrtph.2024.105560.

Thompson CM, **Heintz MM**, Cullen JM, Haws LC. 2024. Letter to the Editor of Environmental Pollution: In regard to Wan et al. (2024), "GenX caused liver injury and potential hepatocellular carcinoma of mice via drinking water even at environmental concentration." Environ Pollut 355(Aug 15):124171; doi: 10.1016/j.envpol.2024.1241741.

Heintz MM, Haws LC, Klaunig JE, Cullen JM, Thompson CM. 2023. Assessment of the mode of action underlying development of liver lesions in mice following oral exposure to HFPO-DA and relevance to humans. Toxicol Sci 192(1):15–29, doi: 10.1093/toxsci/kfad004. PMID: 36629480; PMCID: PMC10025879.

Henderson RG, Lefever TW, **Heintz MM**, Trexler KR, Borghoff SJ, Bonn-Miller MO. 2023. Oral toxicity evaluation of cannabidiol. Food Chem Toxicol 176(June):113778; doi: 10.1016/j.fct.2023.113778.

Thompson CM, **Heintz MM,** Wolf JC, Cheru R, Haws LC, Cullen JM. 2023. Assessment of mouse liver histopathology following exposure to HFPO-DA with emphasis on understanding mechanisms of hepatocellular death. Toxicol Pathol 51(1–2):4–14; doi: 10.1177/01926233231159078. PMID: 36987989.

Godfrey G, Laplaca SB, **Heintz MM**. 2022. Developing young watershed citizen scientists through professional partnerships in the classroom. Am Biol Teach 84(4):202-206; doi: 10.1525/abt.2022.84.4.202.

Heintz MM, Chappell GA, Thompson CM, Haws LC. 2022. Evaluation of transcriptomic responses in livers of mice exposed to the short-chain PFAS compound HFPO-DA. Front Toxicol 4:937168; doi: 10.3389/ftox.2022.937168.

Heintz MM, Kumar R, Maner-Smith KM, Ortlund EA, Baldwin WS. 2022. Age- and diet-dependent changes in hepatic lipidomic profiles of phospholipids in male mice: Age acceleration in Cyp2b-null mice. J Lipids 2022:7122738; doi: 10.1155/2022/7122738.

Olack EM, **Heintz MM**, Baldwin WS. 2022. Dataset of endo-and xenobiotic inhibition of CYP2B6: Comparison to CYP3A4. Data in Brief 41:108013; doi: 10.1016/j.dib.2022.108013.

Chappell GA, **Heintz MM**, Borghoff SJ, Doepker CL, Wikoff DS. 2021. Lack of potential carcinogenicity for steviol glycosides — Systematic evaluation and integration of mechanistic data into the totality of evidence. Food Chem Toxicol 150(April):112045; doi: 10.1016/j.fct.2021.112045.

Chappell GA, **Heintz MM**, Haws LC. 2021. Transcriptomic analyses of livers from mice exposed to 1,4-dioxane for up to 90 days to assess potential mode(s) of action underlying liver tumor development. Curr Res Toxicol 2:30–41; doi: 10.1016/j.crtox.2021.01.003.

Doepker CL, **Heintz MM**, van de Ligt J, Wikoff DS. 2021. Review of potential risks associated with supplemental dietary exposure to nitrate-containing compounds in swine—A paradox in light of emerging benefits. Transl Anim Sci 5(4):txab203; doi: 10.1093/tas/txab203.

Hamilton MC, **Heintz MM**, Pfohl M, Marques E, Ford L, Slitt AL, Baldwin WS. 2021. Increased toxicity and retention of perflourooctane sulfonate (PFOS) in humanized CYP2B6-Transgenic mice compared to Cyp2b-null mice is relieved by a high-fat diet (HFD). Food Chem Toxicol 152(June):112175; doi: 10.1016/j.fct.2021.112175.

Heintz MM, Doepker CL, Wikoff DS, Hawks SE. 2021. Assessing the food safety risk of ochratoxin A in coffee: A toxicology-based approach to food safety planning. J Food Sci 86(11):4799-4810; doi: 10.1111/1750-3841.15938.

Heintz MM, Haws LC. 2021. Correspondence to the Editor Regarding Guillette et al. 2020. Elevated levels of per- and polyfluoroalkyl substances in Cape Fear River Striped Bass (Morone saxatilis) are associated with biomarkers of altered immune and liver function. Environ Int 146(Jan):106299; doi: 10.1016/j.envint.2020.106299.

Thompson CM, Aardema MJ, **Heintz MM**, MacGregor JT, Young RR. 2021. A review of mammalian *in vivo* genotoxicity of hexavalent chromium: Implications for oral carcinogenicity risk assessment. Crit Rev Toxicol 51(10):820-849; doi: 10.1080/10408444.2021.2000934.

Heintz MM, Kumar R, Rutledge M, Baldwin WS. 2019. Cyp2b-null male mice are susceptible to diet-induced obesity and perturbations in lipid homeostasis. J Nutr Biochem 70(Aug):125–137; doi: 10.1016/j.nutbio.2019.05.004.

Heintz, MM, McRee, R, Kumar, R, Baldwin, WS. 2020. Gender differences in diet-induced steatotic disease in Cyp2b-null mice. PLoS ONE 15(3):e0229896; doi: 10.1371/journal.pone.0229896.

Heintz MM, Brander SM, White JW. 2015. Endocrine disrupting compounds alter risk-taking behavior in guppies (*Poecilia reticulata*). Ethology 121(5):480–491; doi: 10.1111/eth.12362.

ABSTRACTS AND PRESENTATIONS

Heintz MM, Kennedy SB, Brown L, Fender CL, Hecker M, Hughes SA, Naile J, DeLeo P. Toxicogenomics in ecological risk assessment: Current landscape, research gaps and recommendations to increase confidence across sectors. Abstract 1.02.T-01, Society of Environmental Toxicology and Chemistry (SETAC) North America 46th Annual Meeting, Portland, OR, November 2025.

Heintz MM, Buerger AN, Haws LC, East AW, Cullen JM, Thompson CM. Comparison of phenotypic and transcriptomic profiles between HFPO-DA and prototypical PPARα, PPARγ, and cytotoxic agents in wild-type and PPARα knockout mice. Abstract 3972, Society of Toxicology 64th Annual Meeting, Orlando, FL, March 2025.

Heintz M, Keating A (Co-chairs). Feeling hot hot hot: Exploring the toxicity of heat. Platform Session, Society of Toxicology 64th Annual Meeting, Orlando, FL, March 2025.

Rogers JM, **Heintz MM**, Haws LC. Reproduction/developmental toxicity screen and extended one generation reproductive toxicity study of decahydronaphthalene in Sprague Dawley rats. Abstract 3864, Society of Toxicology 64th Annual Meeting, Orlando, FL, March 2025.

Thompson CM, **Heintz MM**, Cullen JM, Haws LC. Evaluation of the chronic toxicity and carcinogenicity of ammonium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)-propanoate (HFPO-DA) in mice. Abstract 4700, Society of Toxicology 64th Annual Meeting, Orlando, FL, March 2025.

Reátegui-Zirena EG, Lange SS, Jenkins A, **Heintz MM**, Franke K, Perry CS, Thompson C, et al. Acute health-based screening level derivation for cyanotoxins (microcystin, cylindrospermopsin and anatoxins). Abstract 7.05P-Th-197, Society of Environmental Toxicology and Chemistry, 45th Annual Meeting, Fort Worth, TX, October 2024.

Heintz M, Klaren W, East A, Haws L, Thompson C. Delayed transcriptomic responses in PPARa knockout mouse hepatocytes compared to wild-type hepatocytes exposed to HFPO-DA or PPARa agonist GW7647: Support for a PPARa-dependent mode of action for HFPO-DA in mouse hepatocytes. Abstract 4100, Society of Toxicology 63rd Annual Meeting, Salt Lake City, UT, March 2024.

Thompson CM, **Heintz MM**, Rogers SI, Fitch SE, Rivera BN, Klaren WD, Vincent MJ, Wikoff DS, Haws LC. Evidence identification and appraisal supporting development of an updated toxicity value for HFPO-DA. Abstract 3654, Society of Toxicology 63rd Annual Meeting, Salt Lake City, UT, March 2024.

Lea IA, Feifarek D, Mihalchik A, **Heintz M**, Haws L, Nyambego H, Goyak K, Borghoff SJ. Evaluation of the endocrine disrupting potential of di-isodecyl phthalate. Abstract 3930, Society of Toxicology 63rd Annual Meeting, Salt Lake City, UT, March 2024.

Borghoff SJ, Feifarek D, Mihalchik A, **Heintz M**, Haws L, Nyambego H, Goyak K, Lea IA. Evaluation of the endocrine disrupting potential of di-isodecyl phthalate. Abstract 3931, Society of Toxicology 63rd Annual Meeting, Salt Lake City, UT, March 2024.

Lynn SG, Lea IA, Urban J, Borghoff SJ, Wikoff D, Fitch S, Perry C, Choksi N, Britt J, **Heintz M**, Klaren W, et al. Development and application of systematic approach to inventory and interrogate thyroid hormone network information. Abstract 4357, Society of Toxicology 63rd Annual Meeting, Salt Lake City, UT, March 2024.

Haws LC, **Heintz MM**, Thompson CM. Updated mode of action information informing the risk assessment of HFPO-DA (GenX). Poster presented at Society of Toxicology 62nd Annual Meeting, Nashville, TN, March 2023.

Heintz MM, Haws LC, Thompson CM. Assessment of the mode of action underlying development of liver lesions in mice following oral exposure to HFPO-DA (GenX) and relevance to humans. Poster presented at Society of Toxicology 62nd Annual Meeting, Nashville, TN, March 2023.

Klaren WD, **Heintz MM**, East AW, Thompson CM, Haws LC. *In vitro* transcriptomic analyses informing the mode of action of HFPO-DA (GenX) in the liver. Poster presented at Society of Toxicology 62nd Annual Meeting, Nashville, TN, March 2023.

Lea IA, **Heintz MM**, Feifarek D, Haws LC, Borghoff SJ. Weight-of-evidence evaluation of endocrine activity for di-isodecyl phthalate (DIDP) and di-isononyl phthalate (DINP). Poster presented at Society of Toxicology 62nd Annual Meeting, Nashville, TN, March 2023.

Heintz MM, LaPlaca SB, Haws LC. Application of an integrated ecotoxicological study reliability tool in the derivation of predicted no-effect concentrations for short chain and ultrashort chain per- and polyfluoroalkyl substances. Poster presented at Society of Environmental Toxicology and Chemistry (SETAC), Philadelphia, PA, November 2022.

LaPlaca SB, **Heintz MM**, Wikoff D, Haws LC. Multi-step integration of ecotoxicological study reliability in ecological risk assessment. Poster presented at Society of Environmental Toxicology and Chemistry (SETAC), Philadelphia, PA, November 2022.

Heintz MM, Chappell GA, Thompson CM, Wolf JC, Rogers JM, Haws LC. HFPO-DA (GenX) transcriptomic responses in pregnant and non-pregnant rat livers: Analyses to inform the role of maternal effects on neonatal toxicity. Poster presented at Society of Toxicology 61st Annual Meeting, San Diego, CA, March 2022.

Rogers JM, **Heintz MM**, Thompson CM, Haws LC. Development of a putative adverse outcome pathway for neonatal mortality in rodents: Implications for human health risk assessments of PFAS. Poster presented at Society of Toxicology 61st Annual Meeting, San Diego, CA, March 2022.

Heintz MM, Olack EM, Baldwin WS. Human CYP2B6 is an anti-obesity enzyme that produces active α-linolenic acid metabolites. Society of Toxicology 59th Annual Meeting, Virtual, March 2020.

Heintz MM, McRee R, Kumar R, Baldwin WS. Gender differences in diet-induced nonalcoholic steatohepatitis (NASH) in Cyp2b-null mice. Society of Toxicology 59th Annual Meeting, Virtual, March 2020.

Heintz MM, Kumar R, Baldwin WS. Cyp2b-null male mice are susceptible to high-fat diet-induced obesity due to changes in PUFA metabolism and response to hepatic lipids as measured by RNAseq. International Congress on Toxicology (ICTXV), Honolulu, HI, July 2019.

Olack E, **Heintz MM**, Baldwin WS. Human CYP2B6 is an anti-obesity enzyme involved in unsaturated fatty acid metabolism. International Congress on Toxicology (ICTXV), Honolulu, HI, July 2019.

Heintz MM, Sengupta N, Noorai R, Baldwin WS. Triclosan exposure represses development and alters sphingomyelin metabolism in Daphnia magna as determined by RNA-seq and lipidomics. 20th Pollutant Responses in Marine Organisms (PRIMO20, Charleston, SC, May 2019.

Heintz MM, McRee R, Baldwin WS. The role of Cyp2b in diet-induced nonalcoholic steatohepatitis. Invited speaker: Clemson University Environmental Toxicology program seminar, Clemson, SC, April 2019.

Heintz MM, Kumar R, Baldwin WS. Cyp2b-null male mice are susceptible to high-fat diet-induced obesity due to changes in PUFA metabolism and response to hepatic lipids as measured by RNAseq. American College of Toxicology, 39th Annual Meeting, West Palm Beach, FL, November 2018.

Heintz MM, Kumar R, Baldwin WS. Cyp2b-null male mice are susceptible to high-fat diet-induced obesity due to changes in PUFA metabolism and response to hepatic lipids as measured by RNAseq. Southeastern Society of Toxicology meeting, Gainesville, FL, October 2018.

Williams TL, **Heintz MM**, Baldwin WS. Several toxicants increase retention of triglycerides in Daphnia magna and human liver cells. Annual Biomedical Research Conference for Minority Students (ABRCMS), Indianapolis, IN, November 2018.

Williams TL, **Heintz MM**, Baldwin WS. Several toxicants increase retention of triglycerides in *Daphnia magna* and human liver cells. Research Experiences for Undergraduates (REUs), Alexandria, VA, October 2018.

Williams TL, **Heintz MM**, Baldwin WS. Several toxicants increase retention of triglycerides in Daphnia magna and human liver cells. Clemson Summer Research Symposium, July 2018.

Heintz MM, Kumar R, Baldwin WS. The role of Cyp2b in the metabolism of unsaturated fatty acids. #1291, Society of Toxicology 57th Annual Meeting, San Antonio, TX, March 2018.

McRee R, **Heintz MM**, Baldwin WS. Inhibition of CYP2B6 does not necessarily alter toxicity except in the case of chemicals with known active metabolites. Abstract #1292, Society of Toxicology 57th Annual Meeting, San Antonio, TX, March 2018.