# Katherine E. Pelch, PhD

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## ACADEMIC BACKGROUND

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PhD	2011	University of Missouri, Department of Biology (Developmental Toxicology)
BS	2005	University of Missouri, Department of Biology (Biology), Departmental Honors, General
		Honors, and Magna Cum Laude
BS	2005	University of Missouri, Department of Chemistry (Medicinal Chemistry)

## **Appointments**

Education

2	2020	Assistant Professor, University of North Texas Health Science Center
2	2016-2019	Senior Scientist, The Endocrine Disruption Exchange
2	2012-2016	Postdoctoral Fellow, National Toxicology Program Laboratories, National Toxicology
		Program and Office of Health Assessment and Translation, National Institutes of
		Environmental Health Sciences, Research Triangle Park, NC
2	2006-2011	Research Assistant, University of Missouri
2	2005-2006	Senior Research Laboratory Technician, University of Missouri
2	2004-2004	Undergraduate Laboratory Research Assistant, University of Missouri

## **TEACHING**

# **Courses Taught**

**Assistant Professor,** University of North Texas Health Science Center, School of Public Health, Spring 2020 to present

- EOHS 5300 (in person: spring semester 2020; online summer, fall and spring semesters 2020, 2021). Environmental Determinants of Health I. A masters-level course on the environmental determinants that influence human health.
- EOHS 5313 (online: fall semester 2020, 2021). Topics in Global Food Security and Sustainability. A masters-level course exploring the complexities of global and local food systems.

## **Teaching and Mentoring Professional Development**

Teaching Internship, Introductory Biology, University of Missouri, 2010
Preparing Future Faculty, University of Missouri, 2010
College Science Teaching, Division of Biological Sciences, University of Missouri, 2010
Entering Mentoring Workshop, University of Missouri, 2006

### **Guest Lectures & Invited Presentations**

"Urgent evaluation of links between chlorpyrifos and autism development needed." The Health and Environment Alliance: webinar, 2019.

"Protecting Communities from Exposure to Harmful PFAS Chemicals: The Urgent Need for Safe Drinking Water Standards in the Absence of Federal Action." Alaska Collaborative on Health & the Environment: webinar, 2019.

"Endocrine Disruption: What Can You Do?" Invited guest lecture, The Evergreen State College, 2018.

"Is your trip to the store secretly harming marine wildlife?" Science and Cocktails: Lightning Talks: Seattle Aquarium, 2017.

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"Endocrine Disruption in Plastics." Plastics Summit, 2017.

"The Endocrine Disruption Exchange." University of California – Los Angeles Toxics in Everyday Life Symposium, 2017.

"Systematic literature review of bisphenol A (BPA) structural and functional analogues." US Environmental Protection Agency Emerging Topics Forum, 2016.

"Developmental programming by xenoestrogens." US Environmental Protection Agency Endocrine Disrupting Contaminant Seminar, 2012.

"Real-time quantitative PCR and gene expression." University of Missouri Obstetrics, Gynecology and Women's Health Resident Research Conference, 2008.

## **Student Research Supervision**

**Supervised Undergraduate Students** (co-author on presentation\* or publication†)

University of Missouri (2005-2011)

Audrey Bailey\*Joseph Beeman $^t$ Alison Ghormley $^t$ Bridgett Niebruegee $^t$ Emily MilfordJake Redel\*Amy Schroder\* $^t$ Maija Steinberg\*Stacey Winkeler $^t$ 

## RESEARCH AND CREATIVE ACTIVITY

### **Peer Reviewed Publications**

Kwiatkowski C, Andrews D, Birnbaum L, Bruton T, DeWitt J, Knappe D, Maffini M, Miller M, **Pelch KE**, Reade A, Soehl A, Trier X, Venier M, Wagner C, Wang Z, Blum A. 2021. Response to Comment on Scientific Basis for Managing PFAS as a Chemical Class. Environmental Science & Technology Letters. DOI: 10.1021/acs.estlett.1c00049.

Kwiatkowski C, Andrews D, Birnbaum L, Bruton T, DeWitt J, Knappe D, Maffini M, Miller M, **Pelch KE**, Reade A, Soehl A, Trier X, Venier M, Wagner C, Wang Z, Blum A. 2020. The Scientific Basis for Managing PFAS as a Chemical Class. Environmental Science & Technology Letters, 7(8). DOI: 10.1021/acs.estlett.0c00255.

Merrick BA, Phadke DP, Bostrom MA, Shah RR, Wright GM, Wang X, Gordon O, **Pelch KE**, Auerbach SS, Paules RS, DeVito MJ, Waalkes MP, Tokar EJ. 2020. KRAS-retroviral fusion transcripts and gene amplification in arsenic-transformed, human prostate CAsE-PE cancer cells. Toxicology and Applied Pharmacology, 397. DOI: 10.1016/j.taap.2020.115017.

Muncke J, Andersson A-M, Backhaus T, Boucher JM, Almroth BC, Castillo AC, Chevrier J, Demeneix BA, Emmanuel JA, Fini J-B, Gee D, Geueke B, Groh K, Heindel J, Houlihan J, Kassotis CD, Kwiatkowski C, Lefferts LL, Maffini MV, Martin OV, Myers JP, Nadal A, Nerin C, **Pelch KE**, Rojello Fernández S, Sargis RM, Soto AM, Trasande L, Vandenberg L, Wagner M, Wu C, Zoeller RT, Scheringer M. 2020. Impacts of food contact chemicals on human health: a scientific consensus statement. Environmental Health, 19(25). DOI: 10.1186/s12940-020-0572-5.

Akter S, Xu D, Nagel SC, Bromfield J, **Pelch KE**, Wilshire GB, Joshi T. 2019. Machine learning classifiers for endometriosis using transcriptomics and methylomics data. Frontiers in Genetics, 10(766). DOI: 10.3389/fgene.2019.00766.

**Pelch KE**, Li Y, Perera L, Thayer KA, Korach KS. 2019. Characterization of Estrogenic and Androgenic Activities for Bisphenol A-like chemicals (BPs): *In Vitro* Estrogen and Androgen Receptors

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Transcriptional Activation, Gene Regulation, and Binding Profiles. Toxicological Sciences. DOI: 10.1093/toxsci/kfz173.

**Pelch KE**, Reade A, Wolffe TAM, Kwiatkowski CF. 2019. PFAS Health Database: A Protocol for a Systematic Evidence Map. Environment International, 130. DOI: 10.1016/j.envint.2019.05.045.

**Pelch KE**, Wignall JA, Goldstone AE, Ross PK, Blain RB, Shapiro AJ, Holmgren SD, Hsieh J-H, Svoboda D, Auerbach SS, Parham FM, Masten SA, Walker VR, Rooney AA, Thayer KA. 2019. A scoping review of the health effects and toxicological activity of bisphenol A (BPA) structural analogues and functional alternatives. Toxicology, 424. DOI: 10.1016/j.tox.2019.06.006.

Merrick BA, Phadke DP, Bostrum MA, Shah RR, Wright GM, Wang X, **Pelch KE**, Waalkes MP, Auerbach SS; Paules RS, DeVito MJ, Tokar EJ. 2019. Arsenite malignantly transforms human prostate epithelial cells in vitro by gene amplification of mutated KRAS. PLoS ONE 14(4):e0215504. DOI: 10.1371/journal.pone.0215504.

**Pelch KE**, Bolden AL, Kwiatkowski CF. 2019. Environmental Chemicals and Autism: A Scoping Review of the Human and Animal Research. Environmental Health Perspectives, 127(4). DOI: 10.1289/EHP4386.

Bolden AL, Schultz K, **Pelch KE**, Kwiatkowski CF. 2018. Exploring the endocrine activity of air pollutants associated with unconventional oil and gas extraction. Environmental Health, 17(26). DOI: 0.1186/s12940-018-0368-z.

Walker VR, Boyles AL, **Pelch KE**, Holmgren SD, Shapiro AJ, Blystone CR, Devito MJ, Newbold RR, Blain R, Harman P, Thayer KA, Rooney AA. 2018. Human and animal evidence of potential transgenerational inheritance of health effects: An evidence map and state-of-the-science evaluation. Environment International, 115:48-69. DOI: 10.1016/j.envint.2017.12.032.

Li Y, Perera L, Coons LA, Burns K, Ramsey JT, **Pelch KE**, Houtman R, van Beuningen R, Teng CT, Korach KS. 2018. Differential in vitro biological action, coregulator interactions, and molecular dynamic analysis of bisphenol A (BPA), BPAF, and BPS ligand–ERα complexes. Environmental Health Perspectives, 126(1). DOI: 10.1289/EHP2505.

Rochester RR, Bolden A, **Pelch KE**, Kwiatkowski CF. 2017. Potential developmental and reproductive impacts of triclocarban (TCC): a scoping review. Journal of Toxicology, 2. DOI: 10.1155/2017/9679738.

**Pelch KE**, Wignall JA, Goldstone AE, Ross PK, Blain RB, Shapiro AJ, Holmgren SD, Hsieh J-H, Svoboda D, Auerbach SS, Parham FM, Masten SA, Thayer KA. 2017. NTP research report on biological activity of bisphenol A (BPA) structural analogues and functional alternatives. NTP RR4. Research Triangle Park, NC: National Toxicology Program. 4:1-78. DOI: 10.22427/NTP-RR-4

NTP (National Toxicology Program). 2016. Monograph on immunotoxicity associated with exposure to perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). Research Triangle Park, NC: National Toxicology Program.

Howard BE, Phillips J, Miller K, Tandon A, Mav D, Shah MR, Holmgren S, **Pelch KE**, Walker V, Rooney AA, Macleod M, Shah RR, Thayer K. 2016. SWIFT-Review: a text-mining workbench for systematic review. Systematic Reviews, 5(87). DOI: 10.1186/s13643-016-0263-z.

Thayer KA, **Pelch KE**, Birnbaum LS, Bucher JR. 2015. Bisphenols: more unnecessary surprises. Endocrine Disruptors, 4(1):e1131032. DOI: 10.1080/23273747.2015.1131032.

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**Pelch KE,** Tokar EJ, Merrick BA, Waalkes MP. 2015. Differential DNA methylation profile of key genes in malignant prostate epithelial cells transformed by inorganic arsenic or cadmium. Toxicology and Applied Pharmacology, 286:159-167. DOI: 10.1016/j.taap.2015.04.011.

**Pelch KE**, Sharpe-Timms KL, Nagel SC. 2012. Mouse model of surgically-induced endometriosis by auto-transplantation of uterine tissue: lesion characteristics. Journal of Visualized Experiments, 59. e3396. DOI: 10.379/3396.

**Pelch KE,** Carleton SM, Schroder AL, Phillips CL, Nagel SC. 2011. Developmental exposure to low dose xenoestrogens alters femur length and tensile strength in adult mice. Biology of Reproduction, 86(3):69. DOI: 10.1095/biolreprod.111.096545.

Syrcle SM, **Pelch KE**, Schroder AL, Nichols BM, Mills MP, Barrier BF, Havey AD, Nagel SC. 2011. Altered gene expression profile in vaginal polypoid endometriosis resembles peritoneal endometriosis and is consistent with increased local estrogen production. Gynecologic and Obstetric Investigation, 71(2):77-86. DOI: 10.1159/000320736.

**Pelch KE**, Schroder AL, Kimball PA, Sharpe-Timms KL, Davis JW, Nagel SC. 2010. Aberrant gene expression profile in a mouse model of endometriosis mirrors that observed in women. Fertility and Sterility, 93(5):1615-1627. DOI: 10.1016/j.fertnstert.2009.03.086.

Schroder AL, **Pelch KE**, Nagel SC. 2009. Estrogen modulates the expression of putative house keeping genes in the mouse uterus. Endocrine, 35(2):211-219. DOI: 10.1007/s12020-009-9154-6.

Hajduch M, Casteel JE, **Hurrelmeyer KE**, Song Z, Agrawal GK, Thelen JJ. 2006. Proteomic analysis of seed filling in *Brassica napus*: Developmental characterization of metabolic isozymes using high-resolution two-dimensional gel electrophoresis. Plant Physiology, 141(1):32-46. DOI: 10.1104/pp.105.075390.

## **Scientific and Policy Reports, Comments and Resources**

Technical Comments *Re 35 III. Adm. Code 620; Groundwater Quality Pre-Filing Public Comment Period.* Joint comments by Natural Resources Defense Council, Illinois Environmental Council and Sierra Club, Illinois Chapter. June 2025 (**lead co-author**)

PFAS-Tox Database Released April 20, 2021 at https://pfastoxdatabase.org (project lead)

Comments on Maine's Joint Standing Committee on Health and Human Services Hearing of LD164: An Act To Establish Maximum Contaminant Levels under the State's Drinking Water Rules for Certain Perflouroalkyl and Polyflouroalkyl Substances. February 2021 (lead author)

Technical comments on *Vermont Agency of Natural Resources: Advance Notice on the Regulation of Perfluoroalkyl, Polyfluoroalkyl Substances (PFAS) as a Class.* November 2020. (**lead co-author**)

Comments on Washington Department of Health's Draft Recommended State Action Levels for Perand Polyfluoroalkyl Substances (PFAS) in Drinking Water: Approach, Methods and Supporting Information (Chapter 246-290 WAC). January 2019 (lead co-author)

Comments on New Hampshire Department of Environmental Services Proposed Rulemaking to Set Public Drinking Water and Groundwater Standards for PFOA, PFOS, PFNA, & PFHxS (Env-Dw 700-800 and Env-Or 603.03). April 2019. (lead author)

Comments on the U.S. Environmental Protection Agency's Draft Toxicity Assessments for Perfluorobutane Sulfonic Acid (PFBS) and Hexafluoropropylene Oxide Dimer Acid (GenX Chemicals), November 2018. Joint comments by The Endocrine Disruption Exchange, Natural Resources Defense

Council, Sierra Club, Environmental Working Group, and Center for Environmental Health, January 2019. (lead co-author)

Comments to New York Department of Health regarding setting public drinking water standards for PFOA and PFOS. November 2018. (**lead author**)

Comments on New Hampshire Department of Environmental Services Stakeholder Input for Setting Public Drinking Water and Groundwater Standards for PFOA, PFOS, PFNA, & PFHxS. November 2018. (lead author)

Protocol for a systematic map of the evidence of migrating and extractable chemicals from food contact articles. 2018. DOI: 10.5281/zenodo.2525277. (**contributor and expert reviewer**)

Comments on Washington State's Safe Firefighting Foam Bill "Reducing the use of certain toxic chemicals in firefighting activities" (Senate Bill 6413). January 2018. (lead author)

Comments on Washington State's Healthy Food Packaging Bills (House Bill 2658 and Senate Bill 6396). January 2018. (lead author)

Comments on Washington State Department of Ecology Children's Safe Product Act (CSPA) rule (WAC 173-334). May 2017. (lead author)

The Endocrine Disruption's *FrackHealth Database* of peer-reviewed literature on health effects associated with unconventional oil and gas drilling. 2017-2019. (**co-creator and contributor**)

The Endocrine Disruption Exchange's *List of Potential Endocrine Disruptors*. 2016-2019. (**contributor**)

The Endocrine Disruption Exchange's *Endocrine disruption fact sheet*. 2017. (**co-creator**)

Literature review of bisphenol A (BPA) analogues. Extended abstract submitted to the European Chemicals Agency (ECHA) in response to data call-in related to use of BPA in thermal paper. December 11, 2014. (**lead author**)

## **Book Chapters**

**Pelch KE**, Niebrugee BA, Beeman JM, Winkeler SR, Nagel SC. 2010. Endocrine Disruption in Mammals. In Norris DO and Lopez KH (Ed.), *Hormones and Reproduction of Vertebrates – Volume 5 Mammals* (pp. 329-371). San Diego, CA: Elsevier Publishing.

**Pelch KE**, Allison JL, Nagel SC. 2011. Fetal Programming. In Winn H, Chervenak FA, Romero R (Ed.), *Maternal-Fetal Medicine*, 2<sup>nd</sup> Edition (pp. 45.1-45.15). New York: Informa Healthcare.

#### **Presentations**

"Database of PFAS Health and Toxicology Research." The Navigation Guide Workgroup: webinar 2020.

"Database of PFAS Health and Toxicology Research." The National PFAS Contamination Coalition: webinar 2020.

"Environmental influences on the epigenome: Using SWIFT text mining tool to explore the state of the science." National Toxicology Program's Board of Scientific Counselors Meeting, 2015.

"Using SWIFT text mining tool to explore the state of the science: environmental influences on the epigenome." National Toxicology Program's Concept Review Meeting, 2015.

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"Using SWIFT text mining tool to explore the state of the science: environmental influences on the epigenome." NIEHS Data Science Interest Group Meeting, 2015.

"Upcoming *in vitro* and *in vivo* analyses of BPA analogues." NIEHS Intramural Research on Bisphenol A Analogues, 2015.

"Biological activity of BPA structural analogues and functional alternatives." NIEHS Intramural Research on Bisphenol A Analogues, 2015.

"Environmental influences on the epigenome: using SWIFT text mining tool to assess the current state of the science." NIEHS Cross-divisional Minisymposium on Epigenetics, 2015.

## **Scientific Meeting Abstracts**

Akter S, Xu D, Nagel SC, Bromfield J, **Pelch KE**, Wilshire GB, Joshi T. GenomeForest: An Ensemble Machine Learning Classifier for Endometriosis. American Medical Informatics Association Summit, 2020.

Akter S, Xu D, Nagel SC, Bromfield J, **Pelch KE**, Wilshire GB, Joshi T. Machine Learning Classifier for Endometriosis Using Transcriptomics and Methylomics Data. International Society for Computational Biology, 2019.

Akter S, Xu D, Nagel SC, Bromfield J, **Pelch KE**, Wilshire GB, Joshi T. A machine learning approach for the prediction of endometriosis using multi-omics next generation sequencing data. BIO International Convention, 2019.

Merrick BA, Phadke D, Shah RR, **Pelch KE**, Auerbach SS, Paules RS, DeVito M, Waalkes MP, Tokar EJ. Oncogenic KRAS occurs after prolonged *in vitro* arsenite exposure of human prostate epithelial cells. Society of Toxicology's 58<sup>th</sup> Annual Meeting, 2019.

Akter S, Bromfield J, Pelch KE, Wilshire G, Crowder S, Schust D, Barrier B, Davis W, Nagel S, Joshi T. An Integrative Multi-Omics Diagnostic Predictive Model as a Biomarker of Endometriosis. BIO International Convention, 2018.

**Pelch KE**, Bolden AL, Kwiatkowski CF. 2018. Reviewing the Environmental Origins of Autism. Society of Toxicology's 57<sup>th</sup> Annual Meeting, 2018.

Waidyanatha S, Foster P, Gray L, Mcintyre B, Conley J, Sutherland V, **Pelch KE**. 2017. A comparison of the in vivo reproductive and developmental toxicity (DART) endpoints for bisphenol AF and bisphenol A. Society of Toxicology's 56<sup>th</sup> Annual Meeting, 2017.

**Pelch KE**, Li Y, Teng C, Thayer KA, Korach K. 2016. Characterization of estrogenic and antiandrogenic activity for 21 bisphenol A analogues *in vitro*. Gordon Research Conference on Environmental Endocrine Disruptors, 2016.

**Pelch KE** Wignall JA, Goldstone AE, Ross PK, Blain RB, Shapiro AJ, Holmgren SD, Hsieh J-H, Svoboda D, Auerbach SS, Parham FM, Masten SA, Thayer KA. 2016. Systematic review of bisphenol A (BPA) analogues and analysis of high throughput screening data. Gordon Research Seminar on Environmental Endocrine Disruptors, 2016. \*oral presentation

Sutherland V, **Pelch KE**, McIntyre B, Conley JM, Gray LE, Hsieh JH, Truong RT, Lundby Z, Allard P, Foster PM. 2016. Bisphenol AF: correlation of in vitro endocrine responses with in vivo developmental outcomes (a case example). Society of Toxicology's 55<sup>th</sup> Annual Meeting, 2016.

**Pelch KE**, Li Y, Teng C, DeVito M, Thayer K, Korach K. 2015. Characterization of estrogenic activation for 21 bisphenol A analogues *in vitro*. National Institute of Environmental Health Sciences Science Day, 2015.

Walker VR, Holmgren S, **Pelch KE**, Howard B, Shah RR, Thayer KA, Rooney AA. 2015. Utilizing text-mining strategies to address challenges of a literature-based evaluation of transgenerational inheritance of health effects. Genetics and Environmental Mutagenesis Society, 2015.

**Pelch KE**, Walker VM, Hsieh JH, Auerbach SS, Svoboda D, DeVito M, Holmgren S, Tice R, Thayer KA. 2015. Systematic review of bisphenol A (BPA) analogues and analysis of high throughput screening data. Society of Toxicology's 54<sup>th</sup> Annual Meeting, 2015.

Walker VM, Holmgren S, **Pelch KE**, Howard B, Shah R, Thayer K, Rooney A. 2015. Problem formulation of complex environmental health questions: utilizing text mining to address challenges of a literature-based evaluation of transgenerational health effects. Society of Toxicology's 54<sup>th</sup> Annual Meeting, 2015.

**Pelch KE**, Auerbach SS, DeVito M, Holmgren S, Tice R, Thayer KA. 2014. Literature review of bisphenol A (BPA) analogues and analysis of high throughput screening data. National Institute of Environmental Health Sciences Science Day, 2014.

**Pelch KE**, Tokar EJ, Merrick BA, Waalkes MP. 2014. Differential DNA methylation in arsenic- or cadmium- transformed malignant prostate epithelial cells. Society of Toxicology's 53<sup>rd</sup> Annual Meeting, 2014.

Merrick BA, Tokar EJ, Phadke DP, Shah RR, Wang X, Bostrom MA, Gordon O, Wright GM, Burke M, **Pelch KE**, Auerbach SS, Tice RR Waalkes MP. 2014. Genome-wide DNA methylation changes influence gene expression in arsenic-transformed human prostate cells. Society of Toxicology's 53<sup>rd</sup> Annual Meeting, 2014.

Bromfield JJ, **Pelch KE**, Nagel SC. 2013. Perinatal exposure to low dose Bisphenol A (BPA) or diethylstilbestrol (DES) have similar and yet unique effects on adult gene expression in experimental endometriosis. University of Missouri Health Science Research Day, 2013.

Bromfield JJ, **PeIch KE**, Nagel SC. 2013. Gestational exposure to low dose BPA and DES alters endometrial gene expression in response to induced endometriosis and reduces the ovarian follicle reserve. Seventh Copenhagen Workshop on Endocrine Disruptors, 2013.

Merrick BA, Tokar EJ, Phadke, DP, Shah RR, Wang M, Gordon O, Wright GM, Burke M, Baxter SA, **Pelch KE**, Tice RR, Waalkes MP. 2013. Epigenetics of arsenic carcinogenesis and location of methylated DNA sites underlying gene expression changes. Society of Toxicology's 52<sup>nd</sup> Annual Meeting, 2013.

**Pelch KE**, Davis JW, Nagel SC. 2012. Developmental xenoestrogen exposure permanently programs expression of endometriosis related genes in a mouse model. Gordon Research Conference on Environmental Endocrine Disruptors, 2012.

Drobnis EZ, Nabli H, Sharpe-Timms KL, Schulz LC, Nagamatsu T, **Pelch KE**, Schlitt JM, Sherwood RS, Wright SG, Schust DJ. 2012. Establishment of an IUI program for HIV-discordant couples in the United States. American Association of Bioanalysts Annual Meeting and Educational Conference, 2012.

**Pelch KE**, Bailey AM, Kassotis CD, Lin R, Spearow JL, Nagel SC. 2011. Differential strain sensitivity to prepubertal xenoestrogen disruption. University of Missouri Health Sciences Research Day, 2011.

- **Pelch KE**, Bailey AM, Kassotis CD, Lin R, Spearow JL, Nagel SC. 2011. Differential strain sensitivity to prepubertal xenoestrogen disruption. Society for the Study of Reproduction's 44<sup>th</sup> Annual Meeting, 2011.
- **Pelch KE**, Carleton S, Schroder AL, Phillips C, Nagel SC. 2011. Developmental xenoestrogen exposure alters femur length and tensile strength in adulthood. University of Missouri Obstetrics, Gynecology and Women's Health David G. Hall Symposium, 2011. \*oral presentation
- **Pelch KE**, Carleton SM, Schroder AL, Phillips CL, Nagel SC. 2010. Developmental estrogen exposure alters femur length and tensile strength in mice in adulthood. Society for the Study of Reproduction's 43<sup>rd</sup> Annual Meeting: Milwaukee, WI, July 30-August 3, 2010.
- **Pelch KE**, Schroder AL, Redel J, Ghormley A, Sharpe-Timms KL, Nagel SC. 2010. Developmental xenoestrogen exposure permanently programs cytokine gene expression in a mouse endometriosis model. University of Missouri Obstetrics, Gynecology and Women's Health David G. Hall Symposium 2010. \*oral presentation
- **Pelch KE**, Schroder AL, Nagel SC. 2010. Developmental xenoestrogen exposure permanently programs inflammatory cytokine gene expression in mouse endometriosis model. Gordon Research Conference on Environmental Endocrine Disruptors, 2010.
- **Pelch KE**, Schroder AL, Sharpe-Timms KL, Nagel SC. 2010. Aberrant gene expression in a mouse model of endometriosis mirrors that in women. University of Missouri's Graduate Professional Council's Research and Creative Arts Forum, 2010. \*oral presentation
- **Hurrelmeyer KE**, Carleton S, Schroder AL, Phillips C, Nagel SC. 2008. Developmental exposure to DES alters bone geometry and biomechanical properties. University of Missouri Obstetrics, Gynecology and Women's Health Division Retreat, 2008. \*oral presentation
- **Hurrelmeyer KE**, Schroder AL, Kimball P, Niebruegee B, Beeman J, Ghormley A, Sharpe-Timms KL, Nagel SC. 2008. Aberrant gene expression in a mouse model of endometriosis mirrors that in women. University of Missouri Obstetrics, Gynecology and Women's Health David G. Hall Symposium, 2008. \*oral presentation
- **Hurrelmeyer KE**, Carleton SM, Schroder AL, Phillips CL, Nagel SC. 2008. Developmental exposure to DES alters bone geometry and biomechanical properties. Gordon Research Conference on Environmental Endocrine Disruptors, 2008.
- Kimball PA, **Hurrelmeyer KE**, Schroder AL, Spearow JL, Nagel SC. 2008. Characterization of estrogen sensitivity in C57Bl6 and CD10 ERIN Mice. Gordon Research Conference on Environmental Endocrine Disruptors, 2008.
- Schroder AL, **Hurrelmeyer KE**, Nagel SC. 2008. Estrogen regulation of common house keeping genes in the mouse uterus. Gordon Research Conference on Environmental Endocrine Disruptors, 2008.
- **Hurrelmeyer KE**, Ghormley AL, Redel JM, Schroder AL, Steinberg ML, Sharpe-Timms KL, Nagel SC. 2007. Developmental exposure to xenobiotic estrogens permanently programs expression of extracellular matrix and adhesion molecules in a mouse endometriosis model. Society for the Study of Reproduction's 40<sup>th</sup> Annual Meeting, 2007. \*oral presentation

**Hurrelmeyer KE**, Ghormley AL, Redel JM, Schroder AL, Steinberg ML, Sharpe-Timms KL, Nagel SC. 2007. Developmental exposure to xenobiotic estrogens permanently programs expression of extracellular matrix and adhesion molecules in a mouse endometriosis model. University of Missouri Life Sciences Week, 2007.

Nagel SC, **Hurrelmeyer KE**, Sharpe-Timms KL, Schroder AL, Redel JM, Ghormley AL, Myears HE. 2007. Developmental exposure to DES permanently programs Timp-1 gene expression and exacerbates endometriosis in a mouse model. Society for Gynecologic Investigation, 2007.

**Hurrelmeyer KE**, Ghormley AL, Myears HE, Redel JM, Schroder AL, Sharpe-Timms KL, Nagel SC. 2006. Developmental exposure to DES permanently programs expression of endometriosis related genes in a mouse model. University of Missouri Health Science Research Day, 2006.

**Hurrelmeyer KE**, Ghormley AL, Sharpe-Timms KL, Nagel SC. 2006. Prenatal exposure to DES permanently programs expression of TIMP-1 in a mouse endometriosis model. Society for the Study of Reproduction's 39<sup>th</sup> Annual Meeting, 2006. \*oral presentation

**Hurrelmeyer KE**, Ghormley AL, Nagel SC, Sharpe-Timms KL. 2006. Prenatal exposure to DES permanently programs expression of TIMP-1 in a mouse endometriosis model. Gordon Research Conference on Environmental Endocrine Disruptors, 2006.

**Hurrelmeyer KE**, Ghormley AL, Nagel SC, Sharpe-Timms KL. 2006. Prenatal exposure to DES permanently programs expression of TIMP-1 in a mouse endometriosis model. University of Missouri Life Sciences Week, 2006.

Ghormley AL, **Hurrelmeyer KE**, Sharpe-Timms KL, Nagel SC. Prenatal exposure to xenoestrogens and the development of endometriosis in adulthood. American Association for the Advancement of Science Annual Meeting, 2006.

Hajduch M, Casteel JE, **Hurrelmeyer KE**, Song Z, Agrawal GK, Thelen JJ. Proteomics of seed filling in oilseeds: a proteomics perspective on carbon assimilation in *Brassica napus*. International Plant & Animal Genomes XIV Conference, 2006.

Hajduch M, Casteel JE, **Hurrelmeyer KE**, Song Z, Agrawal GK, Thelen JJ. 2005. Integrated proteomics approach for analysis of *Brassica napus* seed filling - high protein identification rate with limited database resources. NSF-VBI-Noble Workshop, 2005.

**Hurrelmeyer KE**, Thelen JJ. Proteomics of integral membrane proteins from developing *Brassica napus*. University of Missouri Summer Undergraduate Research Conference, 2004.

**Hurrelmeyer KE**, Thelen JJ. Isolation and profiling of integral membrane proteins form developing *Brassica napus*. University of Missouri Undergraduate Research Conference, 2004.

## **AWARDS**

# **Funded External Grant Proposals**

Sigma Xi Grant in Aid of Research, 2010. Towards the development of a non-invasive diagnostic test for endometriosis. \$400. Katherine Pelch.

### **Funded Internal Fellowship**

University of Missouri Clinical Biodetectives Training Grant (NIH T90), 2007-2010. Understanding the etiology of endometriosis. \$42,000. Katherine Pelch and Susan Nagel.

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#### **Research Awards**

3<sup>rd</sup> Place Postdoctoral Research Award for "Differential DNA methylation in arsenic- or cadmium-transformed malignant prostate epithelial cells" by Pelch KE, Tokar EJ, Merrick BA, Waalkes MP; Metals Specialty Section of the Society of Toxicology's 53<sup>rd</sup> Annual Meeting, 2014.

Larry Ewing Memorial Trainee Travel Award for "Differential strain sensitivity to prepubertal xenoestrogen disruption" by Pelch KE, Bailey AM, Kassotis CD, Lin R, Spearow JL, Nagel SC; Society for the Study of Reproduction Annual Meeting, 2011.

Larry Ewing Memorial Trainee Travel Fund, for "Developmental estrogen exposure alters femur length and tensile strength in mice in adulthood" by Pelch KE, Carleton SM, Schroder AL, Phillips CL, Nagel SC; Society for the Study of Reproduction Annual Meeting, 2010.

Research Presentation Award for "Developmental xenoestrogen exposure permanently programs cytokine gene expression in a mouse endometriosis model" by Pelch KE, Schroder AL, Redel J, Ghormley A, Sharpe-Timms KL, Nagel SC; David G. Hall Symposium University of Missouri, 2010.

Graduate Professional Council Travel Grant, for "Developmental xenoestrogen exposure permanently programs inflammatory cytokine gene expression in mouse endometriosis model" by Pelch KE, Schroder AL, Nagel SC; Gordon Research Conference on Environmental Endocrine Disruptors, 2010.

University of Missouri Biology Graduate Student Association Travel Grant for "Developmental exposure to xenobiotic estrogens permanently programs expression of extracellular matrix and adhesion molecules in a mouse endometriosis model" by Hurrelmeyer KE, Ghormley AL, Redel JM, Schroder AL, Steinberg ML, Sharpe-Timms KL, Nagel SC; Society for the Study of Reproduction Annual Meeting, 2007.

## SERVICE

## **University and Professional Service**

Member, HEEDS Mentoring Advising Work Group, 2018-present

Member, CHE EDC Strategies Partnership Webinars Planning Committee, 2018-2019

Co-chair, Gordon Research Symposium on Environmental Endocrine Disruptors, 2018

Coordinator, NIEHS Intramural Research on Bisphenol A Analogues Meeting, 2015

Rapporteur, Shift Work at Night, Artificial Light at Night, and Circadian Disruption Workshop, National Institute of Environmental Health Sciences, 2016

Rapporteur, Expert Panel Meeting: Identifying Research Needs for Assessing Safe Use of High Intakes of Folic Acid, National Institutes of Health, 2015

Member, National Toxicology Program Laboratories Seminar Series Committee, 2013

Co-coordinator, Endocrine Disruptor Discussion Group, 2010-2011

Discussion Group Leader for Mizzou's One Read Program, University of Missouri, 2010

### **Professional Affiliations**

Society of Toxicology, Member, 2014-present
Lone Star Society of Toxicology Member 2019-present
The Griffith's Leadership Society for Women, member, 2010-2011
Sigma Xi Scientific Research Society, member, 2009-2011
Society for the Study of Reproduction, member, 2005-2011, 2015

# Other Professional Service Activities Manuscript referee

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Birth Defects Research; Chemosphere; Current Research in Toxicology; Environment International; Environmental Health Perspectives; Environmental Pollution; Environmental Research, Frontiers in Public Health, Toxicology

### **Community Outreach**

Expert discussion panelist for Clean Water Webinar: Panel Discussion, online event hosted by Environment Texas, 2021

Student podcast, online event for National Public Health Week Conversations: Environmental Science + Public Health hosted by ASPPH, 2021

Expert discussion panelist for A Teach-In Discussing PFAS in Vermont, online event hosted by Conservation Law Foundation, 2020

Expert discussion panelist for Dark Waters Screening: Panel Discussion, online event hosted by Environment Texas, 2020

Expert discussion panelist for Plastics and Covid-19: Panel Discussion, online event hosted by Environment Texas, 2020

Expert discussion panelist for The Devil We Know Film Series, NH, 2019

Presenter at Timberlane Regional School District Science, Technology, Engineering, Arts, and Mathematics (STEAM) Event, Plaistow, NH, 2018

Guest Blog for Toxic Free Future, "The Problem With D4: A Science in Policy Action Brief," May 8, 2007

Case study leader for "BPA and Its Replacements" for NIEHS Science, Teachers & Research Summer (STaRS) Institute, 2015

Facilitator for hands on DNA isolation workshop for NIEHS Family Day, 2013

### MEDIA

Sally Crocker. "Public health scientist lends expertise to national database addressing safer use of chemicals in our environment" SPH News, 11, June 2021. https://www.unthsc.edu/school-of-public-health/public-health-scientist-lends-expertise-to-national-database-addressing-safer-use-of-chemicals-in-our-environment/

Hogue, Cheryl. "New database amasses toxicity studies on PFAS" Chemical and Engineering News, 24, April 2021. https://cen.acs.org/environment/persistent-pollutants/New-database-amasses-toxicity-studies/99/i15

Samsel, Haley. "Grand Prairie Fire Is out, but Concerns about Air Quality, Water Contamination Remain." Star-Telegram, 21 Aug. 2020, https://www.star-telegram.com/news/local/article245146670.html.

Samsel, Haley. "Cancer-Causing Chemicals Found in Fort Worth Well. Could They Be in City Water?" Star-Telegram, 10 July 2020, https://www.star-telegram.com/article244096547.html

Nicole Wendee. "Getting the Lay of the Land: Human and Animal Evidence on Environmental Chemicals and Autism." Environmental Health Perspectives, vol. 127, no. 9, p. 094002. ehp.niehs.nih.gov (Atypon), doi:10.1289/EHP5674.

Bienkowski, Brian. "BPA-Free? Substitutions Mimic Hormones in Breast Cancer Cells." EHN, 15 Mar. 2017, https://www.ehn.org/bpa-free\_substitutions\_mimic\_hormones\_in\_breast\_cancer\_cells-2497125325.html.

Samantha, Hall. "Former NIEHS Trainee Transitions to Nonprofit Work." Environmental Factor, January 2017. National Institute of Environmental Health Sciences, https://factor.niehs.nih.gov/2017/1/awards-recognition/nonprofit/index.htm.

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