Exponent®
Engineering & Scientific Consulting

Sara Hearon, Ph.D., M.P.H.
Managing Scientist | Environmental and Earth Sciences
Austin
+1-512-634-2960 | shearon@exponent.com

Professional Profile

Dr. Hearon is a toxicologist with an interdisciplinary background in biomedical sciences, public health, and environmental and regulatory toxicology. She performs chemical exposure and human health risk assessments, product stewardship and regulatory compliance program development, and industrial hygiene evaluations.

Dr. Hearon's product stewardship work involves managing consumer product due diligence assessments including tracking developing regulations, assisting clients with evaluating products for regulatory compliance, and reviewing health, safety, and toxicological data on product components. Dr. Hearon excels at supporting clients in understanding and addressing current and anticipated future regulations for emerging chemicals of concern, assists in developing regulatory compliance and product stewardship programs, and advises on potential compliance issues with products and supply chains. She actively tracks the development of regulations for emerging chemicals of concern in the US at the federal and state level, including state consumer product programs such as California DTSC's Safer Consumer Products program, Safer Products for Washington, and Oregon's Toxic Free Kids Act. She conducts chemical and product reviews and coordinates product testing for consumer products to support compliance assessments.

Dr. Hearon is experienced with California's Proposition 65, including deriving Safe Harbor Levels using established regulatory guidance and best practice scientific principles, and conducting exposure assessments for consumer products. Dr. Hearon also supports occupational assessments and other industrial hygiene evaluations, including assessments of chemicals of concern in indoor environments as well as mitigation and control of mold and microbial agents. She is experienced with conducting toxicological analyses and developing exposure and risk assessments for occupational and environmental settings.

Dr. Hearon's academic background and areas of focus included human health risk assessments and the fate and transport of contaminants in the environment. As part of this work, she developed broad-acting sorbents to reduce human exposures to environmental chemicals. She also worked on the application of these sorbents to reduce the bioavailability of contaminants from soil, specifically glyphosate, perfluorooctanoic acid (PFOA), and perfluorooctanesulfonic acid (PFOS). During her doctoral research, Dr. Hearon also worked on product development research for a nutritional animal feed additive to address mycotoxins and supported translation of the product to the market.

Academic Credentials & Professional Honors

Ph.D., Toxicology, Texas A&M University, 2021

M.P.H., Environmental Health, Texas A&M University, 2017

B.S., BIOMEDICAL SCIENCE, Texas A&M University, 2015

Research Intern, Texas Department of State Health Services (DSHS) Chemical Threat Laboratory, 2018

National Institute of Environmental Health Sciences Superfund Research Program Trainee, 2018-2021

National Institute of Health T32 Trainee Fellowship, 2017

Exponent Excellence Awards (2), 2024

Prior Experience

Laboratory Manager, Albion Environmental, 2014 - 2017

Publications

Scrafford, C.G., Davis, B.J.K., Higgins, K.A., Moynihan, E., Morris-Schaffer, K., Anderson, M., Rackl, S.M., Hearon, S. and Davis, D., 2025. Estimated Long-Term Dietary Exposure to Cadmium from Consumption of Spinach in the United States: A Probabilistic Assessment. Food and Chemical Toxicology, p.115269.

Wang, M., A. A. Orr, J. M. Jakubowski, K. E. Bird, C. M. Casey, S. E. Hearon, P. Tamamis and T. D. Phillips (2021). Enhanced adsorption of per- and polyfluoroalkyl substances (PFAS) by edible, nutrient-amended montmorillonite clays. Water Research 188: 116534.

Hearon, S. E., M. Wang, T. J. McDonald and T. D. Phillips (2021). Decreased bioavailability of aminomethylphosphonic acid (AMPA) in genetically modified corn with activated carbon or calcium montmorillonite clay inclusion in soil. Journal of Environmental Sciences 100: 131-143.

Wang, M., S. E. Hearon and T. D. Phillips (2020). A high capacity bentonite clay for the sorption of aflatoxins. Food Additives & Contaminants: Part A 37(2): 332-341.

Orr, A. A., S. He, M. Wang, A. Goodall, S. E. Hearon, T. D. Phillips and P. Tamamis (2020). Insights into the interactions of bisphenol and phthalate compounds with unamended and carnitine-amended montmorillonite clays. Computers & Chemical Engineering 143: 107063

Hearon, S. E., M. Wang and T. D. Phillips (2020). Strong Adsorption of Dieldrin by Parent and Processed Montmorillonite Clays. Environmental Toxicology and Chemistry 39(3): 517-525.

Wang, M., S. Safe, S. E. Hearon and T. D. Phillips (2019). Strong adsorption of Polychlorinated Biphenyls by processed montmorillonite clays: Potential applications as toxin enterosorbents during disasters and floods. Environmental Pollution 255: 113210.

Wang, M., S. E. Hearon and T. D. Phillips (2019). Development of enterosorbents that can be added to food and water to reduce toxin exposures during disasters. Journal of Environmental Science and Health, Part B 54(6): 514-524.

Wang, M., S. E. Hearon, N. M. Johnson and T. D. Phillips (2019). Development of broad-acting clays for the tight adsorption of benzo[a]pyrene and aldicarb. Applied Clay Science 168: 196-202.

Phillips, T. D., M. Wang, S. E. Elmore, S. Hearon and J.-S. Wang (2019). NovaSil Clay for the Protection of Humans and Animals from Aflatoxins and Other Contaminants. Clays and Clay Minerals 67(1): 99-110.

Presentations

Hearon SH, Orr AA, Wang M, Tamamis P, Phillips TD. Reduction of per- and polyfluoroalkyl substance (PFAS) bioavailability from soil and translocation to plants with parent and modified montmorillonite clays. Poster presentation, Society of Toxicology Annual Meeting, Virtual, 2021.

Hearon SH, Wang M, Phillips TD. Reduction of the bioavailability of PFAS (per- and polyfluoroalkyl substances) from soil and their translocation to plants in the presence of parent and amended montmorillonite clays. Poster presentation, Superfund Research Program Annual Meeting, Virtual, 2020.

Hearon SH, Wang M, Phillips TD. Carbonaceous and Clay-Based Sorbents Can Reduce Chemical Bioavailability From Soil and Translocation to Plants. Platform presentation, Society of Environmental Toxicology and Chemistry North America 41st Annual Meeting, Virtual, 2020.

Hearon SH, Wang M, Phillips TD. Development of Soil Amendments to Reduce Exposures to Hazardous Environmental Contaminants. Seminar presentation, Texas A&M Toxicology Fall Seminar Series, College Station, TX, 2020.

Hearon SH, Wang M, Phillips TD. Reduction of AMPA bioavailability with biochar and calcium montmorillonite clay. Platform presentation, Society of Toxicology Annual Meeting: Texas Edition, Virtual, 2020.

Hearon SH, Wang M, Phillips TD. Reduction of pesticide bioavailability with biochar and clay-based sorbents. Platform presentation, Society of Environmental Toxicology and Chemistry, Young Environmental Scientists Meeting, Waco, TX, 2020.

Hearon SH, Wang M, Phillips TD. Montmorillonite clays can be used to reduce pesticide bioavailability in soil. Poster presentation, Superfund Research Program Annual Meeting, Seattle, WA, 2019.

Hearon SH, Wang M, Phillips TD. Reduction of Pesticide Bioavailability with Charcoal and Clay-Based Sorbents. Poster presentation, Lone Star Society of Toxicology Annual Meeting, Galveston, TX, 2019.

Hearon SH, Wang M, Phillips TD. Strong Adsorption of Environmental Chemicals by Charcoal and Clay-Based Sorbents. Seminar presentation, Texas A&M Toxicology Fall Seminar Series, College Station, TX, 2019.

Hearon SH, Wang M, Phillips TD. Strong Adsorption of Dieldrin by Charcoal and Clay-Based Sorbents. Poster presentation, Texas A&M Annual Toxicology and Regulatory Science Symposium, College Station, TX, 2019.

Hearon SH, Wang M, Phillips TD. Variable Binding Capacities for Activated Charcoals from Different Sources” Poster presentation, Society of Toxicology Annual Meeting. Baltimore, MD, 2019.

Hearon SH, Wang M, Phillips TD. Activated Charcoal as a Broad-Acting Sorbent for Endocrine Disrupting Chemicals. Poster presentation, College of Veterinary Medicine Research Symposium, College Station, TX, 2019.

Hearon SH, Hamilton K, Hover-Jeansonne J. Validation of an ICP-MS Clinical Method for Determination of Multiple Toxic Elements in Urine. Poster presentation, Lone Star Society of Toxicology Annual Meeting, Austin, TX, 2018.