

## **HEATHER E. PREISENDANZ (GALL)**

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### **EDUCATION**

#### **Ph D, Civil & Environmental Engineering**

Purdue University, School of Civil Engineering, West Lafayette, IN, 2011.

#### **MS, Civil & Environmental Engineering**

Purdue University, School of Civil Engineering, West Lafayette, IN, 2008.

#### **BS, Civil & Environmental Engineering (Minor: Geological Science)**

Rutgers University, New Brunswick, NJ, 2007.

### **PROFESSIONAL EXPERIENCE**

**July 2024 – Present:** Professor of Natural Resources Engineering, Department of Agricultural and Biological Engineering, The Pennsylvania State University, University Park, PA.

**March 2024 – Present:** Director, Institute of Sustainable Agricultural, Food, and Environmental Science, College of Agricultural Sciences, The Pennsylvania State University, University Park, PA.

**September 2022 – March 2024:** Associate Director of Research, Institute of Sustainable Agricultural, Food, and Environmental Science, College of Agricultural Sciences, The Pennsylvania State University, University Park, PA.

**2019 – 2024:** Associate Professor of Natural Resources Engineering, Department of Agricultural and Biological Engineering, The Pennsylvania State University, University Park, PA.

**2013 – 2019:** Assistant Professor of Natural Resources Engineering, Department of Agricultural and Biological Engineering, The Pennsylvania State University, University Park, PA.

**2013:** Visiting Assistant Professor, Department of Civil and Environmental Engineering, Purdue University, West Lafayette, IN.

**2011-2013:** Visiting Assistant Professor, Department of Civil and Environmental Engineering, Purdue University, West Lafayette, IN.

### **LICENSURES AND CERTIFICATIONS**

Fundamentals of Engineering / Engineer in Training. (2007)

## **PROFESSIONAL MEMBERSHIPS**

Member, American Chemical Society. (2022 - Present).

Member, European Geophysical Union. (January 2021 - Present).

Member, Science of Environmental Toxicology and Chemistry. (2019 - Present).

Member, International Erosion Control Association. (2017 - Present).

Member, Northeast Agricultural and Biological Engineering Conference. (2015 - Present).

Member, American Society of Agricultural and Biological Engineers. (2013 - Present).

Member, American Society of Engineering Education. (2013 - Present).

Member, American Geophysical Union. (2011 - Present).

Member, Society of Women Engineers. (2003 - Present).

Member, Science of Environmental Toxicology and Chemistry. (2013).

Member, American Chemical Society. (2010 - 2012).

Member, American Society of Civil Engineers. (2009 - 2010).

Member, Science of Environmental Toxicology and Chemistry. (2008 - 2010).

Member, Air & Waste Management Association. (2007 - 2009).

## **AWARDS AND HONORS**

2024 Institute of Energy and Environment Fellow, Penn State Institute of Energy and Environment. (2024 – 2026). \$50,000 per year (\$150,000 total).

2024 Leadership Citation Award. Natural Resources and Environmental Systems Community, American Society of Agricultural and Biological Engineers. (2024).

2022 Natural Resource Education Champion Award, The Pennsylvania Association of Natural Resource Extension Professionals. (2022).

Young Engineer of the Year, Northeast Agricultural and Biological Engineering Conference. (2020).

Community of Teaching Excellence Award, Penn State College of Agricultural Sciences. (2018).

Harbaugh Faculty Scholar Award, Penn State College of Agricultural Sciences. (July 1, 2017 - June 30, 2018).

Teaching Award of Merit, North American Colleges and Teachers of Agriculture. (2015).

Alpha Epsilon, The Honor Society of Agricultural, Biological, and Food Engineering. (2014).

Professional - 2014 New Faces of Engineering, American Society of Agricultural & Biological Engineers. (2014).

Teaching Award, Purdue University, College of Engineering. (2011).

## **TEACHING EXPERIENCE**

### **Course Instruction**

ABE 590, Colloquium, 1 course

ABE 597A, Emerging Contaminants Seminar Series, 1 course

ABE 600, Thesis Research, 25 courses

ABE 601, Ph D Dis Full-Time, 6 courses

ASM 309, Measurement & Monitoring of Hydrologic Systems, 9 courses

ASM 327, Soil and Waste Resource Management, 4 courses

BE 467, Design of Stormwater & Erosion Control Facilities, 7 courses

BE 494H, Senior Honors Thesis, 4 courses

BE 496, Independent Studies, 14 courses

BRS 496, Independent Studies, 1 course

BRS 600, Thesis Research, 17 courses

BRS 601, Ph D Dis Full-Time, 5 courses

BRS 602, Supervised Experiential/College Teaching, 2 courses

ECLGY 600, Thesis Research, 4 courses

ECLGY 601, Ph D Dis Full-Time, 1 course

ECLGY 602, Supervised Experiential/College Teaching, 2 courses

ERM 309, Measurement & Monitoring of Hydrologic Systems, 9 courses

ERM 496, Independent Studies, 10 courses

### **Non-Credit Instruction**

Chemical Engineering and the Environment (CHE 412), Guest Lecturer, Classroom, Internal to Penn State, University Park Campus. Fall (September 11, 2019).

The Science of Poisons, Guest Lecturer, Classroom, Internal to Penn State, University Park Campus. Spring (April 5, 2017).

Civil Engineering First Year Seminar, Guest Lecturer, Classroom, Internal to Penn State, University Park Campus. Spring (February 22, 2017).

Quantifying the temporal inequality of nutrient transport to the Chesapeake Bay, Guest Lecturer, Classroom, The Pennsylvania State University and Swedish Agricultural University (SLU), Swedish Agricultural University at Uppsala, Sweden, Academic. Summer (May 14, 2016 - May 27, 2016).

45-minute guest lecture as part of a Maymester Course (ERM 499B) comparing water quality issues facing the Chesapeake Bay and the Baltic Sea.

I was in Sweden with the ERM499B course for the entire Maymester trip and participated in discussions with SLU faculty for continued collaboration and partnerships.

Emerging Issues in Water Quality, Guest Lecturer, Internal to Penn State, Penn State Harrisburg. Spring (March 24, 2016).

Taught 60-minute guest lecture for PSH 542

Emerging Issues in Water Quality, Guest Lecturer, Classroom, Internal to Penn State, University Park Campus. Fall (October 21, 2015).

Taught 50-minute class in BE 001S, Growing Your Future – First Year Seminar.

Concentration-Discharge Relationships, Guest Lecturer, Classroom, Internal to Penn State, University Park Campus. Spring (March 23, 2015).

Taught 50-minute class for CE 475 – Water Quality Chemistry.

Emerging Issues in Water Quality, Guest Lecturer, Classroom, Internal to Penn State, University Park Campus. Fall (October 16, 2014).

Taught 50-minute class in BE 001S, Growing Your Future – First Year Seminar.

Emerging Issues in Water Quality, Guest Lecturer, Classroom, Internal to Penn State, University Park Campus. Fall (2013).

Taught 50-minute class in BE 001S, Growing Your Future – First Year Seminar.

### **Undergraduate Student Supervision**

Kabir, R. Per- and polyfluoroalkyl substances (PFAS) footprint calculator. (Biological Engineering, Penn State). (October 2023 – present).

Usner, C. Per- and polyfluoroalkyl substances (PFAS) uptake into crops. (Biological Engineering, Penn State). (January 2023 – May 2023).

Parsons, K., Removal of pharmaceuticals from aqueous solution with pre-treated biochar. (Biological Engineering, Penn State). (January 2022 - May 2022).

Whipkey, G., Removal of trace-level pharmaceuticals from aqueous solution with cotton gin and walnut biochar. (Chemical Engineering, Penn State). (May 2021 - December 2021).

Dahal, S., Using sanitary wastewater as an early indicator of COVID-19 cases in Derry Township, Pennsylvania. (Biology, Penn State Harrisburg). (May 2021 - August 2021).

Vozenilek, N., Empowering citizen scientists to reduce sources of emerging contaminants. (Environmental Resources Management, Penn State). (January 2020 - May 2021).

Deptulski, C., Empowering citizen scientists to reduce sources of emerging contaminants. (BioRenewable Systems, Penn State). (August 2019 - December 2019).

Soffera, M., Understanding occurrence of PFAS at Penn State's Living Filter. (Biological Engineering, Penn State). (August 2019 - December 2019).

Saleh, L. Monitoring pharmaceuticals at Penn State's Living Filter. (Biological Engineering, Penn State). (August 2018 - December 2018).

Program: College of Agricultural Sciences Undergraduate Research Program.

Weikel, J. Managing Landscapes: A study of emerging soil contaminants at Penn State's spray-irrigation site. (Biological Engineering, Penn State). (May 2018 - June 2018).

- Program: College of Agricultural Sciences Undergraduate Research Program.
- Mroczo, O. Antimicrobial resistance genes in surface runoff from manure-amended fields. (Biological Engineering, Penn State)., B E 496, 3 credits. (January 2018 - May 2018).  
Program: College of Agricultural Sciences Undergraduate Research Program.
- Barnes, R., Atrazine sampling blitz across the Susquehanna River Basin. (Biological Engineering, Penn State)., B E 496, 3 credits. (August 2017 - December 2017).  
Program: College of Agricultural Sciences Undergraduate Research Program.
- Valdez, C., Effects of soil properties on surface runoff and infiltration at Penn State's Living Filter. (Biological Engineering, Penn State)., B E 496, 3 credits. (January 2017 - May 2017).  
Program: College of Agricultural Sciences Undergraduate Research Program (January 2017 - May 2017)
- Leavy, D., Linking land use and hydrologic drivers to the presence of pharmaceuticals in drinking water sources. (Biological Engineering, Penn State)., B E 496, 3 credits. (May 2016 - December 2016).  
Program: Pennsylvania Sea Grant (May 2016 - August 2016)  
College of Agricultural Sciences Undergraduate Research Program (August - December 2016)
- Smilnak, D., Ongoing monitoring of Penn State's Living Filter. (Environmental Resources Management, Penn State)., E R M 496, 3 credits. (January 2016 - May 2016).  
Program: College of Agricultural Sciences Undergraduate Research Program
- Everhart, A., Linking irrigation activities to the presence of emerging contaminants in vernal pools. (Environmental Resources Management, Penn State)., E R M 496, 3 credits. (August 2015 - December 2015).  
Program: College of Agricultural Sciences Research Program
- Schultz, D., Applying Lorenz inequality to nutrient transport in the Chesapeake Bay Watershed. (Biological Engineering, Penn State). (May 2015 - August 2015).  
Program: Erickson Discovery Research Program
- Gluberman, M., Developing an endocrine disrupting compounds footprint calculator. (Biological Engineering, Penn State). (May 2015 - August 2015).  
Program: College of Agricultural Sciences Summer Research Program
- Harrington, K., Assessing the impact of wastewater irrigation on the hydroperiods of vernal pools at Penn State's Living Filter. (Civil Engineering, Penn State). (August 2014 - May 2015).  
Program: College of Engineering Research Experience for Undergraduates (REU)
- Schultz, D., Assessing the temporal inequality of nutrient loads to the Chesapeake Bay. (Biological Engineering, Penn State). (May 2014 - August 2014).  
Program: College of Engineering Research Experience for Undergraduates (REU)
- Gonzalez, M., Assessing the impact of land use on water quality in vernal pools. (Energy Engineering, Penn State). (May 2014 - August 2014).  
Program: College of Engineering Research Experience for Undergraduates (REU)

Taylor, R., Developing an endocrine disrupting compounds footprint calculator. (Biological Engineering, Penn State). (May 2014 - August 2014).  
Program: College of Engineering Research Experience for Undergraduates (REU)

### **Honors Thesis Advisor**

Bartuska, E., Undergraduate. Predicting occurrences and potential impacts of concentrated flow pathways within riparian zones of agricultural landscapes. (Biological Engineering, Penn State). Stage of Completion: Completed. (August 2020 - May 2021).

Singer, H., Undergraduate. Locating concentrated flow pathways in the Halfmoon Creek watershed using computer-based flow analysis and evaluating effectiveness of riparian buffer implementation. (Biological Engineering, Penn State). Stage of Completion: Completed. (August 2020 - May 2021).

Ayers, B., Undergraduate. Emerging contaminants at Penn State's Living Filter: From wastewater to groundwater. (Biological Engineering, Penn State). Stage of Completion: Completed. (August 2016 - May 2017).

### **Graduate Student Thesis Advisor**

Kibuye, H., MS. Occurrence and transport of insecticides and herbicides in the Halfmoon Creek watershed. (BioRenewable Systems, Penn State). Stage of Completion: Completed. (August 2023 – December 2024).

Kosiarski, K., MS. Assessing the impacts of wastewater irrigation activities on PFAS levels in livestock feed crops. (BioRenewable Systems, Penn State). Stage of Completion: Completed. (January 2023 – May 2024).

Mroczo, O., MS. Fate and Transport of PFAS at the Penn State Living Filter. (Agricultural and Biological Engineering, Penn State). Stage of Completion: Completed. (August 2019 – December 2023).

Biertempfel, J., MS. Assessing conservation practice effectiveness with Lorenz Inequality results. (BioRenewable Systems, Penn State). Stage of Completion: Completed. (August 2020 - December 2022).

Barnes, R., MS. Using the Integrated Farm System Model to optimize nutrient management practices on dairy farms in Central Pennsylvania. (Agricultural and Biological Engineering, Penn State). Stage of Completion: Completed. (August 2018 - August 2020).

Chandler, J., MS. Role of concentrated flow pathways on the transport of pesticides in agricultural fields. (BioRenewable Systems, Penn State). Stage of Completion: Completed. (January 2018 - August 2019).

Hayden, K., MS. Effects of wastewater irrigation activities on PPCPs in vernal pools. (BioRenewable Systems, Penn State). Stage of Completion: Completed. (August 2017 - August 2019).

Leventhal, T., MS. Effects of manure application type and method on the transport of antimicrobial resistance genes and bacteria in surface runoff. (Agricultural and Biological Engineering, Penn State). Stage of Completion: Completed. (August 2017 - August 2019).

Miller, M., MS. The importance of intra-management practice variability in phosphorus and total solids losses from agricultural fields. (Soil Science, Penn State). Stage of Completion: Completed. (August 2017 - May 2018).  
Co-Advised with Dr. J.E. Watson (Ecosystem Science and Management Department)

### **Graduate Student Dissertation Advisor**

Kibuye, H., Ph.D. Evaluating and restoring riparian buffer integrity for traditional and emerging contaminants. (BioRenewable Systems, Penn State). Stage of Completion: In Process. (January 2025 – Present).

Kosiarski, K., Ph.D. Assessing the impacts of biosolids applications on PFAS occurrence in private wells, forage crops, and nearby surface water bodies: Implications for responsible land application. (BioRenewable Systems, Penn State). Stage of Completion: In Process. (August 2024 – Present).

Ferguson, F., Ph.D. Co-threats of emerging contaminants and predators on macroinvertebrate diversity. (Ecology, Penn State). Stage of Completion: In Process. Passed Comprehensive Exam Spring 2023. (January 2021 - Present).

Taylor, R., Ph.D. GIS-Based Tools for predicting the fate and transport of emerging contaminants. (Agricultural and Biological Engineering, Penn State). Stage of Completion: In Process. Passed Comprehensive Exam Fall 2022. (January 2020 - Present).

Hayden, K., Ph.D. Measuring and addressing the presence and impact of endocrine disrupting compounds from anthropogenic sources in waterways. (BioRenewable Systems, Penn State). Stage of Completion: Completed. (August 2019 - December 2022).

Ndoun, M. C., Ph.D. Cotton gin waste and walnut shells-derived biochar for the removal of pharmaceuticals and humic acids from aqueous solutions. (Agricultural and Biological Engineering, Penn State). Stage of Completion: Completed. (August 2019 - December 2022).

Jiang, F., Ph.D. Two reactionary approaches to reduce impaired agricultural sediment and nutrient runoff. (Soil Science, Penn State). Stage of Completion: Completed. (October 2017 - May 2020).  
Co-Advised with Dr. Patrick Drohan (Ecosystem Science and Management Department)

Kibuye, F., Ph.D. Impact of Land Use and Drinking Water Treatment Processes on the Occurrence of Pharmaceuticals and Personal Care Products in the Susquehanna River Basin. (BioRenewable Systems, Penn State). Stage of Completion: Completed. (August 2015 - August 2019).

Mina, O., Ph.D. The occurrence, fate, and transport of steroid estrogens in surface water impacted by application of human and animal wastes. (Agricultural and Biological Engineering, Penn State). Stage of Completion: Completed. (August 2013 - August 2016).

### **Graduate Student Thesis Committee Member**

Pannella, D., MS. Assessing the potential for hemp to remediate PFAS-contaminated agroecosystems. (Soil Science, Penn State). Stage of Completion: In Process. (August 2025

– Present).

Adams, S., MS. The role of childcare in farm safety. (BioRenewable Systems, Penn State). Stage of Completion: In Process. (January 2025 – Present).

Hogsdon, O., MS. Quantifying potential functional shifts and the trophodynamics of per-/poly-fluoroalkyl substances in a riverine food web invaded by Flathead Catfish (*Pylodictus olivaris*). (Ecology, Penn State). Stage of Completion: In Process. (August 2023 – Present).

Senerchia, H., MS. Streambank erosion in a karst watershed impaired by agricultural sources of sediment. (Soil Science, Penn State). Stage of Completion: In Process. (August 2022 – Current).

Morris, B., MS. Impact of biochar on physical and chemical soil properties within concentrated flow paths. (Soil Science, Penn State). Stage of Completion: Completed. (August 2022 – December 2024).

Vozenilek, N., MS. Biotransformation of COVID-19 therapeutics in aerobic soils. (BioRenewable Systems, Penn State). Stage of Completion: Completed. (August 2021 – May 2024).

Owens, A., MS. Soil and landscape assessment of the hydrological capacity of a 45-year-old spray irrigation wastewater treatment system (Soil Science, Penn State). Stage of Completion: Completed. (January 2021 – August 2023).

McClure, C., MS. Effects of emerging contaminants on smallmouth fish populations. (Ecology, Penn State). Stage of Completion: Completed. (August 2018 - May 2022).

Pflumm, J. S., MS. Does bacteria lipid composition show differences when incubated on PET substrate vs in a free-floating planktonic sample? (Agricultural and Biological Engineering, Penn State). Stage of Completion: Completed. (August 2019 - August 2021).

Clees, W., MS. Suitability of Penn State's biosolids for land-based recycling: A greenhouse evaluation. (BioRenewable Systems, Penn State). Stage of Completion: Completed. (August 2017 - May 2020).

Ndoun, M. C., MS. Slow filtration of pharmaceuticals and organic matter from wastewater using biochar fixed-bed columns. (Agricultural and Biological Engineering, Penn State). Stage of Completion: Completed. (August 2017 - August 2019).

Saha, G., MS. Geospatial landscape analysis for livestock manure management in western Pennsylvania. (Agricultural and Biological Engineering, Penn State). Stage of Completion: Completed. (January 2016 - August 2019).

McTish, S. MS. Diversified integrated pest management cropping systems influence pest populations and the potential for environmental pollution. (Entomology, Penn State). Stage of Completion: Completed. (October 2018 – May 2019).

Hopkins, I., MS. Soil hydrology at the Living Filter: Analysis of preferential flow and moisture-temperature dynamics under wastewater irrigation. (Soil Science, Penn State). Stage of Completion: Completed. (September 2014 - December 2016).



Navitsky, L., MS. Establishing thresholds for negative effects on vegetation and soils from Marcellus gas well production water. (Agricultural and Biological Engineering, Penn State). Stage of Completion: Completed. (November 2015 - May 2016).

Cangiano, M. L., MS. Carbon budget of maize and shrub willow for bioenergy. (Agricultural and Biological Engineering, Penn State). Stage of Completion: Completed. (January 2015 - May 2015).

Hoover, F., MS. Water cycle analysis of an extensive green roof system: A case study of the Schleman green roof. (Agricultural and Biological Engineering, Purdue University). Stage of Completion: Completed. (January 2012 - August 2013).

### **Graduate Student Dissertation Committee Member**

Zhou, Y., Ph.D. Green stormwater BMPs and effectiveness in removing PAHs from urban stormwater runoff. (Landscape Architecture, Penn State). Stage of Completion: In Process. (August 2024 - Present).

Ayoola, V., Ph.D. Conversion of woody biomass and spent mushroom substrate to hierarchical porous carbons for water treatment and sustainable energy product. (Agricultural and Biological Engineering, Penn State). Stage of Completion: In Process. (April 2024 - Present).

Shen, M., Ph.D. impact of water scarcity on housing supply in the western United States. (Energy, Environment, and Food Economics, Penn State). Stage of Completion: Complete. (March 2022 – August 2025).

Benavides Bolanos, J., Ph.D. High resolution landscape modeling of critical source areas. (Soil Science, Penn State). Stage of Completion: In Completed. (June 2021 – August 2023).

Kenges, A., Ph.D. Development, characterization and application of neutron imaging facility at the Penn State Breazeale reactor. (Nuclear Engineering, Penn State). Stage of Completion: In Process. (June 2021 – May 2023).

Li, X., Ph.D. Three essays on conservation practices, agricultural land uses and environmental benefits. (Agricultural Economics, Penn State). Stage of Completion: Completed. (August 2018 - December 2020).

Hilaire, S., Ph.D. Impact of manure land management practices on manure borne antibiotic resistant elements (AREs) in agroecosystems. (Crop and Soil Environmental Sciences, Virginia Tech). Stage of Completion: Completed. (August 2017 - December 2020).

McDevitt, B., Ph.D. Assessing Oil and Gas Produced Water Disposal to Western U.S. Surface Water: Implications for Beneficial Use as Disposal Management. (Civil Engineering, Penn State). Stage of Completion: Completed. (2017 - August 2020).

Jovanovic, T., Ph.D. Scaling, complexity, and stochasticity as features of urban watersheds. Stage of Completion: Completed. (Civil Engineering, Penn State). Stage of Completion: Completed. (October 2014 – August 2017).

Ramcharan, A., Ph.D. Multidisciplinary applications of US soils datasets: Machine learning models, data mining, and land uses. Stage of Completion: Completed. (Agricultural and Biological Engineering, Penn State). (April 2016 - May 2017).

### Visiting Scholar Supervised

Zhu, J., MS student. Linking land use activities to the exceedance of drinking water standards for atrazine at drinking water treatment plant Intakes in the Mississippi River Basin. (Agronomy, China Agricultural University). (September 2015 - August 2016).

von Freyberg, J., Ph.D. student. Implications of hydrologic connectivity between hillslopes and riparian zones on streamflow composition. (Eawag, The Swiss Federal Institute of Aquatic Science and Technology) (June - July 2014).

### Visiting Scholars Hosted

Lintern, A. Characterizing the impact of farm management practices on emerging contaminant presence and impacts in agriculturally-impacted streams. (Civil Engineering, Monash University). (June 2023).

Anderson, A. Identifying phosphorus sources and mitigation strategies for the Upper Bann watershed. (Northern Ireland Agri-Food and Biosciences Institute). (September - November 2019).

## PUBLICATIONS

### Refereed Journal Articles

Jones, M. J., Ibrahim, R., Clark, S., Brooks, Y. M., **Preisendanz, H. E.**, Richard, T. L., Read, A. F., Robinson, C. J., Noorali, S., Shreve, M. J., Dennington, N. L., Silverman, J. D., Van Oost, C., & McGraw, E. A. (2025). Wastewater surveillance of SARS-CoV-2 and influenza in a dynamic university community: understanding how wastewater measurements correspond to reported cases. *Science of the Total Environment*, 1000: 180377. DOI: 10.1016/j.scitotenv.2025.180377

Kosiarski, K., Veith, T. L., Kibuye, F. A., Fetter, J., Boser, S., Vanden Heuvel, J. P., Thompson, C. L., & **Preisendanz, H. E.** (2025). Geospatial and socioeconomic factors of PFAS contamination in private water wells: Insights for monitoring and management. *Journal of Environmental Management*, 388: 125863. DOI: 10.1016/j.envman.2025.125863

**Preisendanz, H. E.**, Li, H., Mashtare, M. L., & Mina, O. (2025). PFAS in agroecosystems: Sources, impacts, and opportunities for mitigating risks to human and ecosystem health. *Journal of Environmental Quality*, 54(1): 1-5. DOI: 10.1002/jeq2.20670

Liao, S., Garza-Rubalcava, U., Abriola, L. M., Preisendanz, H. E., Lee, L. S., & Pennel, K. D. (2025). Simulating PFAS Transport in Effluent-Irrigated Farmland Using PRZM5, LEACHM and HYDRUS-1D Models. *Journal of Environmental Quality*. 54(1): 54-65. DOI: 10.1002/jeq2.20639

- Kosiarski, K., Usern, C., & **Preisendanz, H. E.** (2025). From wastewater to feed: Understanding PFAS occurrence in wastewater-irrigated crops. *Journal of Environmental Quality*. 54(1): 66-79. DOI: 10.1002/jeq2.20630
- Vanden Heuvel, J., Granda, M., Ferguson, F., Glaberman, S. R., & **Preisendanz, H. E.** (2024). Priority screening of contaminants of emerging concern (CECs) in surface water: Comparing cell-based bioassays and exposure-activity ratios (EARs). *Science of the Total Environment*. 935, 176115. DOI: 10.1016/j.scitotenv.2024.176115
- Rohith, A. N., Ritesh, K., Veith, T. L., **Preisendanz, H. E.**, Duncan, J., Kleinman, P. J. A., Cibin, R. (2024). Prioritizing conservation practice locations for effective water quality improvement using the Agricultural Conservation Planning Framework (ACPF) and the Soil and Water Assessment Tool (SWAT). *Journal of Environmental Management*. 349(1), 119514. DOI: 10.1016/j.jenvman.2023.119514
- Harmel, D., **Preisendanz, H. E.**, King, K. W., Busch, D., Birgand, F., & Sahoo, D. (2023). Water quality monitoring on field-scale and small watersheds: Data quality and cost considerations. *Water*. 15(7), 3110. DOI: 10.3390/w15173110
- Chen, H., Danesha, S. C., Muñoz-Carpena, R., Ferruzzi, G., Yuan, Y., Henry, E., Blankinship, A., Veith, T. L., Breckels, R., Fox, G., Luo, Y., Osmond, D., **Preisendanz, H.**, Tang, J., Armbrust, K., Costello, K., McConnell, L., Rice, P., Westgate, J., & Whiteside, M. (2023). Incorporating the benefits of vegetative filter strips into risk assessment and risk management of pesticides. *Integrated Environmental Assessment and Management*. 20(2): 454-464. DOI: 10.1002/ieam.4824
- Ndoun, M. C., Knopf, A., **Preisendanz, H. E.**, Vozenilek, N., Elliott, H. A., Mashtare, M. L., Velegol, S. B., & Williams, C. F. (2023). Fixed bed column experiments using cotton gin waste and walnut shells-derived biochar as low-cost solutions to removing pharmaceuticals from aqueous solutions. *Chemosphere*, 330, 138591. DOI:10.1016/chemosphere.2023.138591
- Ndoun, C. M., Knopf, A., **Preisendanz, H. E.**, Vozenilek, N., Elliott, H. A., Mashtare, M. L., Velegol, S. B., Veith, T. L., & Williams, C. F. (2023). Physicochemical characterization of biochar derived from the pyrolysis of cotton gin waste and walnut shells. *Journal of the American Society of Agricultural and Biological Engineers*. 66(5), 1163-1174. DOI: 10.13031/ja.15489
- Chiles, R.M., Drohan, P. J., Cibin, R., O'Sullivan, L. M., Doody, D., Schulte, R. P. O., Grady, C., Jiang, F., **Preisendanz, H. E.**, Dingkuhn, E. L., Veith, T. L., & Anderson, A. (2023). Optimization and reflexivity in interdisciplinary agri-environmental scholarship. *Frontiers in Sustainable Food Systems*. 7, 1083388. DOI: 10.3389/fsufs.2023.1083388
- Taylor, R. R., Gluberman, M., Garcia, L., Gorucu, S., Swistock, B., **Preisendanz, H. E.**, & Hayden, K. R. (2022). Development and demonstration of an endocrine-disrupting compound footprint calculator. *Water*, 14(10), 2587. DOI: 10.3390/w14101587
- Hayden, K. R., Jones, M., Elkin, K. R., Clees III, W. I., Clark, S. E., Mashtare, M., Veith, T. L., Elliott, H. A., Watson, J. E., Silverman, J., Richard, T. L., Read, A. F., & **Preisendanz, H. E.** (2022). Impacts of the COVID-19 pandemic on pharmaceuticals in wastewater treated for

- beneficial reuse: Two case studies in central Pennsylvania. *Journal of Environmental Quality*, 51(5), 1066-1082. DOI: 10.1002/jeq2.20398
- Opalinski, N., Schultz, D., Veith, T. L., Royer, M., & **Preisendanz, H. E.** (2022). Meeting the moment: Leveraging temporal inequality for temporal targeting to achieve water quality load-reduction goals. *Water*, 14(7), 1003. DOI: 10.3390/w14071003
- Mroczo, O., **Preisendanz, H. E.**, Wilson, C., Mashtare, M., Elliott, H. A., Veith, T. L., Soder, K. J., & Watson, J. E. (2022). Spatiotemporal patterns of PFAS in water and crop tissue at a beneficial wastewater reuse site in central Pennsylvania. *51*(6), 1282-1297. DOI: 10.1002/jeq2.20408
- Saha, G. K., Cibil, R., Elliott, H. A., & **Preisendanz, H. E.** (2022). Toward a robust land suitability framework for manure management: Modeling impacts and evaluating biophysical characteristics. *Journal of the American Water Resources Association*, 58(3), 435-452. DOI: 10.1111/1752-1688.13008
- Hayden, K. R., **Preisendanz, H. E.**, Elkin, K. R., Saleh, L. B., Weikel, J., Veith, T. L., Elliott, H. A., & Watson, J. E. (2022). Comparison of POCIS and grab sampling techniques for monitoring PPCPs in vernal pools in Central Pennsylvania. *Science of the Total Environment*, 806(2), 12. DOI: 10.1016/j.scitotenv.2021.150607
- Hilaire, S. S., Chen, C., Radolinski, J., Leventhal, T., **Preisendanz, H. E.**, Kleinman, P. J., Maguire, R., Stewart, R. D., Saporito, L. S., & Xia, K. (2022). Culturable antibiotic-resistant fecal coliform bacteria in soil and surface runoff after liquid dairy manure surface application and subsurface injection. *Journal of Environmental Quality*, 51(2), 288-300. DOI: 10.1002/jeq2.20332
- Iavorivska, L., Veith, T. L., Cibil, R., **Preisendanz, H. E.**, & Steinman, A. (2021). Mitigating lake eutrophication through stakeholder-driven hydrologic modeling of agricultural conservation practices: A case study of Lake Macatawa, Michigan. *Journal of Great Lakes Research*, 47, 1710-1725. DOI: 10.1016/j.jglr.2021.10.001
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- Gall, H. E.,** Veith, T. L., Brooks, R. P., Cibir, R., Shortle, J. S., Royer, M., Zipp, K. Y., *Flexible Buffer Systems: Enhancing Ecosystem Services and Expanding Agricultural Options in Riparian Areas.* 6 pp. Annual Report, USDA-NIFA. (April 30, 2020).
- Gall, H. E.,** *Contaminants of Emerging Concern (CECs) at the Living Filter: Understanding the effects of wastewater irrigation on CEC presence in wastewater, groundwater, and vernal pools.* Annual Report, Penn State Office of Physical Plant. (February 28, 2020).
- Gall, H. E.,** Veith, T. L., Brooks, R. P., Cibir, R., Shortle, J. S., Royer, M., Zipp, K. Y., *Flexible Buffer Systems: Enhancing Ecosystem Services and Expanding Agricultural Options in Riparian Areas.* 6 pp. Annual Report, USDA-NIFA. (April 30, 2019).
- Gall, H. E.,** *Assessing the Impacts of Wastewater Irrigation on Hormones in Wastewater, Groundwater, and Vernal Pools at Penn State's Living Filter.* 11 pp. Annual Report, Penn State Office of Physical Plant. (February 28, 2019).
- Gall, H. E.,** Fowler, L., Swistock, B., *EAGER: PPER: Empowering Citizen Scientists to Reduce Sources of Emerging Contaminants.* 7 pp. Annual Report, NSF. (January 30, 2019).
- Gall, H. E.,** Veith, T. L., Brooks, R. P., Cibir, R., Shortle, J. S., Royer, M., Zipp, K. Y., *Flexible Buffer Systems: Enhancing Ecosystem Services and Expanding Agricultural Options in Riparian Areas.* 6 pp. Annual Report, USDA-NIFA. (April 30, 2018).
- Gall, H. E.,** Kibuye, F. A., Elliott, H. A., Watson, J. E., Swistock, B., Clark, J., *Pharmaceuticals and Personal Care Products in Municipal Water Supplies from Reservoir and Riverine Sources.* 40 pp. Final Report, PA Sea Grant. (March 30, 2018).
- Gall, H. E.,** *Assessing the Impacts of Wastewater Irrigation on Hormones in Wastewater, Groundwater, and Vernal Pools at Penn State's Living Filter.* 12 pp. Annual Report, Penn State Office of Physical Plant. (February 27, 2018).
- Gall, H. E.,** *Assessing the Impacts of Wastewater Irrigation on Hormones in Wastewater, Groundwater, and Vernal Pools at Penn State's Living Filter.* 19 pp. Annual Report, Penn State Office of Physical Plant. (March 20, 2017).

**Gall, H. E.,** *Assessing the Impacts of Wastewater Irrigation on Hormones in Vernal Pools at Penn State's Living Filter.* 8 pp. Annual Report. (March 16, 2016).

**Gall, H. E.,** Watson, J., Elliott, H., Boyer, E., *Emerging contaminants: Challenges for environmental resilience.* 5 pp., Penn State College of Agricultural Sciences. (October 31, 2015).

**Gall, H. E.,** Boyer, E., Langkilde, T., Miller, D., *Emerging contaminants across a human impact gradient.* 9 pp. Final Report, Penn State Institutes of Energy and the Environment (IEE). (October 30, 2015).

**Gall, H. E.,** Boyer, E., Langkilde, T., Miller, D., *Preliminary data on estrogens in Living Filter vernal pools.* 3 pp. Progress Report, Penn State Office of Physical Plant. (February 23, 2015).

**Gall, H. E.,** Boyer, E., Langkilde, T., Miller, D., *Emerging contaminants across a human impact gradient.* 5 pp. Interim Report, Penn State Institutes of Energy and the Environment (IEE). (February 6, 2015).

### **Editorial and Advisory Boards**

*Journal of Environmental Quality*, Editorial Board. (January 1, 2021 - December 31, 2025).

One of 6 Technical Editors (one step above Associate Editor on the Editorial Board). Handle approximately 10-20 papers per month.

*Journal of Environmental Quality*, Associate Editor. (January 1, 2017 - December 31, 2020).

Handle approximately one paper every other month.

### **Peer Reviewer of Manuscripts**

*Advances in Water Research*

Reviewer, 1 review(s). (2015)

*Agricultural and Environmental Letters*

Reviewer, 1 review(s). (2018)

*Agriculture, Ecosystems and Environment*

Reviewer, 1 review(s). (2020)

Reviewer, 1 review(s). (2018)

*Agriculture, Ecosystems, and Environment*

Reviewer, 1 review(s). (2011)

*Environment International*

Reviewer, 1 review(s). (2013)

*Environmental Pollution*

Reviewer, 1 review(s). (2021)

*Environmental Science & Technology*

Reviewer, 1 review(s). (2025).

Reviewer, 1 review(s). (2020)

Reviewer, 2 review(s). (2019)

*Environmental Science and Pollution Research*

Reviewer, 1 review(s). (2013)

*Environmental Science: Processes & Impacts*

Reviewer, 1 review(s). (2020)

Reviewer, 2 review(s). (2019)

*Environmental Science: Processes and Impacts*

Reviewer, 1 review(s). (2014)

Reviewer, 2 review(s). (2013)

*Environmental Studies and Sciences*

Reviewer, 1 review(s). (2014)

*Hydrological Processes*

Reviewer, 1 review(s). (2016)

*Hydrology and Earth Systems Sciences*

Reviewer, 2 review(s). (2012)

Reviewer, 1 review(s). (2011)

*Journal of the American Society of Agricultural and Biological Engineers*

Reviewer, 1 review(s). (2024).

*Journal of Contaminant Hydrology*

Reviewer, 1 review(s). (2014)

Reviewer, 1 review(s). (2013)

*Journal of Environmental Management*

Reviewer, 1 review(s). (2022)

*Journal of Environmental Quality*

Reviewer, 1 review(s). (2021)

Reviewer, 1 review(s). (2020)

Reviewer, 4 review(s). (2018)

Reviewer, 1 review(s). (2016)

Reviewer, 1 review(s). (2015)

Reviewer, 1 review(s). (2014)

Reviewer, 1 review(s). (2013)

*Journal of Great Lakes Research*

Reviewer, 1 review(s). (2016)

*Journal of Hydrology*

Reviewer, 1 review(s). (2025).

Reviewer, 1 review(s). (2023)

Reviewer, 1 review(s). (2019)

*Journal of Toxicology and Environmental Health Part B*

Reviewer, 1 review(s). (2019)

*Journal of Visualized Experiments*  
Reviewer, 1 review(s). (2017)

*Science of the Total Environment*  
Reviewer, 2 review(s). (2023).  
Reviewer, 3 review(s). (2021)  
Reviewer, 2 review(s). (2018)

*Stochastic Environmental Research and Risk Assessment*  
Reviewer, 1 review(s). (2015)

*Sustainability*  
Reviewer, 1 review(s). (2014)

*Transactions of the American Society of Agricultural and Biological Engineers*  
Reviewer, 1 review(s). (2021)  
Reviewer, 1 review(s). (2020)  
Reviewer, 2 review(s). (2017)  
Reviewer, 1 review(s). (2016)

*Water Research*  
Reviewer, 1 review(s). (2017)  
Reviewer, 1 review(s). (2016)

*Water Resources Research*  
Reviewer, 2 review(s). (2017)

### **Peer Reviewer of Grant Proposals**

Maine Department of Agriculture, Conservation & Forestry (DACF), Reviewer. (December 2024 – February 2025).

Reviewed and evaluated seven proposals for the Maine DACF PFAS Fund grant program.

University of Wisconsin-Madison Aquatic Sciences Center, Reviewer. (January 2024).  
Reviewed and evaluated one proposal.

McIntire Stennis Grant Program, Reviewer. (December 2023).  
Reviewed and evaluated one proposal for the McIntire Stennis grant program.

Wisconsin Sea Grant, Reviewer. (May – June 2023).  
Reviewed and evaluated one proposal for Wisconsin Sea Grant.

USDA, Panel Member. (February 11, 2020 - February 12, 2020).  
Reviewed and discussed eight proposals as part of a two-day virtual panel.

The National Academies of Sciences, Engineering, and Medicine, Reviewer. (2018).  
Five proposals reviewed and discussed on Agriculture and Water Research Panel for Funding Cycle 19.

Agriculture and Agri-Food Canada Science and Technology, Reviewer. (2016).  
One proposal reviewed.

Oklahoma United States Geological Survey 104(b), Reviewer. (2016).  
One proposal reviewed.

## **PRESENTATIONS**

### **Invited Talks**

**Preisendanz, H. E. & Kibuye, F. A.** (November 21, 2025). “PFAS occurrence, transport, and impact in agroecosystems.” Water Quality Insights Webinar Series, Penn State Extension, Virtual Webinar, Invited. State.

**Preisendanz, H. E.** (November 18, 2025). “PFAS occurrence, transport, and impact in agroecosystems.” Mid-Atlantic Crop Management School. Ocean City, MD. Invited. Regional.

**Preisendanz, H. E.** (May 25, 2023). “Lightning Talk: PFAS uptake by crops in a greenhouse study”, W4170 Multistate Workgroup: The State of PFAS Science in Relation to Agriculture and Natural Resources Challenges. Virtual Webinar, Invited. National.

**Preisendanz, H. E.** (May 24, 2023). “PFAS fate, transport, and plant uptake from wastewater reuse”, W4170 Multistate Workgroup: The State of PFAS Science in Relation to Agriculture and Natural Resources Challenges. Virtual Webinar, Invited. National.

**Preisendanz, H. E.** (May 24, 2023). “PFAS testing in private wells across PA”, W4170 Multistate Workgroup: The State of PFAS Science in Relation to Agriculture and Natural Resources Challenges. Virtual Webinar, Invited. National.

**Preisendanz, H. E.** (May 16, 2023). “PFAS occurrence in private wells across PA: A community-science study,” Master Well Owner Network Advanced Training, Penn State Extension, Virtual Webinar, Invited. State.

**Preisendanz, H. E.** (May 11, 2023). “Impacts of COVID-19 on pharmaceuticals in wastewater treated for beneficial use,” Journal of Environmental Quality Webinar Series. Virtual Webinar, Invited. National.

Lee, L. S., **Preisendanz, H. E.**, & Pennell, K. (April 25, 2023). “Evaluating PFAS Occurrence and Fate in Rural Water Supplies and Agricultural Operations to Inform Management Strategies,” EPA PFAS Workshop: Science for a Changing World, Cincinnati, OH and Zoom (Hybrid), Invited. National.

Harmel, D., **Preisendanz, H. E.**, King, K. W., Haggard, B. E., Smith, D. R., & Busch, D. (July 19, 2022). "Water quality monitoring on field-scale and small watersheds: Data quality and resource constraints," ASABE 2022 Annual International Meeting, American Society of Agricultural and Biological Engineers, Houston, TX, Invited. National.

**Preisendanz, H.E.** (April 13, 2022). “Water Cooler Talk; PFAS Occurrence in Rural PA Groundwater,” Water Cooler Seminar Series, Penn State Extension, Virtual Webinar, Invited. Regional.

**Preisendanz, H. E.** (April 6, 2022). “From wastewater to groundwater: Occurrence and fate of



- PFAS at Penn State's Living Filter site," Wastewater Reuse: 50-plus Years of Research, Management, and Lessons Learned, Penn State Office of Physical Plant, State College, PA. Invited. Local.
- Preisendanz, H. E.** (April 6, 2022). "Impact of the COVID-19 pandemic on pharmaceuticals in wastewater retreated for beneficial reuse," Wastewater Reuse: 50-plus Years of Research, Management, and Lessons Learned, Penn State Office of Physical Plant, State College, PA. Invited. Local.
- Preisendanz, H. E.,** Kibuye, F., Mroczko, O., Alam, S., Veith, T. L., Watson, J. E., & Elliott, H. A. (March 22, 2022). "From wastewater to groundwater: Fate of pharmaceuticals and PFAS in beneficial reuse systems and implications for human health," American Chemical Society Spring 2022 Meeting, American Chemical Society, Virtual, Invited. National.
- Preisendanz, H. E.** (May 5, 2021). "Wastewater as an indicator of community physical and mental health during the COVID-19 pandemic," EESL Seminar Series, Penn State Institutes of Energy and the Environment, Virtual Seminar, Invited. Local.
- Preisendanz, H. E.** (April 7, 2021). "Contaminants of emerging concern in domestic wastewater," Master Watershed Stewards Seminar Series, Penn State Extension, Virtual Seminar, Invited. Local.
- Preisendanz, H. E.** (March 24, 2021). "Temporal inequality and hot moments in nutrients and sediment transport across the Chesapeake Bay watershed," Department of Earth and Environmental Sciences Seminar Series, Rutgers University, Virtual Seminar, Invited. Regional.
- Preisendanz, H. E.** (March 23, 2021). "Using wastewater as an indicator of community physical & mental health during the COVID-19 pandemic," Millennium Science Café, Penn State Materials Research Institute, Virtual Seminar, Invited. Local.
- Preisendanz, H. E.** (February 24, 2021). "Water Cooler Talk: Temporal Inequality and Hot Moments," Water Cooler Seminar Series, Penn State Extension, Virtual Webinar, Invited. Regional.
- Preisendanz, H. E.** (September 23, 2021). "What else is in our water?," Dive Deeper Summit, Penn State Extension, Harrisburg, PA, Invited. Regional.
- Preisendanz, H. E.** (January 28, 2021). "Wastewater as an indicator of the physical and mental health of PA communities during the COVID-19 pandemic," Sea Grant Water Resources Vision Team Webinar Series, National Sea Grant, Virtual Webinar, Invited. National.
- Preisendanz, H. E.** (September 16, 2020). "Contaminants of emerging concern in the environment: Understanding occurrence, risk, and mitigation strategies," Spring Creek Watershed Commissioners Meeting, Spring Creek Watershed Commission, State College, PA, Virtual, Invited. Local.
- Preisendanz, H. E.,** Veith, T. L., Schultz, D., Goslee, S., Mejia, A., Harman, C. J., Cibir, R., & Patterson, P. (September 9, 2020). "The Importance of Temporal Inequality in Quantifying Vegetated Filter Strip Removal Efficiencies," 2020 CERSA (Center of Excellence for Regulatory Science in Agriculture) VFS (Vegetated Filter Strip) Workshop, NC State,

Virtual, Invited. National.

Chandler, J. W., **Preisendanz, H. E.**, Veith, T. L., Elkin, K. R., Elliott, H. A., Watson, J. E., & Kleinman, P. J. (July 16, 2020). "Role of concentrated flow pathways on the movement of pesticides through agricultural fields and riparian buffer zones," ASABE 2020 Annual International Meeting, American Society of Agricultural and Biological Engineers, Virtual Meeting, published in proceedings, Invited. National.

Hayden, K. R., **Gall, H. E.**, Veith, T. L., Elkin, K. R., Kibuye, F. A., Mina, O., Lincoln, S., Biertempfel, J., & Deptulski, C. (November 11, 2019). "Endocrine Disrupting Compounds in the Susquehanna River Basin," Fishing Creek Watershed Association, Bloomsburg, PA, Invited. State.

**Gall, H. E.** (June 5, 2019). "Contaminants of Emerging Concern in the Environment: Understanding Occurrence, Risk, and Mitigation Strategies," Catchment Science Research Meeting, Northern Ireland Environment Agency and Department of Agriculture, Environment, and Rural Affairs, Belfast, Northern Ireland, 20 in attendance, Invited. International.

**Gall, H. E.** (June 3, 2019). "Pharmaceuticals and Personal Care Products in Surface and Groundwater Sources of Potable Water," Northern Ireland Water, Belfast, Northern Ireland, 15 in attendance, Invited. International.

**Gall, H. E.** (February 25, 2019). "Personal Care Products and Pharmaceuticals in Our Waterways," 2019 Pennsylvania Statewide Conference for Watershed Organizations, Pennsylvania Environmental Council, Boalsburg, PA, Invited. State.

**Gall, H. E.**, Hayden, K. R., Kibuye, F. A., Elkin, K. R., & Veith, T. L. (December 14, 2018). "Understanding emerging contaminants in the environment: Moving from fear to empowerment," 2018 Annual American Geophysical Union Conference, American Geophysical Union, Washington, D.C., Invited. National.

**Gall, H. E.** (June 13, 2018). "A field-based approach to understanding the fate and transport of contaminants of increasing concern in the environment," 2018 Chesapeake Community Research and Modeling Consortium, Chesapeake Community Modeling Program, Annapolis, MD, Invited. Regional.

**Gall, H. E.** (February 16, 2018). "A field-based approach to understanding the fate and transport of emerging contaminants in the environment," Geochemistry Forum, Penn State Department of Geosciences, University Park, PA, Invited. Local.

**Gall, H. E.** (February 14, 2018). "Empowering citizen scientists to reduce sources of emerging contaminants in the Susquehanna River Basin," Pennsylvania Senior Environmental Corp Monthly Meeting, Pennsylvania Senior Environmental Corp, Bellefonte, PA, Invited. Local.

**Gall, H. E.** (February 13, 2018). "Understanding Emerging Contaminants in the Environment: From Fear to Empowerment," Millennium Science Cafe, Materials Research Institute, University Park, PA, Invited. Local.

**Gall, H. E.** (September 13, 2017). "A field-based approach to understanding the fate and transport of emerging contaminants: Implications for best management practices,"

- Environmental Engineering Seminar Series, Penn State Department of Civil and Environmental Engineering, University Park, PA, Invited. Local.
- Gall, H. E.** (June 8, 2017). "What's your EDC Footprint? Development of an endocrine disrupting compounds (EDC) footprint calculator," Contaminants of Emerging Concern Webinar Series, Environmental Protection Agency (Region 3), State College, PA, Virtual. Invited. Regional.
- Gall, H. E.** (March 1, 2017). "What's your EDC Footprint? Development of an Endocrine Disrupting Compounds (EDC) Footprint Calculator," Smeal Green Team Seminar Series, Penn State, Smeal College of Business, University Park, PA, Invited. Local.
- Gall, H. E.** (February 28, 2017). "The Importance of Temporal Inequality in the Assessment & Design of BMPs," M. Gordon Wolman Seminar Series, Johns Hopkins, Department of Environmental Health and Engineering, Baltimore, MD, Invited. Regional.
- Gall, H. E.** (February 15, 2017). "What's your EDC Footprint? Development of an endocrine disrupting compounds (EDC) footprint calculator," Civil and Environmental Engineering Seminar Series, Temple University, Department of Civil and Environmental Engineering, Philadelphia, PA, Invited. State.
- Gall, H. E.** (February 8, 2017). "The Importance of Temporal Inequality in the Assessment & Design of BMPs," Energy and Environmental Economics and Policy Seminar Series, Penn State's Earth & Environmental Systems Institute, University Park, PA, Invited. Local.
- Gall, H. E.** (June 16, 2015). "From Purdue Student to Penn State Faculty: Building an Emerging Contaminants Research Program," Ecosystem Science and Management Seminar Series, Purdue Agricultural and Biological Engineering Graduate Student Association (ABE GSA), Invited. Local.
- Gall, H. E.** (November 4, 2014). "Monitoring, Modeling, and Assessing Contaminants of Emerging Concern in Agricultural Catchments," Ecosystem Science and Management Seminar Series, The Pennsylvania State University, University Park, PA, Invited. Local.
- Gall, H. E.** (September 18, 2014). "Quantifying nutrient flux variability with Lorenz Inequality," Mid Atlantic Chapter of the International Erosion Control Association: 21st Annual Conference, Workshop, and Trade Exposition, King of Prussia, PA, Invited. Regional.
- Gall, H. E.** (January 29, 2014). "Monitoring, Modeling, and Assessing Contaminants of Emerging Concern in Agricultural Catchments," Civil and Environmental Engineering Seminar Series, The Pennsylvania State University, University Park, PA, Invited. Local.
- Gall, H. E.** (September 7, 2012). "Anthropogenic and Natural Drivers of Hormone Fate and Transport in an Intensively Managed Catchment," Civil Engineering Hydraulics/Hydrology Seminar Series, Purdue University, West Lafayette, IN, Invited. Local.
- Lee, L., **Gall, H. E.**, Mashtare, M., Sassman, S., Basu, N., & Rao, P. (May 22, 2012). "Hormone fate, export, and restoration dynamics in agricultural catchments," 2012 Land Grant and Sea Grant National Water, Portland, OR, Invited. National.
- Gall, H. E.** (March 14, 2012). "Legacies and Trajectories of Hormone Export from Agricultural

Catchments: Role of Natural and Anthropogenic Drivers," Seminar for Water Resources and Drinking Water Department, Eawag Aquatic Research Institute, Dübendorf, Switzerland, Invited.

### **Keynotes/Plenary Addresses**

**Preisendanz, H. E.** (May 5, 2022). "Spatial and temporal patterns of PFAS in wastewater and groundwater at a beneficial wastewater reuse site in central PA," PA Groundwater Symposium, Penn State Extension, Virtual, 200 in attendance, Invited. State.

**Gall, H. E.** (May 1, 2019). "Contaminants of Emerging Concern in the Environment: Understanding Occurrence, Risk," 2019 PA Groundwater Symposium, State College, PA, 250 in attendance, Invited. State.

### **Oral Presentations**

Kosiarski, K. & **Preisendanz, H. E.** (November 11, 2025). "Evaluating riparian buffer zone effectiveness on mitigating PFAS from surface runoff," CANVAS 2025. Salt Lake City, UT, Accepted. National.

Kibuye, H. Veith, T. L., Groh, T., & **Preisendanz, H. E.** (August 4, 2025). "Understanding triazine herbicides and neonicotinoid insecticide transport dynamics in the Halfmoon Creek watershed." Ithaca, NY, Accepted. Regional.

**Preisendanz, H. E.** & Veith, T. L. (February 27, 2025). "PFAS fate and transport in agroecosystems and rural water supplies." PFAS Seminar Series, Penn State Institute for Sustainable, Agricultural, Food, and Environmental Science (SAFES), University Park, PA. Local.

**Preisendanz, H. E.** (October 8, 2024). "Assessing the occurrence of PFAS in groundwater wells across PA: Implications for human health," Michigan State University Center for PFAS Research Annual Symposium, Michigan State University Center for PFAS Research, Lansing, MI. Regional.

**Preisendanz, H. E.,** Ingram, T., & Cook, A. (September 23, 2024). "Introduction to the Institute for Sustainable Agricultural, Food, and Environmental Science (SAFES)," Penn State Extension, University Park, PA. Virtual.

Kosiarski, K., Niyoni, H., Mina, O., **Preisendanz, H. E.,** Irmak, S. (July 30, 2024). "Effects of wastewater irrigation on PFAS in forage crops: Insights from field and greenhouse studies," ASABE 2024 Annual International Meeting, American Society of Agricultural and Biological Engineers, Anaheim, CA, Accepted. National.

**[Placed in Graduate Student Oral Presentation, Natural Resources and Environment Systems Community]**

**Preisendanz, H. E.,** Kibuye, F., Fetter, J., Veith, T. L., & Vanden Heuvel, J. (July 15, 2024). "Assessing the occurrence of PFAS in private wells across PA: Implications for human health," 2024 Northeast Agricultural and Biological Engineering Conference, University Park, PA, Accepted. Regional.

Taylor, R., **Preisendanz, H. E.,** Veith, T. L., & Groh, T. (July 15, 2024). "Concentrated flow paths and riparian buffer performance," 2024 Northeast Agricultural and Biological Engineering Conference, University Park, PA, Accepted. Regional.

- Kibuye, H. J., **Preisendanz, H. E.**, & Veith, T. L. (July 15, 2024). "Neonicotinoid pesticide occurrence in the Halfmoon Creek Watershed," 2024 Northeast Agricultural and Biological Engineering Conference, University Park, PA, Accepted. Regional.
- Kosiarski, K., Niyoni, J., Mina, O., Irmak, S., & **Preisendanz, H. E.** (July 15, 2024). "Effects of wastewater irrigation on PFAS in forage crops: Insights from field and greenhouse studies," 2024 Northeast Agricultural and Biological Engineering Conference, University Park, PA, Accepted. Regional.  
(**Won first place in Graduate Student Oral Competition**)
- Kibuye, F., **Preisendanz, H. E.**, & Vanden Heuvel, J. (June 27, 2024). "Assessing the Occurrence and Toxicological Risks of Emerging Contaminant Mixtures in Private Wells," Penn State Extension, Virtual, 118 in attendance. State.
- Preisendanz, H. E.** (May 9, 2023). "PFAS occurrence in private wells across PA: A community-science study," PA Groundwater Symposium, Penn State Extension, Virtual, 200 in attendance, Accepted. State.
- Alam, S. & **Preisendanz, H. E.** (March 23, 2023). "PFAS occurrence and fate in water supplies and agricultural operations around beneficial land use sites," Penn State Spring 2023 Water Event, Penn State Water Council, University Park, PA, Accepted. Local.
- Preisendanz, H. E.** (November 10, 2022). "Assessing the potential impact of biosolids and wastewater irrigation on the presence of PFAS in nearby groundwater wells," Fall 2022 PFAS Specialty Conference, PA-American Water Works Association, Harrisburg, PA, Accepted. State.
- Ferguson, F., Elkin, K. R., Stout, R., Veith, T. L., Tooker, J. F., & **Preisendanz, H. E.** (August 1, 2022). "Linking water quality-stressors and macroinvertebrate diversity in central Pennsylvania using passive samplers," 2022 Northeast Agricultural and Biological Engineering Conference, Northeast Agricultural and Biological Engineering Conference, Edgewood, MD, Accepted. Regional.  
(**Won first place in Graduate Student Oral Presentation Competition**)
- Alam, M. S., Olivia, M., Mashtare, M., Fetter, J., Boser, S., Elliott, H. A., Veith, T. L., Watson, J. E., & **Preisendanz, H. E.** (August 1, 2022). "Occurrence of PFAS concentrations in groundwater near biosolids application and wastewater irrigation activities," 2022 Northeast Agricultural and Biological Engineering Conference, Northeast Agricultural and Biological Engineering Conference, Edgewood, MD. Accepted. Regional.
- Biertempfel, J., **Preisendanz, H. E.**, & Veith, T. L. (August 1, 2022). "Temporal inequality of nutrient load across several Chesapeake Bay gauging stations – Assessing BMP effectiveness using Lorenz Inequality results," 2022 Northeast Agricultural and Biological Engineering Conference, Northeast Agricultural and Biological Engineering Conference, Edgewood, MD, Accepted. Regional.
- Taylor, R., Veith, T. L., & **Preisendanz, H. E.** (July 20, 2022). "Assessing the watershed implementation plan for Halfmoon Creek watershed using the Soil and Water Assessment Tool," ASABE 2022 Annual International Meeting, American Society of Agricultural and Biological Engineers, Houston, TX, Accepted. National.

- Biertempfel, J., **Preisendanz, H. E.**, & Veith, T. L. (July 20, 2022). "Temporal inequality of nutrient load across several Chesapeake Bay gauging stations – Assessing BMP effectiveness using Lorenz Inequality results," ASABE 2022 Annual International Meeting, American Society of Agricultural and Biological Engineers, Houston, TX, Accepted. National.
- Alam, M. S., **Preisendanz, H. E.**, Fetter, J., Boser, S., & Swistock, B. (July 19, 2022). "Assessing the impacts of biosolids applications on the presence of PFAS compounds in nearby groundwater wells; A citizen science-based study in Pennsylvania," ASABE 2022 Annual International Meeting, American Society of Agricultural and Biological Engineers, Houston, TX, Accepted. National.
- Ndoun, M. C., Williams, C. F., Knopf, A., Elliott, H. A., Mashtare, M., Vozenilek, N., Velegol, S. B., & **Preisendanz, H. E.** (July 19, 2022). "Removal of pharmaceuticals using biochar: Low-cost solutions to improving the quality of wastewater effluent," ASABE 2022 Annual International Meeting, American Society of Agricultural and Biological Engineers, Houston, TX, Accepted. National.
- Dahal, S., Clark, S. E., **Preisendanz, H. E.**, Hayden, K. R., Jones, M., & Shreve, M. (August 4, 2021). "Using sanitary wastewater as an early indicator of COVID-19 cases in Derry Township, Pennsylvania," Drawdown at Penn State Conference, Penn State, Virtual Meeting, Accepted. Local.
- Dahal, S., Clark, S. E., **Preisendanz, H. E.**, Hayden, K. R., Jones, M., & Shreve, M. (July 29, 2021). "Using sanitary wastewater as an early indicator of COVID-19 cases in Derry Township, Pennsylvania," Multi Campus REU 2021 Symposium, Penn State, Virtual Meeting, Accepted. Local.
- Biertempfel, J., **Preisendanz, H. E.**, Veith, T. L., & Cibir, R. (July 26, 2021). "Assessing Land Use Based Temporal Inequalities of Phosphorus, Nitrogen, and Suspended Sediments in the Chesapeake Bay Nontidal Network Using Lorenz Inequality Results," 2021 Northeast Agricultural and Biological Engineering Conference, Northeast Agricultural and Biological Engineering Conference, Virtual Meeting, Accepted. Regional.
- Hayden, K. R., **Preisendanz, H. E.**, Clees, W. I., Mroczko, O., Elkin, K. R., Watson, J. E., & Elliott, H. A. (July 26, 2021). "COVID-19 Pharmaceuticals in Treated Wastewater," 2021 Northeast Agricultural and Biological Engineering Conference, Northeast Agricultural and Biological Engineering Conference, Virtual Meeting, Accepted. Regional.
- Taylor, R. R., **Preisendanz, H. E.**, Veith, T. L., & Cibir, R. (July 26, 2021). "Evaluating the Halfmoon Creek Watershed implementation plan using the Soil Water Assessment Tool," 2021 Northeast Agricultural and Biological Engineering Conference, Northeast Agricultural and Biological Engineering Conference, Accepted. Regional.  
(**Won first place in Graduate Student Oral Presentation Competition**)
- Mroczko, O., **Preisendanz, H. E.**, Wilson, C., Veith, T. L., Mashtare, M. L., Watson, J. E., & Elliott, H. E. (July 26, 2021). "From wastewater to groundwater: Tracking PFAS at a wastewater reuse irrigation site," 2021 Northeast Agricultural and Biological Engineering Conference, Northeast Agricultural and Biological Engineering Conference, Virtual Meeting, Accepted. Regional.

- Ndoun, M. C., Elliott, H. A., Williams, C. F., **Preisendanz, H. E.**, Knopf, A., & Watson, J. E. (July 26, 2021). "Slow filtration of pharmaceuticals from wastewater using biochar fixed-bed columns," 2021 Northeast Agricultural and Biological Engineering Conference, Northeast Agricultural and Biological Engineering Conference, Virtual Meeting, Accepted. Regional. **(Won second place in Graduate Student Oral Presentation Competition)**
- Karki, R., Cibin, R., Veith, T. L., **Preisendanz, H. E.**, Duncan, J. M., & Kleinman, P. J. (July 14, 2021). "Selection and Placement of Conservation Practices Using the Agricultural Conservation Planning Framework (ACPF) and the Soil and Water Assessment Tool (SWAT)," ASABE 2021 Annual International Meeting, American Society of Agricultural and Biological Engineers, Virtual Meeting, Accepted. National.
- Mroczko, O., **Preisendanz, H. E.**, Wilson, C., Veith, T. L., Mashtare, M. L., Watson, J. E., & Elliott, H. E. (July 14, 2021). "Spatial and Temporal Patterns of PFAS Occurrence at a Wastewater Beneficial Reuse Site in Central Pennsylvania," ASABE 2021 Annual International Meeting, American Society of Agricultural and Biological Engineers, Virtual Meeting, Accepted. National.
- Hayden, K. R., **Preisendanz, H. E.**, Clees, W. I., Mroczko, O., Elkin, K. R., Watson, J. E., & Elliott, H. A. (July 12, 2021). "Impacts of COVID-19 on the presence of emerging contaminants in treated wastewater," ASABE 2021 Annual International Meeting, American Society of Agricultural and Biological Engineers, Virtual Meeting, Accepted. National.
- Preisendanz, H. E.**, Veith, T. L., & Elkin, I. R. (November 18, 2020). "Characterizing transport of natural and anthropogenic constituents in a long-term agricultural watershed in the Northeastern U.S.," 7th Annual Interagency Conference on Research in the Watersheds, Interagency Conference on Research in the Watersheds, Virtual Meeting. National.
- Mroczko, O., **Preisendanz, H. E.**, Elliott, H. A., & Watson, J. E. (July 28, 2020). "Monitoring per- and polyfluoroalkyl substances (PFAS) at the Penn State Living Filter," 2020 Northeast Agricultural and Biological Engineering Conference, Northeast Agricultural and Biological Engineering Conference, Virtual Meeting, Accepted. Regional.
- Hayden, K. R., **Preisendanz, H. E.**, Veith, T. L., Elkin, K. R., Kibuye, F. A., Biertempfel, J., Deptulski, C., Swistock, B. R., & Fowler, L. (July 14, 2020). "Monitoring endocrine disrupting compounds in the Susquehanna River Basin through citizen science," 2020 ASABE Annual International Meeting, American Society of Agricultural and Biological Engineers, Virtual Meeting, Accepted. National.
- Mroczko, O., **Preisendanz, H. E.**, Elliott, H. A., & Watson, J. E. (July 14, 2020). "Monitoring per- and polyfluoroalkyl substances (PFAS) at the Penn State Living Filter," 2020 ASABE Annual International Meeting, American Society of Agricultural and Biological Engineers, Virtual Meeting, Accepted. National.
- Preisendanz, H. E.** (January 28, 2020). "Contaminants of emerging concern in the environment: Understanding occurrence, risk, and mitigation strategies," Water Insights Seminar Series, Penn State Environmental and Natural Resources Institute, University Park, PA. Local.
- Jiang, F., **Gall, H. E.**, Veith, T. L., Cibin, R., & Drohan, P. J. (July 7, 2019 - July 10, 2019). "Assessment of Riparian Buffers' Effectiveness in Controlling Nutrient and Sediment Loads as a Function of Buffer Design, Site Characteristics and Upland Loadings," 2019 Annual

- International Meeting, American Society of Agricultural and Biological Engineers, Boston, MD, Accepted. National.
- Hayden, K. R., **Gall, H. E.**, Elkin, K. R., Elliott, H. A., Harper, J. P., Mina, O., & Watson, J. E. (July 7, 2019 - July 10, 2019). "Monitoring emerging contaminants in wastewater-impacted vernal pools using integrative and grab sampling techniques," 2019 Annual International Meeting, American Society of Agricultural and Biological Engineers, Boston, MD, Accepted. National.
- Barnes, R., **Gall, H. E.**, Rotz, C. A., Elliott, H. A., Veith, T. L., Tyson, J. T., & Watson, J. E. (July 7, 2019 - July 10, 2019). "Optimizing management approaches to reduce nutrient runoff on dairy farms in Central Pennsylvania," 2019 Annual International Meeting, American Society of Agricultural and Biological Engineers, Boston, MD, Accepted. National.
- Gall, H. E.**, Kibuye, F. A., Veith, T. L., Elkin, K. R., Harper, J. P., Elliott, H. A., & Watson, J. E. (July 7, 2019 - July 10, 2019). "Seasonal Variations of Emerging Organic Contaminants (EOCs) in Drinking Water Sources in the Susquehanna River Basin," 2019 Annual International Meeting, American Society of Agricultural and Biological Engineers, Boston, MD, Accepted. National.
- Iavorivska, L., **Gall, H. E.**, Veith, T. L., & Watson, J. E. (July 7, 2019 - July 10, 2019). "Simulating the Fate and Transport of Contaminants of Emerging Concern in Agricultural Watersheds with the Soil and Water Assessment Tool," 2019 Annual International Meeting, American Society of Agricultural and Biological Engineers, Boston, MD, Accepted. National.
- Leventhal, T. E., **Gall, H. E.**, Saporito, L. S., Veith, T. L., & Kleinman, P. J. (June 16, 2019 - June 18, 2019). "Antibiotics in runoff and soil from dairy-manure treated soils subject to varied rainfall," NABEC, Quebec, Canada, Accepted. Regional.  
(**Won second place in Graduate Student Oral Presentation Competition**)
- Hayden, K. R., **Gall, H. E.**, Veith, T. L., & Kibuye, F. A. (June 16, 2019 - June 18, 2019). "Empowering citizen scientists to reduce the presence of EDCs in the Susquehanna River Basin," NABEC, Quebec, Canada, Accepted. Regional.
- Chandler, J., **Gall, H. E.**, Veith, T. L., Elliott, H. A., Watson, J. E., & Kleinman, P. J. (June 16, 2019 - June 18, 2019). "Impact of concentrated flow pathways on pesticide transport through agricultural fields," NABEC, Quebec, Canada, Accepted. Regional.  
(**Won first place in Graduate Student Oral Presentation Competition**)
- Gall, H. E.**, Hayden, K. R., Elkin, K. R., & Veith, T. L. (May 20, 2019). "Understanding emerging contaminants in the environment: Moving from fear to empowerment," 2019 Environmental & Water Resources Congress, American Society of Civil Engineers, Pittsburgh, PA, Accepted. National.
- Gall, H. E.**, Veith, T. L., & Goslee, S. C. (September 19, 2018). "The effectiveness of vegetated filter strips for trapping sediment in agricultural runoff," Mid-Atlantic Chapter of International Erosion Control Association 2018 Annual Meeting, Mid-Atlantic Chapter of International Erosion Control Association, Harrisburg, PA, Accepted. Regional.
- Leventhal, T., Hilaire, S., Saporito, L. S., **Gall, H. E.**, Veith, T. L., Kleinman, P. J., & Xia, K.



- (July 31, 2018). "Comparing the presence of antimicrobial resistance genes and bacteria in soil and runoff following different manure application methods," 2018 Annual International Meeting, American Society of Agricultural and Biological Engineers, Detroit, MI, Accepted. National.
- Watson, J. E., Williams, C. F., Walker, C., Woodward, E., Andrews-Brown, D., Franklin, A., & **Gall, H. E.** (July 31, 2018). "Drinking our medicines? Fate and transport of emerging contaminants at Penn State's "Living Filter"," 2018 Annual International Meeting, American Society of Agricultural and Biological Engineers, Detroit, MI, Accepted. National.
- Veith, T. L., Goslee, S. C., & **Gall, H. E.** (July 31, 2018). "Hydrogeomorphological hot spots for erosion in the Mid-Atlantic region of the U.S.," 2018 Annual International Meeting, American Society of Agricultural and Biological Engineers, Detroit, MI, Accepted. National.
- Kibuye, F. A., Elkin, K. R., **Gall, H. E.**, Elliott, H. A., Watson, J. E., & Swistock, B. (July 31, 2018). "Occurrence and concentrations of pharmaceutical compounds in private wells in Central Pennsylvania," 2018 Annual International Meeting, American Society of Agricultural and Biological Engineers, Detroit, MI, Accepted. National.
- Gall, H. E.**, Schultz, D., Veith, T. L., Goslee, S. C., Mejia, A., Harman, C., Cibin, R., & Patterson, P. H. (July 31, 2018). "The effects of disproportionate load contributions on quantifying the sediment trapping efficiencies of vegetated filter strips," 2018 Annual International Meeting, American Society of Agricultural and Biological Engineers, Detroit, MI, Accepted. National.
- Miller, M., Saporito, L. S., Buda, A. R., **Gall, H. E.**, Veith, T. L., White, C., Williams, C. F., Brasier, K. J., Kleinman, P. J., & Watson, J. E. (July 31, 2018). "The importance of intra-management practice variability in sediment and phosphorus loss from agricultural fields," 2018 Annual International Meeting, American Society of Agricultural and Biological Engineers, Detroit, MI, Accepted. National.
- Kibuye, F. A., Elkin, K. R., **Gall, H. E.**, Swistock, B., Elliott, H. A., Watson, J. E., & K. (July 17, 2018). "Characterization of fluxes of pharmaceuticals and personal care products in a drinking water sources during various flow conditions," 2018 Northeast Agricultural and Biological Engineering Conference, Northeast Agricultural and Biological Engineering Conference, Morgantown, WV, Accepted. Regional.
- Leventhal, T. E., Hilaire, S., Saporito, L. S., **Gall, H. E.**, Elkin, K. R., Veith, T. L., Kleinman, P. J., & Xia, K. (July 17, 2018). "Comparing the presence of antimicrobial resistance genes and bacteria in soil and runoff following different manure application methods," 2018 Northeast Agricultural and Biological Engineering Conference, Northeast Agricultural and Biological Engineering Conference, Morgantown, WV, Accepted. Regional.  
(**Won second place in Graduate Student Oral Presentation Competition**)
- Hayden, K., Elkin, K. R., **Gall, H. E.**, & Swistock, B. (July 17, 2018). "Empowering citizen scientists to reduce sources of EDCs in the Susquehanna River Basin," 2018 Northeast Agricultural and Biological Engineering Conference, Northeast Agricultural and Biological Engineering Conference, Morgantown, WV, Accepted. Regional.
- Miller, M. D., Saporito, L. S., Buda, A., **Gall, H. E.**, Veith, T. L., White, C., Williams, C. F., Brasier, K. J., & Kleinman, P. J. (July 17, 2018). "The importance of intra-management

- practice variability in sediment and phosphorus loss from agricultural fields," 2018 Northeast Agricultural and Biological Engineering Conference, Northeast Agricultural and Biological Engineering Conference, Morgantown, WV, Accepted. Regional.  
(**Won first place in Graduate Student Oral Presentation Competition**)
- Chandler, J., **Gall, H. E.**, Veith, T. L., & Kleinman, P. J. (July 17, 2018). "Understanding the presence of agricultural contaminants in conservation buffers in the Mahantango Creek Watershed," 2018 Northeast Agricultural and Biological Engineering Conference, Northeast Agricultural and Biological Engineering Conference, Morgantown, WV, Accepted. Regional.
- Hayden, K. R., Elkin, K. R., **Gall, H. E.**, & Swistock, B. (June 27, 2018). "Empowering citizen scientists to reduce sources of EDCs in the Susquehanna River Basin," Universities Council on Water Resources 2018 Conference, Universities Council on Water Resources, Pittsburgh, PA, Accepted. National.
- Gall, H. E.** (June 13, 2018). "A field-based approach to understanding the fate and transport of contaminants of increasing concern in the environment," 2018 Chesapeake Community Research and Modeling Consortium, Chesapeake Community Modeling Program, Annapolis, MD, Invited. Regional.
- Kibuye, F. A., Elkin, K. R., **Gall, H. E.**, Swistock, B., Elliott, H. A., Watson, J. E., & K. (April 16, 2018). "Seasonal variations in the occurrence of pharmaceuticals in drinking water sources and treated drinking water," 2018 Environmental Chemistry and Microbiology Student Symposium, Environmental Chemistry and Microbiology Student Symposium, University Park, PA, Accepted. Regional.
- Mina, O., **Gall, H. E.**, Elliott, H. A., Saporito, L., & Kleinman, P. J.A. (August 1, 2017). "Estrogen transport in surface runoff from agricultural fields treated with two application methods of dairy manure," 2017 Northeast Agricultural and Biological Engineering Conference, Northeast Agricultural and Biological Engineering Conference, Groton, CT, Accepted. Regional.
- Kibuye, F., Elkin, K., **Gall, H. E.**, Elliott, H. A., Watson, J. E., & Swistock, B. (August 1, 2017). "Seasonal influences on the occurrences of pharmaceutical compounds in source and finished drinking water," 2017 Northeast Agricultural and Biological Engineering Conference, Northeast Agricultural and Biological Engineering Conference, Groton, CT, Accepted. Regional.
- Gall, H. E.**, & Patterson, P. (July 20, 2017). "Riparian buffers for water quality management," Poultry Science Association 2017 Annual Meeting, Poultry Science Association, Orlando, FL, Accepted. National.
- Mina, O., Elkin, K., Elliott, H. A., **Gall, H. E.**, Elliott, H. A., Saporito, L., & Kleinman, P. J.A. (July 19, 2017). "Estrogen transport in surface runoff from agricultural fields treated with two application methods of dairy manure," 2017 Annual International Meeting, American Society of Agricultural and Biological Engineering, Spokane, WA, Accepted. National.
- Kibuye, F., Elkin, K., **Gall, H. E.**, Elliott, H. A., Watson, J. E., & Swistock, B. (July 18, 2017). "Persistence of pharmaceutical compounds in drinking water treatment processes," 2017 Annual International Meeting, American Society of Agricultural and Biological Engineering, Spokane, WA, Accepted. National.

- Ayers, B., Elkin, K., Kibuye, F., & **Gall, H. E.** (July 18, 2017). "Pharmaceuticals at Penn State's Living Filter: From Wastewater to Groundwater," 2017 Engineering Annual International Meeting, American Society of Agricultural and Biological Engineering, Spokane, WA, Accepted. National.
- Kibuye, F., **Gall, H. E.**, Elkin, K., Elliott, H. A., Watson, J. E., & Swistock, B. (May 31, 2017). "Persistence of pharmaceutical compounds in drinking water treatment processes," 2017 Emerging Contaminants in the Aquatic Environment Conference, University of Illinois-Urbana Champaign, Champaign, IL, Accepted. National.
- Gall, H. E.** (May 11, 2017). "Monitoring and modeling contaminant sources, fate, transport, impacts, and solutions," Freiburg-Penn State Water Research Symposium, Freiburg, Germany, International.
- Ayers, B., Elkin, K., Kibuye, F., & **Gall, H. E.** (May 3, 2017). "Pharmaceuticals at Penn State's Living Filter: From Wastewater to Groundwater," Pennsylvania Groundwater Symposium, Penn State, State College, PA, Accepted. State.
- Gall, H. E.**, Gluberman, M., Taylor, R., & Garcia, L. (August 1, 2016). "Development of an emerging contaminants footprint calculator," Northeast Agricultural and Biological Engineering Conference, Northeast Chapter of American Society of Agricultural and Biological Engineers, Orono, ME, Accepted. Regional.
- Kibuye, F., **Gall, H. E.**, Elliott, H. A., Watson, J. E., Swistock, B., & Elkin, K. (August 1, 2016). "Impact of land use and drinking water treatment processes on the occurrence of pharmaceuticals and personal care products within the Susquehanna River Basin," Northeast Agricultural and Biological Engineering Conference, Northeast Chapter of American Society of Agricultural and Biological Engineers, Orono, ME, Accepted. Regional.
- (Won second place in Graduate Student Oral Presentation Competition)**
- Gall, H. E.**, Basu, N., Mashtare, M., Rao, P. S. C., & Lee, L. S. (July 20, 2016). "Assessing the impacts of anthropogenic and hydro-climatic drivers on estrogen legacies and trajectories," 2016 Annual International Meeting, American Society of Agricultural and Biological Engineering, Orlando, FL, Accepted. National.
- Opalinski, N., Schultz, D., **Gall, H. E.**, & Royer, M. (July 19, 2016). "Development of a decision-making framework for best management practice design to reduce loads during "hot moments"," 2016 Annual International Meeting, American Society of Agricultural and Biological Engineers, Orlando, FL, Accepted. National.
- Gluberman, M., Taylor, R., Garcia, L., & **Gall, H. E.** (July 19, 2016). "Development of an emerging contaminants footprint calculator," 2016 Annual International Meeting, American Society of Agricultural and Biological Engineers, Orlando, FL, Accepted. National.
- Gall, H. E.** (January 20, 2016). "Soil as a living filter," 16th National Conference and Global Forum on Science, Policy, and the Environment, Washington, D.C., Accepted. National.
- Mina, O., **Gall, H. E.**, & Mashtare, M. (December 14, 2015). "Assessing the persistence, occurrence, and fate of estrogens in vernal pools impacted by wastewater irrigation," 2015 American Geophysical Union Fall Meeting, San Francisco, CA, Accepted. National.

- Mina, O., **Gall, H. E.**, & Mashtare, M. (July 29, 2015). "Assessing the persistence, occurrence, and fate of estrogens in vernal pools impacted by wastewater irrigation," 2015 Annual International Meeting, American Society of Agricultural and Biological Engineers, New Orleans, LA, Accepted. National.
- Gall, H. E.**, Schultz, D., Rao, P. S., Jawitz, J., & Royer, M. (July 28, 2015). "Quantifying the temporal and spatial inequality of nutrient transport to the Chesapeake Bay with a novel metric," 2015 Annual International Meeting, American Society of Agricultural and Biological Engineering, New Orleans, LA, Accepted. National.
- García, L., Gluberman, M., Taylor, R., & **Gall, H. E.** (July 28, 2015). "Development of a footprint calculator for endocrine disrupting compounds," 2015 Summer Research Opportunities Program Symposium, Penn State, University Park, PA. Local.
- Gall, H. E.**, Schultz, D., Rao, P. S., Jawitz, J., & Royer, M. (July 14, 2015). "Quantifying the temporal and spatial inequality of nutrient transport to the Chesapeake Bay with a novel metric," Northeast Agricultural and Biological Engineering Conference, Northeast Chapter of American Society of Agricultural and Biological Engineers, Newark, DE, Accepted. Regional.
- Mina, O., **Gall, H. E.**, & Mashtare, M. (July 13, 2015). "Assessing the persistence, occurrence, and fate of estrogens in vernal pools impacted by wastewater irrigation," Northeast Agricultural and Biological Engineering Conference, Northeast Chapter of American Society of Agricultural and Biological Engineers, Newark, DE, Accepted. Regional.  
(**Won first place in Graduate Student Oral Presentation Competition**)
- Chowdhury, A., **Gall, H. E.**, & Brandt, R. (July 13, 2015). "Simulation of stochastic rainfall and runoff, and evaluation of the removal efficiency of vegetated filter strips," Northeast Agricultural and Biological Engineering Conference, Northeast Chapter of American Society of Agricultural and Biological Engineers, Newark, DE, Accepted. Regional.
- Mina, O., **Gall, H. E.**, Carlson, B., & Langkilde, T. (July 15, 2014). "A preliminary assessment of endocrine disrupting compounds in vernal ponds in Central Pennsylvania," 2014 American Society of Agricultural and Biological Engineers and Canadian Society for Bioengineering Annual International Meeting, Montréal, Québec, Canada, Accepted. International.
- Gall, H. E.**, Schultz, D., & Elliott, H. (July 15, 2014). "Assessing Nutrient Flux Variability in the Chesapeake Bay using Lorenz Inequality," 2014 American Society of Agricultural and Biological Engineers and Canadian Society for Bioengineering Annual International Meeting, Montréal, Québec, Canada, Accepted. International.
- Gonzalez, M., Mina, O., & **Gall, H. E.** (July 2, 2014). "Assessing the impact of land use on water quality in vernal pools," Penn State College of Engineering Research Initiative Research Symposium, Penn State, University Park, PA. Local.
- Schultz, D., & **Gall, H. E.** (July 2, 2014). "Assessing the temporal inequality of nutrient loads to the Chesapeake Bay," Penn State College of Engineering Research Initiative Research Symposium, Penn State, University Park, PA. Local.
- Taylor, R., & **Gall, H. E.** (July 2, 2014). "Developing an endocrine disrupting compounds

footprint calculator," Penn State College of Engineering Research Initiative Research Symposium, Penn State, University Park, PA. Local.

Lee, L. S., **Gall, H. E.**, Mashtare, M., Green, D., Sassman, S., Jafvert, C., Jenkinson, B., Leet, J., Basu, N., & Rao, P. S. C. (October 22, 2012). "Hormone fate, export, and restoration dynamics in agricultural ditch networks receiving subsurface tile drainage," 2012 American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America International Annual Meetings, Cincinnati, OH, Accepted. National.

**Gall, H. E.**, Rao, P. S. C., Basu, N., Thompson, S., Mashtare, M., Sassman, S., & Lee, L. S. (December 9, 2011). "Legacies and trajectories of hormone export from agricultural catchments: Role of natural and anthropogenic drivers," 2011 American Geophysical Union Fall Meeting, San Francisco, CA, Accepted. National.

**Gall, H. E.**, Sassman, S., Jafvert, C., Lee, L., Sepúlveda, M., & Leet, J. (November 8, 2010). "Spatial and temporal variations in the export of endocrine disrupting compounds from agricultural fields under various manure application practices," 31st North American Annual Meeting, Science of Environmental Toxicology and Chemistry, Oregon Convention Center, Portland, OR, Accepted. National.

**Gall, H. E.**, & Jafvert, C. (August 25, 2010). "Temporal variations in nutrient fluxes in agricultural drains and ditches," American Society of Civil Engineers Watershed Management Conference, Madison, WI, Accepted. National.

**Gall, H. E.**, Schuster, D., Jafvert, C., & Rhoads, W. (July 14, 2010). "Design, implementation, and monitoring of Purdue University's first green roof," High Performance Buildings Conference, West Lafayette, IN, Accepted. National.

**Gall, H. E.**, Jafvert, C., & Lee, L. S. (May 28, 2010). "Assessing water quality of tile drains and agricultural ditches with a novel sampling scheme," 2010 Annual Indiana Water Resources Association Symposium: Emerging Waters, Emerging Contaminants, Emerging Communities, Purdue University, West Lafayette, IN. State.

**Gall, H. E.**, Jafvert, C., Sassman, S., & Lee, L. (March 23, 2010). "Quantifying the fate and transport of manure-borne hormones with event-specific sampling schemes," 2010 National American Chemical Society Conference: Chemistry for a Sustainable World, San Francisco, CA, Accepted. National.

## Posters

Panella, D., **Preisendanz, H. E.**, Drohan, P., & Carrijo, D. (November 11, 2025). "PFAS in agriculture – can hemp remediate contaminated land?" CANVAS 2025. Salt Lake City, UT, Accepted, National.

Kibuye, H. J., Veith, T. L., Groh, T., & **Preisendanz, H. E.** (November 7, 2025). "Assessing active and passive sampling techniques for emerging contaminants using nested watershed monitoring," 20<sup>th</sup> Annual River Symposium, Lewisburg, PA, Accepted. State.  
**(Won first place in Graduate Student Poster Presentation Competition)**

Veith, T. L., **Preisendanz, H. E.**, & Stout, R. (July 15, 2024). "Stream monitoring supports Halfmoon Creek watershed renewal project," 2024 Northeast Agricultural and Biological Engineering Conference, University Park, PA, Accepted. Regional.

- Kosiarski, K., **Preisendanz, H. E.**, Usner, Z., Diloretto, S., & Loughran, J. (July 31, 2023). "From wastewater to feed: Understanding the occurrence of PFAS in crops irrigated with treated wastewater," 2023 Northeast Agricultural and Biological Engineering Conference, Northeast Agricultural and Biological Engineering Conference, Guelph, Canada, Accepted. Regional.  
(**Won first place in Graduate Student Poster Presentation Competition**)
- Usner, C., Kosiarski, K., Diloreto, S., Loughran, J., & **Preisendanz, H. E.** (March 30, 2023). "From wastewater to feed: Understanding the occurrence of PFAS in crops irrigated with treated wastewater," Gamma Sigma Delta Research Exposition, Penn State, University Park, PA, Accepted. Local.
- Alam, M. S., Mroczko, O., **Preisendanz, H. E.**, Wilson, C., Mashtare, M. L., Elliott, H. A., Veith, T. L., Soder, K. J., & Watson, J. E. (March 30, 2023). "Spatial and temporal patterns of PFAS in groundwater and crop tissues at the Penn State Living Filter," Gamma Sigma Delta Research Exposition, Penn State, University Park, PA, Accepted. Local.
- Alam, M. S., **Preisendanz, H. E.**, Fetter, J. R., & Boser, S. (March 24, 2023). "Occurrence of per- and polyfluoroalkyl substances (PFAS) in Pennsylvania's private well water," Graduate Exhibition, Penn State, University Park, PA, Accepted. Local.
- Alam, M. S., **Preisendanz, H. E.**, Fetter, J., Boser, S., & Swistock, B. (September 29, 2022). "Assessing the potential impacts of biosolids applications on the presence of PFAS in nearby groundwater wells," Cancer and the Environment: Connecting Penn State Researchers to address exposures, cancer disparities and opportunities, Penn State Institutes of Energy and the Environment and Cancer Institute, University Park, PA, Accepted. Local.
- Biertempfel, J., **Preisendanz, H. E.**, & Veith, T. L. (March 24, 2022). "Temporal inequality of nutrient load across several Chesapeake Bay gauging stations – Assessing BMP effectiveness using Lorenz Inequality results," 2022 College of Agricultural Sciences Gamma Sigma Delta Research Exposition, Gamma Sigma Delta, University Park, PA, Accepted. Local.  
(**Won third place in Graduate Student Poster Presentation Competition**)
- Bartuska, E., **Preisendanz, H. E.**, Veith, T. L., Glagola, C., & Cibin, R. (July 26, 2021). "The presence of concentrated flow pathways in existing riparian buffers: determining their existence, and lessening their impact on buffer integrity," 2021 Northeast Agricultural and Biological Engineering Conference, Northeast Agricultural and Biological Engineering Conference, Virtual Meeting, Accepted. Regional.  
(**Won second place in Graduate Student Poster Presentation Competition**)
- Ndoun, M. C., Elliott, H. A., Williams, C. F., **Preisendanz, H. E.**, Knopf, A., & Watson, J. E. (July 13, 2021). "Adsorption of pharmaceuticals from aqueous solutions using biochar derived from cotton gin waste and guayule bagasse," 2021 Annual International Meeting, American Society of Agricultural and Biological Engineers, Virtual Meeting, Accepted. National.
- Taylor, R. R., **Preisendanz, H. E.**, Veith, T. L., & Cibin, R. (July 13, 2021). "Evaluating the Halfmoon Creek Watershed implementation plan using the Soil and Water Assessment Tool," 2021 Annual International Meeting, American Society of Agricultural and Biological Engineers, Accepted. National.

Ndoun, M. C., Elliott, H. A., Williams, C. F., **Preisendanz, H. E.**, Knopf, A., & Watson, J. E. (March 23, 2021). "Adsorption of pharmaceuticals from aqueous solutions using biochar derived from cotton gin waste and guayule bagasse," 2021 College of Agricultural Sciences Gamma Sigma Delta Research Exposition, Gamma Sigma Delta, University Park, PA, Accepted. Local.

**(Won first place in Graduate Student Poster Presentation Competition)**

Ndoun, M., Williams, C., **Preisendanz, H. E.**, Knopf, A., & Elliott, H. A. (July 28, 2020).

"Biochar as a filter media for the removal of emerging contaminants from treated wastewater effluents used for irrigation," 2020 Northeast Agricultural and Biological Engineering Conference, Northeast Agricultural and Biological Engineering Conference, Virtual Meeting, Accepted. Regional.

Hayden, K. R., **Preisendanz, H. E.**, Veith, T. L., Elkin, K. R., Kibuye, F. A., Biertempfel, J., Deptulski, C., Swistock, B., & Fowler, L. (July 28, 2020). "Monitoring endocrine disrupting compounds in the Susquehanna River Basin in 2018 through 2019 through citizen science," 2020 Northeast Agricultural and Biological Engineering Conference, Northeast Agricultural and Biological Engineering Conference, Virtual Meeting. Regional.

Hayden, K. R., **Gall, H. E.**, Elkin, K. R., Saleh, L. B., Elliott, H. A., Watson, J. E., Veith, T. L., & Weikel, J. (November 6, 2019). "Monitoring emerging contaminants in wastewater-impacted vernal pools using passive and grab sampling techniques," 40th Annual North American Meeting, Science of Environmental Toxicology and Chemistry, Toronto, Canada, Accepted. International.

Leventhal, T. E., **Gall, H. E.**, Saporito, L. S., Veith, T. L., & Kleinman, P. J. (March 28, 2019). "Antibiotics in runoff and soil from dairy-manure treated soils subject to varied rainfall," 2019 College of Agricultural Sciences Gamma Sigma Delta Research Exposition, Gamma Sigma Delta, University Park, PA, Accepted. Local.

**(Won first place in Graduate Student Poster Presentation Competition)**

Kibuye, F. A. **Gall, H. E.**, Veith, T. L., Elkin, K. R., Harper, J. P., Elliott, H. A., & Watson, J. E. (March 28, 2019). "Seasonal Variations of Emerging Organic Contaminants (EOCs) in Drinking Water Sources in the Susquehanna River Basin," 2019 College of Agricultural Sciences Gamma Sigma Delta Research Exposition, Gamma Sigma Delta, University Park, PA, Accepted. Local.

**(Won second place in Graduate Student Poster Presentation Competition)**

Veith, T. L., **Gall, H. E.**, Shortle, J. S., Brooks, R. P., & Kleinman, P. J. (December 13, 2018). "Moving towards sustainable land management in the Chesapeake Bay through novel engagement strategies," 2018 Annual American Geophysical Union Conference, American Geophysical Union, Washington, D.C., Accepted. National.

**Gall, H. E.**, Veith, T. L., Shortle, J. S., Brooks, R. P., Cibin, R., & Zipp, K. Y. (October 2, 2018). "Flexible buffer systems: Enhancing ecosystem services and expanding options in riparian areas," FY 2018 Water and Soil Project Directors Annual Meeting, USDA-NIFA, Newark, DE, Accepted. National.

Jiang, F., **Gall, H. E.**, Drohan, P. J., Veith, T. L., & Cibin, R. (April 13, 2018). "Assessment of riparian buffer system effectiveness as a function of buffer attributes," 2018 Environmental

- Chemistry and Microbiology Student Symposium, Environmental Chemistry and Microbiology Student Symposium, University Park, PA, Accepted. Regional.
- Jiang, F., **Gall, H. E.**, Drohan, P. J., Veith, T. L., & Cibin, R. (March 29, 2018). "Assessment of riparian buffer system effectiveness as a function of buffer attributes," 2018 College of Agricultural Sciences Gamma Sigma Delta Research Exposition, Gamma Sigma Delta, University Park, PA, Accepted. Local.
- Barnes, R., Chandler, J., & **Gall, H. E.** (March 29, 2018). "Atrazine sampling blitz across the Susquehanna River Basin," 2019 College of Agricultural Sciences Gamma Sigma Delta Research Exposition, Gamma Sigma Delta, University Park, PA, Accepted. Local.
- Barnes, R., Chandler, J., & **Gall, H. E.** (March 29, 2018). "Atrazine sampling blitz across the Susquehanna River Basin," 2019 College of Agricultural Sciences Gamma Sigma Delta Research Exposition, Gamma Sigma Delta, University Park, PA, Accepted. Local.
- Kibuye, F. A., Elkin, K. R., **Gall, H. E.**, Elliott, H. A., Watson, J. E., & Swistock, B. (March 29, 2018). "Occurrence and concentrations of pharmaceutical compounds in private wells in Central Pennsylvania," 2018 College of Agricultural Sciences Gamma Sigma Delta Research Exposition, Gamma Sigma Delta, University Park, PA, Accepted. Local.  
(**Won first place in Graduate Student Poster Presentation Competition**)
- Mroczo, O., Leventhal, T. E., Saporito, L. S., & **Gall, H. E.** (March 29, 2018). "Determination of antibiotic resistant genes in agricultural runoff," 2019 College of Agricultural Sciences Gamma Sigma Delta Research Exposition, Gamma Sigma Delta, University Park, PA, Accepted. Local.
- Jiang, F., **Gall, H. E.**, Drohan, P. J., Veith, T. L., & Cibin, R. (March 25, 2018). "Assessment of riparian buffer system effectiveness as a function of buffer attributes," 2018 Graduate Research Exposition, Penn State University, University Park, PA, Accepted. Regional.
- Gall, H. E.**, Schultz, D., Veith, T. L., Goslee, S. C., Mejia, A., Harman, C. J., Cibin, R., & Patterson, P. H. (December 8, 2017). "The importance of temporal variability in quantifying vegetated filter strip removal efficiencies," 2017 Fall Annual American Geophysical Union Meeting, American Geophysical Union, New Orleans, LA, Accepted. National.
- Kibuye, F., Elkin, K., **Gall, H. E.**, Elliott, H. A., Watson, J. E., & Swistock, B. (April 22, 2017). "Persistence of pharmaceutical compounds in drinking water treatment processes," Environmental Microbiology and Chemistry Student Symposium, Penn State University, University Park, PA, Accepted. Regional.
- Kibuye, F., Elkin, K., **Gall, H. E.**, Elliott, H. A., Watson, J. E., & Swistock, B. (March 24, 2017). "Persistence of pharmaceutical compounds in drinking water treatment processes," Penn State Graduate Exhibition, Penn State University, University Park, PA. Local.
- Everhart, A., Mina, O., **Gall, H. E.**, Saporito, L., & Kleinman, P. J. A. (April 8, 2016). "Emerging contaminants in surface runoff from manure-amended fields," Environmental Chemistry and Microbiology Student Symposium, Penn State, Accepted. Regional.
- Kibuye, F., **Gall, H. E.**, Elliott, H., Watson, J., & Swistock, B. (April 8, 2016). "Impact of land use and drinking water treatment processes on the occurrence of pharmaceuticals and



- personal care products (PPCPs) in the Susquehanna River Basin," Environmental Chemistry and Microbiology Student Symposium, Penn State, University Park, PA, Accepted. Regional.
- Zhu, J., Corley, B., Schultz, D., Rakestraw, M., Kolok, A., & **Gall, H. E.** (April 8, 2016). "Land use and hydrologic drivers of atrazine presence in drinking water," Environmental Chemistry and Microbiology Student Symposium, Penn State, University Park, PA, Accepted. Regional.
- Gluberman, M., García, L., Taylor, R., & **Gall, H. E.** (March 29, 2016). "Developing an endocrine disrupting compounds footprint calculator," College of Agricultural Sciences Research Exposition, Penn State, University Park, PA. Local.
- Smilnak, D., Klueber, Z., Hopkins, I., Lin, H., & **Gall, H. E.** (March 29, 2016). "Infiltration tests along a hillslope at Penn State's Living Filter," College of Agricultural Sciences Research Exposition, Penn State, University Park, PA. Local.
- Gall, H. E.**, Schultz, D., Rao, P. S., Jawitz, J., Mejía, A., & Royer, M. (December 17, 2015). "Quantifying the temporal inequality of nutrient loads with Lorenz Inequality," 2015 American Geophysical Union Fall Meeting, San Francisco, CA, Accepted. National.
- Gall, H. E.**, Mina, O., & Chowdhury, A. (May 1, 2015). "Fate, transport, and impacts of human and animal sources of emerging contaminants," Penn State Institutes of Energy and the Environment Bar Charts & Barbecue: Annual Picnic & Poster Symposium, Penn State, University Park, PA. Local.
- Harrington, K., Mina, O., & **Gall, H. E.** (April 8, 2015). "Assessing the impacts of wastewater irrigation on water levels in vernal pools," Penn State Undergraduate Research Symposium, Penn State, University Park, PA. Local.
- Gall, H. E.**, Sassman, S., Jenkinson, B., Lee, L., & Jafvert, C. (December 16, 2014). "Hydrologic variability controls nutrient and hormone export from a Midwestern agroecosystem," 2014 American Geophysical Union Fall Meeting, San Francisco, CA, Accepted. National.
- Mina, O., **Gall, H. E.**, Carlson, B., & Langkilde, T. L. (April 25, 2014). "Assessing the presence of endocrine disrupting compounds in vernal pools," Penn State Institutes of Energy and the Environment Bar Charts & Barbecue: Annual Picnic & Poster Symposium, Penn State, University Park, PA. Local.
- Mina, O., **Gall, H. E.**, Carlson, B., & Langkilde, T. L. (March 28, 2014). "Assessing the presence of endocrine disrupting compounds in vernal pools," Environmental Chemistry and Microbiology Student Symposium, Penn State, University Park, PA, Accepted. Regional.
- Gall, H. E.**, Mina, O., Carlson, B., & Langkilde, T. (February 5, 2014). "Assessing the presence of endocrine disrupting compounds in vernal pools," Science of Environmental Toxicology and Chemistry North America Focused Topic Meeting: Endocrine Disruption, Research Triangle Park, NC. National.
- Gall, H. E.**, Rao, P. S. C., & O'Conner, G. (December 11, 2013). "Influence of hydro-climatic conditions, soil type, and application matrix on potential vadose zone export of pharmaceuticals and personal care products (PPCPs)," 2013 American Geophysical Union Fall Meeting, San Francisco, CA, Accepted. National.

Rao, P. S. C., **Gall, H. E.**, Lee, L. S., Pijanowski, B., & Evangelou, D. (October 11, 2011). "Innovations in pedagogical approaches to overcome barriers to interdisciplinary education," Transforming education workshop: From innovation to implementation, Purdue University, West Lafayette, IN. Local.

**Gall, H. E.**, Davis, A., Cambridge, R., Wilson, K., & Jafvert, C. (September 25, 2009). "Monitoring Boiler Green Initiative's green roof on Schleman Hall," 3rd Annual Ecological Sciences and Engineering Symposium: Water Resources in a Changing Global Climate, Purdue University, West Lafayette, IN. Local.

**Gall, H. E.**, & Jafvert, C. (September 25, 2009). "Temporal variations of nutrient fluxes in agricultural tile drains and ditches," 3rd Annual Ecological Sciences and Engineering Symposium: Water Resources in a Changing Global Climate, Purdue University, West Lafayette, IN. Local.

**Gall, H. E.**, Jafvert, C., & Lee, L. (May 15, 2009). "Nutrient fluxes in agricultural tile drains and ditches," Indiana Environmental Health Summit, Indianapolis, IN. State.

**Gall, H. E.**, Jafvert, C., Lee, L., & Jenkinson, B. (October 3, 2008). "Real-time monitoring and automated sampling of tile-drains and near-field streams," Ohio Valley Chapter of Science of Environmental Toxicology and Chemistry, Indiana University, Bloomington, IN. Regional.

## **Workshops**

**Gall, H. E.** (Host and Speaker). (December 12, 2018). Empowering citizen scientists to reduce emerging contaminants in the environment: Focus group workshop, Penn State Survey Research Center, Lancaster, PA. State.

This 1.5-hr focus group meeting was one of three focus group meetings held to engage citizen scientists who volunteered to participate in PI Gall's NSF-funded grant.

**Gall, H. E.** (Host and Speaker). (December 12, 2018). Empowering citizen scientists to reduce emerging contaminants in the environment: Focus group workshop, Penn State Survey Research Center, Harrisburg, PA. State.

This 1.5-hr focus group meeting was one of three focus group meetings held to engage citizen scientists who volunteered to participate in PI Gall's NSF-funded grant.

**Gall, H. E.** (Host and Speaker). (December 11, 2018). Empowering citizen scientists to reduce emerging contaminants in the environment: Focus group workshop, Penn State Survey Research Center, Lancaster, PA. State.

This 1.5-hr focus group meeting was one of three focus group meetings held to engage citizen scientists who volunteered to participate in PI Gall's NSF-funded grant.

**Gall, H. E.** (Co-Host & Participant). (March 14, 2018). Flexible buffer focus group meeting, Penn State Agriculture and Environment Center, Lancaster, PA. State.

This 2-hr focus group meeting held in State College, PA sought to identify critical weaknesses and barriers in the current riparian buffer policies. Approximately 15 attendees from the Spring Creek watershed attended the meeting.

**Gall, H. E.** (Co-Host & Participant). (March 2, 2018). Flexible buffer focus group meeting, Penn State Agriculture and Environment Center, Lancaster, PA. State.

This 2-hr focus group meeting held in Lancaster, PA sought to identify critical weaknesses and barriers in the current riparian buffer policies. Approximately 15 attendees from the

Conewago Creek watershed attended the meeting.

**Gall, H. E. (Speaker).** (August 18, 2016). "Effect of different dairy manure applications on estrogen fate and transport," Manure Handlers Professional Training, Penn State University, College of Agricultural Science.

This workshop is specifically designed to provide background training for commercial and public nutrient management specialists. It is part of the Certificate of Professional Manure Handlers. Workshop includes field trips and site visits at the Agricultural Progress Days.

**Gall, H. E. (Co-Organizer and Speaker).** (November 5, 2014). "Vegetative and Riparian Buffers for Environmental Stewardship and Renewable Fuels on Poultry and Livestock Farms," The Pennsylvania State University, Pennsylvania Department of Agriculture, State Conservation Commission, Pennsylvania Landscape and Nursery Association, and PennAg Industries Association.

1-day workshop to provide an overview of natural resource issues facing poultry and livestock farms and a tour of two poultry farms that implemented best management practices for air and water quality.

**Gall, H. E. (Host and speaker).** (November 21, 2011). Backyard Composting Workshop, West Lafayette Go Greener Commission and Tipmont.

This 2-hr evening workshop brought members of the public to an education and outreach event to learn how to manage their backyard compost. All participants received a composter as part of their participation in the event.

### **Other Speaking Engagements**

Penn State Living Filter, Tour. (May 3, 2023).

Organization/Group: Penn State Extension

Location: State College, PA (Living Filter Site)

Role: Tour Guide and Invited Speaker

Halfmoon Creek Watershed Tour. (December 5, 2022).

Organization/Group: College of Agricultural Sciences Institute for Sustainable Agricultural Food, and Environmental Science (SAFES)

Location: Port Matilda, PA (Halfmoon Creek watershed)

Role: Tour Organizer and Guide

Penn State Living Filter, Tour. (December 1, 2022).

Organization/Group: College of Agricultural Sciences Institute for Sustainable Agricultural, Food, and Environmental Science (SAFES)

Location: State College, PA (Living Filter Site)

Role: Tour Organizer and Guide

Penn State Living Filter, Tour. (April 7, 2022).

Organization/Group: Living Filter Conference

Location: State College, PA (Living Filter Site)

Role: Tour Organizer and Guide

Penn State Living Filter, Tour. (February 21, 2022).

Organization/Group: Penn State Association of Water Students

Location: State College, PA (Living Filter Site)

Role: Tour Organizer and Guide

Penn State Living Filter, Tour. (July 26, 2016).

Organization/Group: NEWBio

Location: State College, PA (Living Filter Site)

Role: Tour Guide and Invited Speaker

Schleman Hall Green Roof, Tour. (June 12, 2013).

Organization/Group: Elderhostel Senior Programs

Location: West Lafayette, IN

Role: Invited Speaker

What's in your water? Traditional and Emerging Contaminants. (April 24, 2013).

Organization/Group: Westminster Retirement Home

Location: West Lafayette, IN

Role: Invited Speaker

Green Practices in our Community. (October 17, 2012).

Organization/Group: Chauncey Hill Neighborhood Association

Location: West Lafayette, IN

Role: Invited Speaker

Pharmaceuticals in the Wabash River Watershed. (April 24, 2012).

Organization/Group: Hoosier Environmental Council

Location: West Lafayette, IN

Role: Invited Speaker

Water Quality Impairment from Intensive Management. (March 25, 2011).

Organization/Group: Wabash Area Lifelong Learning Association

Location: West Lafayette, IN

Role: Invited Speaker

## **GRANTS**

### **Funded (External Funding Sources)**

Vanden Heuvel, J., Ganda, E., Kibuye, F., & **Preisendanz, H. E.** "Assessing PFAS exposure in agroecosystems to inform mitigation strategies," United States Department of Agriculture – Agricultural Research Service, Cooperative Agreement. Total Awarded: \$180,000. (October 1, 2025 – September 30, 2028).

Kibuye, F., Yench, A., & **Preisendanz, H. E.** "Per- and polyfluoroalkyl substances (PFAS) workshop for Extension educators and volunteers," Pennsylvania Department of Environmental Protection. Total Awarded: \$30,000. (July 1, 2025 – June 30, 2026).

**Preisendanz, H. E., (PI)**, Carrijo, D., Kibuye, F., Drohan, P. "Assessing the potential for hemp to remediate PFAS-contaminated agroecosystems," Pennsylvania Department of Agriculture. Total Awarded: \$272,000. (July 1, 2024 – June 30, 2026).

Drohan, P., **Preisendanz, H. E. (Co-PI)**, Groh, T., & Veith, T. L. "Ready solutions for reducing agricultural nitrogen, phosphorus, and sediment in the Susquehanna River Basin,"

- Pennsylvania Department of Agriculture. Total Awarded: \$162,184. (July 1, 2024 – June 30, 2026).
- Preisendanz, H. E. (PI)**, Brent, D., Cibir, R., Drohan, P. J., Groh, T. A., & Zipp, K. Y., "Evaluating and Improving the Integrity of Riparian Buffers for Achieving Water Quality Benefits," USDA-NIFA. Total Awarded: \$750,000. (August 1, 2023 - July 31, 2026.)
- Ippolito, J. (PI, Ohio State University), Basta, N. (Co-PI, Ohio State University), Borch, T. (Co-PI, Colorado State University), Huang, Q. (Co-PI, University of Georgia), **Preisendanz, H. E.** (Co-PI, Penn State), & Xia, K. (Virginia Tech). "A Collaborative Multi-State Research and Technical Assistance Consortium: State of Science and Future Opportunities to Address PFAS in Agriculture," USDA-NRCS. Total Award: \$1.5M. Penn State Sub-Award: \$321,089. September 27, 2022 – September 30, 2025.
- Lee, L. S. (PI, Purdue University), Pennel, K. (Co-PI, Brown University), & **Preisendanz, H. E. (Co-PI, Penn State)**, "Evaluating PFAS Occurrence and Fate in Rural Water Supplies and Agricultural Operations to Inform Management Strategies," Environmental Protection Agency. Total Award: \$1.6M. Penn State Sub-Award: \$368,663. September 1, 2020 - April 28, 2025.
- McPhillips, L. (PI), Kahl, A., **Preisendanz, H. E. (Co-PI)**, Warner, N. R., & Zappe, S. E. "IRES Track 1: Sources and solutions of nonpoint source pollution," National Science Foundation, Total Awarded: \$298,682. November 1, 2021 - October 31, 2025.
- Preisendanz, H. E. (PI)**. "Slow Filtration of Pharmaceuticals from Wastewater using Biochar Columns," USDA Agricultural Research Service. Total Awarded: \$75,000. September 1, 2020 - August 31, 2024.  
Amendments:  
OSP Number: 232137, Additional amount awarded: \$23,237.00. Updated total amount awarded: \$98,237.00. September 1, 2020 - August 31, 2024.
- Groh, T. A. (PI), McPhillips, L., & **Preisendanz, H. E. (Co-PI)**, "Water Quality Monitoring Network on Halfmoon Creek in Centre County," COP: Department of Agriculture, Commonwealth of Pennsylvania. Total Awarded: \$175,000. July 1, 2022 - June 30, 2024.
- Duncan, J. M. (PI), Cibir, R., & **Preisendanz, H. E. (Co-PI)**. "Agricultural Conservation Planning Framework Tool Evaluation for the Eastern U.S.," USDA Agricultural Research Service, Total Awarded: \$195,000. Total Anticipated: \$195,000, Amount Funded (Total or To Date, as applicable): \$195,000. January 20, 2020 - June 30, 2024.
- Regan, J. M. (PI) & **Preisendanz, H. E. (Co-PI)**. "Metatranscriptome and Redox Signatures of Microbially Catalyzed Phosphorus Mobilization in Agricultural Landscapes," USDA National Institute of Food and Agriculture, Total Awarded: \$500,000. July 1, 2019 - June 30, 2024.
- Preisendanz, H. E. (PI)**, "Assessing Chesapeake Riparian Buffer Effectiveness Through Spatial and Temporal Monitoring and Modeling: Part 2," USDA Agricultural Research Service, Total awarded: \$104,380. September 1, 2018 - August 31, 2023.  
Amendments:  
OSP Number: 233689, Total awarded: \$91,120. Total anticipated: \$353,471. September 1, 2018 - August 31, 2023

- OSP Number: 224494, Total awarded: \$42,816. Total anticipated: \$262,351. September 1, 2018 - September 30, 2023
- OSP Number: 211431, Total awarded: \$115,155. Total anticipated: \$219,535. September 1, 2018 - September 30, 2021
- Preisendanz, H. E. (PI)**, Elliott, H. A., Watson, J. E., Mashtare, M., Read, A. F., & Szpara, M. "Wastewater as an Indicator of the Physical and Mental Health of a Community during the COVID-19 Pandemic (Funding Opportunity Number NOAA-OAR-SG-2020-2006519)," National Oceanic and Atmospheric Administration. Total Awarded: \$100,000. February 1, 2018 - January 31, 2023.
- Brasier, K. J. (PI), Watson, J. E. Eaton, W. Hinrichs, C. C., Mendum, R. M., Ahern, L. Fowler, L. **Gall, H. E. (Co-PI)**, Meinen, R., Santangelo, N., Tyson, J. T., & Yoxtheimer, D. A. "Securing Water for and from Agriculture through Effective Community and Stakeholder Engagement," USDA National Institute of Food and Agriculture. Total Awarded: \$4,999,923. July 1, 2017 - June 30, 2022.
- Kang, X. (PI, Virginia Tech), **Gall, H. E. (Co-PI, Penn State)**, Hodges, S., Kleinman, P., & Maguire, R., "Can Manure Land Application Practices Designed for Best Nutrient Management Reduce the Flow of Antimicrobial Resistance Elements in Agroecosystems and Enhance Overall Ecosystem," USDA National Institute of Food and Agriculture. Total Awarded: \$480,000. Penn State Sub-Award: \$123,895. April 1, 2017 - March 31, 2022.
- Gall, H. E. (PI)**, Cibir, R., Royer, M., Shortle, J. S., & Zipp, K. Y. "Flexible Buffer Systems: Enhancing Ecosystem Services and Expanding Agricultural Options in Riparian Areas," USDA National Institute of Food and Agriculture. Total awarded: \$499,500. May 1, 2017 - May 30, 2021
- Gall, H. E. (PI)**, "Assessing Chesapeake Riparian Buffer Effectiveness Through Spatial and Temporal Monitoring and Modeling: Part 2," USDA Agricultural Research Service. Total awarded: \$104,380. October 1, 2018 - September 30, 2020.
- Gall, H. E. (PI)**, Fowler, L., Bryant, R., & Swistock, B. "EAGER: PPER: Empowering Citizen Scientists to Reduce Sources of Emerging Contaminants," National Science Foundation, Federal Agencies. Total awarded: \$99,995. January 1, 2018 - December 31, 2019.
- Gall, H. E. (PI)**. "Assessing Chesapeake Riparian Buffer Effectiveness Through Spatial and Temporal Monitoring and Modeling," USDA Agricultural Research Service, Federal Agencies. Total awarded: \$45,231. December 15, 2017 - August 31, 2019.
- Patterson, P. H. (PI) & **Gall, H. E. (Co-PI)**. "Vegetative and Riparian Buffers for Environmental Stewardship and Renewable Fuels on Poultry Farms," USDA Natural Resources Conservation Service. Total awarded: \$290,650. September 24, 2014 - September 30, 2018.
- Gall, H. E. (PI)**. "Expanding access to real-time monitoring hydrologic and water quality sensors in ASM/ERM 309," Campbell Scientific, Inc., Corporations. Amount Awarded: \$9,868. March 22, 2018 - June 29, 2018.
- Cibir, R. (PI), Abler, D. G., Elliott, H. A., **Gall, H. E (Co-PI)**, & Shortle, J. S. "Manurefest Destiny: Opportunities for Animal Agriculture in Western PA," COP: Department of

Agriculture, Commonwealth of Pennsylvania. Total awarded \$145,000. February 21, 2017 - December 31, 2017.

**Gall, H. E. (PI)**, Elliott, H. A., Watson, J., Swistock, B., Galford, A., & Clark, J., "Pharmaceuticals and Personal Care Products in PA Municipal Water Supplies from Lake and Riverine Sources," Pennsylvania Sea Grant. Total requested: \$53,400.00. (total start and end of funding: February 1, 2016 - December 31, 2017.

**Gall, H. E. (PI)**. "Incorporating Real-Time Monitoring Technology into ASM/ERM 309," Penn State College of Agricultural Sciences, Agricultural and Biological Engineering Department, and Ecosystem Resources Management, Penn State. Amount awarded: \$14,908. December 2, 2014 - December 2015.

**Gall, H. E. (PI)**. "Testing the Ability of Rezfree and Toxoff to Accelerate Pesticide Degradation," Pristine Earth, LLC. Amount Awarded: \$5,902. May 1, 2015 - June 1, 2015.

### **Funded (Internal Funding Sources)**

**Preisendanz, H. E. (PI)**, Carrijo, D., Groh, T., Kibuye, K., Mashtare, M., Perdew, G., Vanden Heuvel, J., & Veith, T. L. "Towards establishing a PFAS-in-Agroecosystems Research and Extension Network at Penn State (SNIP Level I)," College of Agricultural Sciences, Penn State. Total awarded: \$9,976. November 27, 2023 – December 31, 2025.

Carrijo, D. (PI), Collin, A., Mina, O. & **Preisendanz, H. E. (Co-PI)**. "Assessing the potential for hemp to remediate PFAS-contaminated agroecosystems (SNIP Level II)," College of Agricultural Sciences, Penn State. Total awarded: \$25,000. November, 27, 2023 – December 31, 2025.

Kibuye, F. (PI) & **Preisendanz, H. E. (Co-PI)**. "Drinking water testing and education for roadside springs in Pennsylvania (Science to Practice Program). College of Agricultural Sciences, Penn State. Total awarded: \$10,000. September 29, 2023 – September 30, 2024.

**Preisendanz, H. E. (PI)**, Kibuye, F., Peters, J., Thompson, C., & Vanden Heuvel, J. "Understanding cancer risks from exposure to emerging contaminants in drinking water," Penn State Cancer Institute. Total awarded: \$59,532. May 1, 2023 – May 31, 2024.

**Preisendanz, H. E. (PI)**, Gomez, E., Vasco-Correa, J., & Velegol, S. "Developing water treatment technologies for PFAS removal in disadvantaged communities," Institute of Energy and the Environment, Penn State. Total awarded: \$30,000. July 1, 2023 – May 30, 2024.

**Preisendanz, H. E. (PI)**, Watson, J. E., Veith, T. L., "Investigating the occurrence, spatiotemporal patterns, and potential impacts of PFAS at the Penn State Living Filter," Office of Physical Plant, Penn State. Amount Awarded: \$51,248. July 1, 2020 - June 30, 2021.

**Gall, H. E. (PI)**, Watson, J. E., Elliott, H. A., Swistock, B., Brantley, S. L., Mina, O., Fowler, L., Brennan, R. A., Tooker, J. F., Ahern, L., Hall, M., Sponsored Research, 50% credit, "Center for Contaminants of Emerging Concern (C4CECs)," College of Agricultural Sciences, Penn State. Total awarded: \$45,000. May 1, 2018 - April 30, 2021.

**Preisendanz, H. E. (PI)**, Watson, J. E., Veith, Read, A. F., Jones, M. J., Sponsored Research, 70% credit, "Impacts of COVID-19 on Beneficial Reuse Water and Compost Quality:

- Potential Agricultural and Environmental Health Impacts," College of Agricultural Sciences, Penn State. Amount Awarded: \$20,000. May 1, 2020 - April 30, 2021.
- Preisendanz, H. E. (PI)**, Watson, J. E., & Veith, T. L. "Understanding the effects of wastewater irrigation on CEC presence in soil, groundwater, and vernal pools," Office of Physical Plant, Penn State. Amount awarded: \$65,000. July 1, 2019 - June 30, 2020.
- Gall, H. E. (PI)**, Veith, T. L., Elkin, K. R., "Understanding the effects of wastewater irrigation on CEC presence in soil, groundwater, and vernal pools," Office of Physical Plant, Penn State. Amount Awarded: \$41,308. July 1, 2018 - June 30, 2019.
- Wong, B. (PI, Monash University), **Gall, H. E. (Co-PI, Penn State)**, Tooker, J. F., Alton, L., "Toxicants in the wilderness: Ecological impacts of emerging contaminants," Penn State & Monash University. Total awarded: \$20,000. June 2018 - May 2019.
- Cibin, R. (Principal Investigator), **Gall, H. E. (Co-PI)**, Chiles, R. M., Grady, C., Drohan, P. J., Veith, T. L., "What would the Susquehanna River Basin look like in a European Union Framework Directive?," Institutes of Energy and the Environment, Penn State. Total awarded: \$25,000. April 1, 2018 - March 31, 2019.
- Saleh, L. (PI) & **Gall, H. E. (Co-PI)**. "Monitoring pharmaceuticals at Penn State's Living Filter," College of Agricultural Sciences, Penn State. Total awarded: \$1,750. August 2018 - December 2018.
- Weikel, J. (PI) & **Gall, H. E. (Co-PI)**. "Managing landscapes: Emerging soil contaminants at Penn State's spray-irrigation site," College of Agricultural Sciences, Penn State. Total awarded: \$3,000. May 2018 - July 2018.
- Mroczo, O. (PI) & **Gall, H. E. (Co-PI)**. "Antimicrobial Resistance Genes in Surface Runoff from Manure-Amended Fields," College of Agricultural Sciences, Penn State. Amount awarded: \$1,750. January 2018 - May 2018.
- Barnes, R. (PI) & **Gall, H. E. (Co-PI)**. "Atrazine Sampling Blitz across the Susquehanna River Basin," College of Agricultural Sciences, Penn State. Amount Awarded: \$1,750. August 2017 - December 2017.
- Gall, H. E. (PI)**. "Assessing the Impacts of Wastewater Irrigation on Vernal Pool and Groundwater Quality at the Living Filter," Office of Physical Plant, Penn State. Amount awarded: \$42,000. July 1, 2016 - June 30, 2017.
- Nowin, M. (PI) & **Gall, H. E. (Co-PI)**. "Quantification of Emerging Contaminant Effects of Wastewater Irrigation Activities Through Penn State's Living Filter on Water Quality for Humans and Amphibians," College of Agricultural Sciences, Penn State. Amount awarded: \$3,000. May 8, 2017 - June 16, 2017.
- Valdez, C. (PI) & **Gall, H. E. (Co-PI)**. "Effects of arable Soil Properties on Surface Runoff and Infiltration at Penn State's Living Filter," College of Agricultural Sciences, Penn State. Amount Awarded: \$1,500. January 9, 2017 - April 28, 2017.
- Leavy, D. (PI) & **Gall, H. E. (Co-PI)**. "Pharmaceuticals and personal care products in municipal water supplies from reservoir and riverine sources." College of Agricultural Sciences, Penn



- State. Amount Awarded: \$1,500. August 2016 - December 2016.
- Klueber, Z. (PI) & **Gall, H. E. (Co-PI)**. "Spatial and Temporal Variations of Soil Hydraulic Functions in Warm Conditions," Erickson Discovery Grant Program, Penn State. Amount Awarded: \$3500. May 2016 - July 2016.
- Gall, H. E. (PI)**. "Assessing the Impacts of Wastewater Irrigation on Fate and Transport of Emerging Contaminants at Penn State's Living Filter," Office of Physical Plant, Penn State. Amount Awarded: \$30,000. July 1, 2015 - June 30, 2016.
- Smilnak, D. (PI) & **Gall, H. E. (Co-PI)**. "Ongoing Monitoring of Penn State's Living Filter," College of Agricultural Sciences, Penn State. Amount Awarded: \$1,500. January 11, 2016 - April 25, 2016.
- Gall, H. E. (PI)**. "Spatial and Temporal Variations in Soil Hydrologic Functions at Penn State's Living Filter," College of Agricultural Sciences, Penn State. Amount Awarded: \$1,750. January 11, 2016 - April 25, 2016.
- Gall, H. E. (PI)**. "Linking irrigation activities to the presence of emerging contaminants in vernal pools," College of Agricultural Sciences, Penn State. Amount Awarded: \$1,750. August 24, 2015 - October 7, 2015.
- Gall, H. E. (PI)**, Elliott, H. A., Boyer, E. W., & Watson, J. "Emerging Contaminants: Challenges for Environmental Resilience - An interdisciplinary seminar series and dialogue," College of Agricultural Sciences, Penn State. Amount Awarded: \$20,000. November 1, 2014 - July 31, 2015.
- Schultz, D. (PI) & **Gall, H. E. (PI)**. "Assessing the Temporal Inequality of Nutrient Loads to the Chesapeake Bay," Erickson Discovery Grant, Penn State. Amount Awarded: \$3,500. May 26, 2015 - July 21, 2015.
- Gluberman, M. (PI) & **Gall, H. E. (Co-PI)**. "Development of an Endocrine Disrupting Compounds Footprint Calculator," College of Agricultural Sciences, Penn State. Amount Awarded: \$3000. June 1, 2015 - July 13, 2015.
- Gall, H. E. (PI)**. "Assessing the Impacts of Wastewater Irrigation on Vernal Pools at Penn State's Living Filter," Office of Physical Plant, Penn State. Amount Awarded: \$26,500. July 1, 2014 - July 1, 2015.
- Harrington, K. (PI) & **Gall, H. E. (Co-PI)**. "Evaluating the Spatial Variability of Water Quality Parameters within Vernal Pools," Penn State College of Engineering Research Experience for Undergraduates (REU), Penn State. Amount Awarded; \$6,000. August 25, 2014 - June 30, 2015.
- Gall, H. E. (PI)**, Langkilde, T. L., Boyer, E. W., Miller, D., "Emerging Contaminants in Vernal Ponds Across a Human Impact Gradient," Institutes of Energy and the Environment, Penn State. Amount Awarded: \$24,725. March 15, 2014 - June 2015.
- Schultz, D. (PI) & **Gall, H. E. (Co-PI)**. "Assessing the Temporal Inequality of Nutrient Loads to the Chesapeake Bay," College of Engineering, Penn State. Amount Awarded: \$6,000. June 30, 2014 - August 2014.

Gonzalez, M. (PI) & **Gall, H. E. (Co-PI)**. "Establishing a Human Impact Gradient for Vernal Pools in Centre County, PA," College of Engineering, Penn State. Amount Awarded: \$6,000. June 9, 2014 - August 2014.

Taylor, R. (PI) & **Gall, H. E. (Co-PI)**. "Developing an Endocrine Disrupting Compounds Footprint Calculator," College of Engineering, Penn State. Amount Awarded: \$6,000. May 27, 2014 - August 30, 2014.

### **Pending**

Drohan, O., **Preisendanz, H. E. (Co-PI)**, & Veith, T. L. "Extending runoff mapping for forested and agricultural areas to reduce nitrogen, phosphorus and sediment in the Susquehanna River Basin," USDA-Natural Resources Conservation Service. Total Requested: \$213,994. October 1, 2024 – September 30, 2027. (Submitted: July 23, 2024).

### **Workshops**

**Preisendanz, H. E. (Participant)**. (September 10-12, 2024). Identifying and Prioritizing Research and Programmatic Needs in the Detection, Mitigating, and Remediating PFAS in Agriculture and Food Systems, USDA-Agricultural Research Service, Arlington, V.A. National.

This three-day workshop organized by the USDA-ARS brought together 150 federal, state, and academic researchers, scientists, and policymakers to identify priority needs on PFAS in agricultural systems. The outcome of the workshop was a roadmap for how to achieve these needs in the short-term (1-2 years) and longer term (2-4+ years).

**Gall, H. E. (Participant)**. (August 29, 2018). Center for Nutrient Solutions Workshop, Penn State Agriculture and Environment Center, Harrisburg, PA. Regional.

This all-day workshop in Harrisburg, PA showcased the research conducted as part of the EPA-funded Center for Nutrient Solutions. The workshop featured oral presentations from the watershed scientists, economists, ecologists, engineers, soil scientists, and law and policy experts from Penn State, USDA-ARS, Montana State University, and University of Maryland Eastern Shore who were involved in the multi-year project.

**Gall, H. E. (Participant)**. (August 29, 2018). Soil and Water Quality Field Day Workshop, USDA-ARS, Klingerstown, PA. State.

This 7-hr workshop was held at the USDA-ARS facility in Klingerstown, PA to update workshop attendees about the Conservation Reserve Enhancement Program and ongoing research activities in the Mahantango Creek Watershed.

**Gall, H. E. (Participant)**. (October 18, 2016). Spring Creek Watershed: The Key to a Sustainable Future, Penn State Sustainability Institute & Arava Institute, State College, PA.

This 3 hr active workshop ("master class") was focused on how to address water challenges in the Spring Creek Watershed. Population growth, land-use changes, and climate change are putting increasing pressure on our shared water resources in the Centre Region. Dr. Lipchin and Penn State moderators facilitated a process of community dialogue among civic and non-profit leaders to identify challenges and potential solutions in the Spring Creek Watershed. The Arava Institute is a leading environmental and academic institute in the Middle East working on water issues in an extremely arid and conflict-laden region of the world. Dr. Lipchin's area of expertise is trans-boundary water issues.

**Gall, H. E. (Participant).** (March 1, 2016). "Pennsylvania in the Balance," Penn State College of Agricultural Sciences.

This conference provided a collaborative forum where motivated leaders throughout PA's agricultural and environmental community could collectively identify new, innovative solutions that can help us ensure vibrant, productive agriculture while meeting water quality goals for the Commonwealth's rivers and streams and the Chesapeake Bay.

**Gall, H. E. (Participant).** (November 3, 2014). Centre County Watershed Summit, Penn State Agriculture and Environment Center.

1-day summit that brought together university and community partners to share success stories, explore challenges and solutions, and identify collaborative opportunities in research, outreach, implementation, and engaged scholarship.

**Gall, H. E. (Participant).** (October 2013). "Soil-mediated Drivers of Coupled Biogeochemical and Hydrological Processes Across Scales," American Geophysical Union.

4-day focused-topic workshop held at Biosphere II in Tucson, AZ. ~100 scientists from around the world with expertise in soil systems sciences, hydrology, and biogeochemistry were brought together to discuss recent findings dealing with the role and importance of coupled hydrological and biogeochemical processes occurring in the soil system and its interfaces with adjacent compartments. In-depth exchanges of concepts and ideas on these topics were facilitated in small groups, with an emphasis on addressing critical research needs across spatial and temporal scales.

### **Training & Professional Development Activities**

"Transdisciplinary Webinar-The Science of Team Science," Jeni Cross, Colorado State University and Anne Mook, Colorado State University, US Department of Agriculture. (December 6, 2023).

LEAD21: Leadership for the 21<sup>st</sup> Century. Class 19.

Session 1: June 11-16, 2023. Chicago, IL.

Session 2: October 2-5, 2023, Denver, CO.

Session 3: February 19-23, 2024, Washington, DC.

LEAD21 is intended to meet the future needs for leadership development of faculty, specialists, program and team leaders, research station and center directors, district and regional directors, department heads and chairs, and others in land grant universities' colleges of agricultural, environmental, and human sciences and USDA/NIFA. The primary purpose of LEAD21 is to develop leaders in land grant institutions and their strategic partners who link research, academics, and extension in order to lead more effectively in an increasingly complex environment, either in their current position or as they aspire to other positions.

"Research Talk: Creating Cultures of Inclusion in STEM," Penn State Harrisburg, Penn State. (April 11, 2023).

"BUILD for Leaders: Activating DEI Culture Shifts," SkillSoft, Penn State. (March 2023).

"BUILD for Leaders: Adopting a New Leadership Mindset to Drive DEIB," SkillSoft, Penn State. (March 2023).

"BUILD for Leaders: Embedding Inclusion into Everyday Experiences," SkillSoft, Penn State. (March 2023).

“Safer People Safer Places Transgender & Gender Inclusion 101 Workshop,” Penn State Center for Sexual and Gender Diversity. (September 19, 2022).

"Incorporating Diversity in the Engineering Curriculum," Deans Patreese Ingram and Tonya Peeples, Penn State Colleges of Agricultural Sciences and Engineering. (October 16, 2020).

"Digital tools for teamwork," Leonhard Center, Leonhard Center. (July 16, 2020).

"Effective student teams in any learning environment," Leonhard Center, Leonhard Center. (July 14, 2020).

"Diversity and Inclusion Workshop: Intercultural Competence," Dean Patreese Ingram, Penn State College of Agricultural Sciences. (April 17, 2017).

“Safe Zone 101,” Penn State Student Affairs. (January 26, 2017).

“NSF Proposal Writing Workshop,” The Schreyer Institute for Teaching Excellence. (April 22, 2015).

"Effective Undergraduate Advising," The Schreyer Institute for Teaching Excellence. (February 10, 2015).

"Experimentation in Engineering Courses," The Leonhard Center for the Enhancement of Engineering Education, Penn State. (March 23, 2015).

"Master the Media," Penn State Institutes of Energy and the Environment. (April 21, 2014).

"Using Social Media in the Classroom," The Pennsylvania State University College of Agricultural Sciences Faculty Development Committee. (February 26, 2014),

“Leadership Training,” The Pennsylvania State University College of Agricultural Sciences. (December 2013),

"New Faculty Teaching Tips: Interpreting SRTes," The Leonhard Center for the Enhancement of Engineering Education, Penn State. (November 12, 2013).

"New Faculty Teaching Tips: Active Learning Strategies," The Leonhard Center for the Enhancement of Engineering Education, Penn State. (October 16, 2013).

“New Faculty Workshop,” The Pennsylvania State University College of Engineering. (August 2013).

“New Faculty Orientation,” The Pennsylvania State University. (August 22, 2013).

### **Media Mentions**

“Feds cut funds for PSU team that tested water wells for PFAS: Opinion,” GoErie, (Jul 23, 2025). <https://www.goerie.com/story/opinion/columns/2025/07/23/epa-feds-cut-funds-for-psu-team-that-tested-water-wells-for-pfas-opinion/85312620007/>

“Penn State study finds toxic PFAS in 18% of private wells in Pennsylvania,” Internet and Radio, WHYY, (July 17, 2025).

<https://whyy.org/articles/pfas-private-wells-pennsylvania/>

“College of Ag Sciences grant program supports student learning experiences,” Internet, Penn State News. (July 16, 2025).

<https://www.psu.edu/news/agricultural-sciences/story/college-ag-sciences-grant-program-supports-student-learning-experiences>

“‘Forever Chemicals’ detected in 65% of sampled private wells in Pennsylvania,” Internet, Penn State News. (June 16, 2025).

<https://www.psu.edu/news/research/story/forever-chemicals-detected-65-sampled-private-wells-pennsylvania>

“Ag Sciences research institute SAFES funds projects addressing critical issues,” Internet, Penn State News. (March 15, 2025).

<https://www.psu.edu/news/agricultural-sciences/story/ag-sciences-research-institute-safes-funds-projects-addressing-critical>

“The Interview: Heather Preisendanz,” Ag Science Magazine, Penn State College of Agricultural Sciences. (January 9, 2025).

<https://agsci.psu.edu/magazine/articles/2024/fall-winter/the-interview-heather-preisendanz>

“Alternate stream water-testing method detects emerging contaminants,” Internet, Penn State News. (November 22, 2024).

<https://www.psu.edu/news/research/story/alternate-stream-water-testing-method-detects-emerging-contaminants>

“Grants will provide real-world learning experiences for College of Ag students,” Internet, Penn State News. (July 30, 2024).

<https://www.psu.edu/news/agricultural-sciences/story/grants-will-provide-real-world-learning-experiences-college-ag-students/>

“College of Ag Sciences faculty, extension leader engage in leadership program,”

Internet, Penn State News. (April 22, 2024).

<https://www.psu.edu/news/agricultural-sciences/story/college-ag-sciences-faculty-extension-leader-engage-leadership-program/>

“‘Growing Impact’ examines PFAS water contamination, evaluation of existing tech,”

Internet, Penn State News. (March 4, 2024).

<https://www.psu.edu/news/research/story/growing-impact-examines-pfas-water-contamination-evaluation-existing-tech/>

“‘Growing Impact’: Low-cost PFAS filtration,” Internet, Penn State Institute of Energy and the Environment News, Podcast. (March 1, 2024).

<https://iee.psu.edu/news/podcast/growing-impact-low-cost-pfas-filtration>

“Preisendanz to direct Penn State College of Agricultural Sciences Institute,” Internet, Penn State News. (March 1, 2024).

<https://www.psu.edu/news/agricultural-sciences/story/preisendanz-direct-penn-state-college-agricultural-sciences-institute/>

- "USDA funds study of effectiveness of vegetation to curb water pollution," Internet, Penn State News. (July 20, 2023).  
<https://www.psu.edu/news/research/story/usda-grant-funds-study-effectiveness-vegetation-curb-water-pollution/>
- "COVID-19 Impacts found in unexpected places," Internet, American Society of Agronomy Science News. (November 28, 2022).  
<https://www.agronomy.org/news/science-news/covid-19-impacts-found-unexpected-places/>
- "The Sustainable Communities Collaborative celebrates community partnerships," Internet, Penn State News. (November 22, 2022).  
<https://www.psu.edu/news/sustainability-institute/story/sustainable-communities-collaborative-celebrates-community/>
- "Using biochar to clean out pharmaceuticals from our precious streams and waterways," Internet, USDA-ARS, Under the Microscope: Zooming in on Agriculture's Biggest Challenges. (November 15, 2022).  
<https://www.ars.usda.gov/oc/utm/using-biochar-to-clean-out-pharmaceuticals-from-our-precious-streams-and-waterways/>
- "'Forever Chemicals' persist through wastewater treatment, may enter crops," Internet, Penn State News. (October 27, 2022).  
[https://www.psu.edu/news/research/story/forever-chemicals-persist-through-wastewater-treatment-may-enter-crops/?utm\\_audience=Combined&utm\\_source=newswire&utm\\_medium=email&utm\\_campaign=Penn%20State%20Today&utm\\_content=10-26-2022-22-24&utm\\_term=Research%20-%201](https://www.psu.edu/news/research/story/forever-chemicals-persist-through-wastewater-treatment-may-enter-crops/?utm_audience=Combined&utm_source=newswire&utm_medium=email&utm_campaign=Penn%20State%20Today&utm_content=10-26-2022-22-24&utm_term=Research%20-%201)
- "When chemicals go to the dark side: The unintended consequences of emerging contaminants," Internet, CSA News. (October 25, 2022).  
<https://access.onlinelibrary.wiley.com/doi/10.1002/csan.20894>
- "Penn State, State College data on SARS-CoV-2 in wastewater now available online," Internet, Penn State News. (October 17, 2022).  
<https://www.psu.edu/news/campus-life/story/penn-state-state-college-data-sars-cov2-wastewater-now-available-online/>
- "COVID-19 drugs persist in wastewater, may pose risk to aquatic organisms," Internet, Penn State News. (September 8, 2022).  
<https://www.psu.edu/news/research/story/covid-19-drugs-persist-wastewater-may-pose-risk-aquatic-organisms/>
- "Full attention on Halfmoon Creek: CBF and partners create a unique watershed restoration plan," Internet, Chesapeake Bay Foundation, Annapolis, MD. (February 4, 2022).
- "Chesapeake Bay Foundation, partners, create unique watershed restoration plan for Halfmoon Creek in Centre County," Internet, PA Environment Digest. (February 4, 2022).
- "Emerging Contaminants in the Bay," Internet, Chesapeake Research Consortium Newsletter, Edgewater, MD. (October 12, 2021).

"Penn State wastewater testing shows potential for future coronavirus monitoring," Internet, The Daily Collegian, State College, PA. (April 7, 2021).

"Putting Wastewater To Use, Penn State Researchers Track COVID-19 Trends," Radio, WPSU, State College, PA. (March 5, 2021).  
[https://radio.wpsu.org/post/putting-wastewater-use-penn-state-researchers-track-covid-19-trends?fbclid=IwAR1-Os5qaTxyB-kRTX3M8wlxG43V3FkNUk3-6Tvp2cfY-Sh2K9Ug6\\_JBxJ8](https://radio.wpsu.org/post/putting-wastewater-use-penn-state-researchers-track-covid-19-trends?fbclid=IwAR1-Os5qaTxyB-kRTX3M8wlxG43V3FkNUk3-6Tvp2cfY-Sh2K9Ug6_JBxJ8)

"Changing cropping systems in impaired watersheds can produce water quality gains," Internet, Penn State News. (February 9, 2021).  
<https://news.psu.edu/story/647012/2021/02/09/research/changing-cropping-systems-impaired-watersheds-can-produce-water>

"'Windows of opportunity' crucial for cutting Chesapeake nutrient, sediment loads," Internet, Penn State News. (December 14, 2020).  
<https://news.psu.edu/story/641771/2020/12/14/research/windows-opportunity-crucial-cutting-chesapeake-nutrient-sediment>

"Biochar from agricultural waste products can adsorb contaminants in wastewater," Internet, Penn State News. (November 16, 2020).  
<https://news.psu.edu/story/638309/2020/11/16/research/biochar-agricultural-waste-products-can-adsorb-contaminants>

"Harvesting vegetation on riparian buffers barely reduces water-quality benefits," Internet, Penn State News. (October 2, 2020).  
<https://news.psu.edu/story/633913/2020/10/02/research/harvesting-vegetation-riparian-buffers-barely-reduces-water-quality>

"Harvesting vegetation on riparian buffers barely reduces water-quality benefits," Internet, MorningAg Clips. (October 1, 2020).  
[https://www.morningagclips.com/harvesting-vegetation-on-riparian-buffers-barely-reduces-water-quality-benefits/?fbclid=IwAR0u6C9e4eP7phyVLQsUsmjA8YZ5P5\\_8AWOA3CcbIwddjQr1ESky0Fh3\\_k](https://www.morningagclips.com/harvesting-vegetation-on-riparian-buffers-barely-reduces-water-quality-benefits/?fbclid=IwAR0u6C9e4eP7phyVLQsUsmjA8YZ5P5_8AWOA3CcbIwddjQr1ESky0Fh3_k)

"Wastewater sampling may give advanced warning of potential COVID-19 outbreaks," Internet, Penn State News. (September 20, 2020).  
<https://news.psu.edu/story/632398/2020/09/20/research/wastewater-sampling-may-give-advanced-warning-potential-covid-19>

"Household chemicals that harm fish were found in Susquehanna River. This Penn State research aims to help lessen the problem," Internet, StateImpact Pennsylvania. (July 1, 2020).  
<https://stateimpact.npr.org/pennsylvania/2020/07/01/household-chemicals-that-harm-fish-were-found-in-susquehanna-river-this-penn-state-research-aims-to-help-lessen-the-problem/>

"Emerging organic contaminant levels greatly influenced by stream flows, seasons," Internet, Penn State News. (January 29, 2020).  
<https://news.psu.edu/story/605932/2020/01/29/research/emerging-organic-contaminant-levels-greatly-influenced-stream->

flows?fbclid=IwAR3h0XVR9yHZc4JKhtH\_XJcqVdBQmw0iIwdQZ5kiMmTGAQQAuwcUDNrYins

"Active pharmaceutical ingredients can persist in the environment," Internet, Soil Science Society of America. (July 22, 2019).

<https://www.soils.org/news/science-news/active-pharmaceutical-ingredients-can-persist-environment>

"Manure injection offers hope, challenge for restoring Chesapeake water quality," Internet, Penn State News. (February 6, 2019).

<https://news.psu.edu/story/557850/2019/02/06/research/manure-injection-offers-hope-challenge-restoring-chesapeake-water>

"Drugs detected in private well water in north Central Pennsylvania," Internet, WHYY News. (August 6, 2018).

<https://whyy.org/articles/drugs-detected-in-private-well-water-in-north-central-pennsylvania/>

"Small amounts of pharmaceuticals found in north central PA rural well water," Internet, Penn State News. (July 31, 2018).

<https://news.psu.edu/story/529674/2018/07/31/research/small-amounts-pharmaceuticals-found-north-central-pa-rural-well>

"Presence, persistence of estrogens in vernal pools an emerging concern," Internet, Science Newsline: Biology. (February 14, 2018).

<http://news.psu.edu/story/505282/2018/02/13/research/presence-persistence-estrogens-vernal-pools-emerging-concern>

"Presence, persistence of estrogens in vernal pools an emerging concern," Internet, Penn State News. (February 13, 2018).

<http://news.psu.edu/story/505282/2018/02/13/research/presence-persistence-estrogens-vernal-pools-emerging-concern>

"Presence, persistence of estrogens in vernal pools an emerging concern," Internet, ScienceDaily. (February 13, 2018).

<https://www.sciencedaily.com/releases/2018/02/180213183547.htm>

"Citizen scientists to help researchers gauge Susquehanna water quality," Internet, Penn State News. (December 11, 2017).

<http://news.psu.edu/story/497659/2017/12/11/research/citizen-scientists-help-researchers-gauge-susquehanna-water-quality>

"Injecting manure instead of spreading on surface reduces estrogen loads," Internet, Penn State News. (August 16, 2017).

<http://news.psu.edu/story/477904/2017/08/16/research/injecting-manure-instead-spreading-surface-reduces-estrogen-loads>

"Researchers receive USDA grant to study new riparian buffer strategy," Internet, Penn State News. (July 20, 2017).

<http://news.psu.edu/story/475297/2017/07/20/research/researchers-receive-usda-grant-study-new-riparian-buffer-strategy>



- "Soil filters out some emerging contaminants before reaching groundwater," Internet, ScienceDaily. (July 19, 2017).  
<https://www.sciencedaily.com/releases/2017/07/170719113331.htm>
- "Soil filters out some emerging contaminants before reaching groundwater," Internet, Penn State News. (July 18, 2017).  
<http://news.psu.edu/story/474873/2017/07/18/research/soil-filters-out-some-emerging-contaminants-reaching-groundwater>
- "Measuring a Consumer's Contaminant Footprint," Journal or Magazine, Resource Magazine. (March 2017).  
[http://bt.e-ditionsbyfry.com/publication/?i=385900&p=26#{\"page\":26,\"issue\\_id\":385900}](http://bt.e-ditionsbyfry.com/publication/?i=385900&p=26#{\)
- "Track your trace amounts," Journal or Magazine, State College Magazine. (December 2016).
- "New tool helps consumers measure their emerging contaminant footprint," Newspaper, The Farmer's Friend. (December 16, 2016).
- "New tool helps consumers measure their emerging contaminant footprint," Internet, Penn State News. (December 1, 2016).  
<http://news.psu.edu/story/440170/2016/12/01/research/new-tool-helps-consumers-measure-their-emerging-contaminant>
- "Subsurface injection of manure reduces estrogen transport," Internet, Alliance of Crop, Soil, and Environmental Science Societies Digital Library News. (November 28, 2016).  
<https://dl.sciencesocieties.org/story/2016/nov/wed/subsurface-injection-of-manure-reduces-estrogen-transport>
- "Penn State's Living Filter site of study into emerging contaminants," Journal or Magazine, Environmental Monitor. (October 27, 2015).  
<http://www.fondriest.com/news/penn-states-living-filter-site-of-study-into-emerging-contaminants.htm>
- "Teenage mutant ninja tadpoles?," Internet, Penn State News. (October 5, 2015).  
<http://news.psu.edu/story/373421/2015/10/05/research/teenage-mutant-ninja-tadpoles>
- "Students develop plans to mitigate storm water in public parks," Newspaper, The Daily Collegian. (December 4, 2014).  
[http://www.collegian.psu.edu/news/campus/article\\_a31b8120-7b48-11e4-a987-cf28b764d70e.html](http://www.collegian.psu.edu/news/campus/article_a31b8120-7b48-11e4-a987-cf28b764d70e.html)
- "Purdue's first green roof won't be last," WLFI 18: News From Where You Live. (September 22, 2009).  
[http://www.wlfi.com/dpp/living\\_green/local\\_wlfi\\_west\\_lafayette\\_purdues\\_first\\_green\\_roof\\_wont\\_be\\_last\\_20090922](http://www.wlfi.com/dpp/living_green/local_wlfi_west_lafayette_purdues_first_green_roof_wont_be_last_20090922)

## **SERVICE**

### **Service to the University**

#### **Department**

Department Seminar Series, Department of Agricultural and Biological Engineering, Penn State.  
Chair. (July 2023 – June 2024).

ABET Steering Committee, Department of Agricultural and Biological Engineering, Penn State.  
Committee Member. (2020 - Present).

ABENG Graduate Program Coordinator, Department of Agricultural and Biological Engineering,  
Penn State. (January 2020 - June 2022).

Promotion & Tenure Committee, Department of Agricultural and Biological Engineering, Penn  
State.  
Member, Elected. (July 2019 - 2025).  
Chair, Elected. (2025 – Present).

Graduate Studies Committee, Department of Agricultural and Biological Engineering, Committee  
Member. (July 2017 - June 2022).

Awards Committee, Department of Agricultural and Biological Engineering, Penn State.  
Committee Member. (2019 - 2020).  
Chairperson. (2014 - 2018).

Faculty Advisory Committee, Department of Agricultural and Biological Engineering, Penn  
State. Committee Member.  
Elected. (2017 – 2019; 2023 – 2025).  
Appointed. (2014 – 2015; 2022-2023).

Green Team, Department of Agricultural and Biological Engineering, Penn State.  
Committee Member. (2016 - 2018).  
Chairperson. (2013 - 2016).

Undergraduate Studies Committee, Department of Agricultural and Biological Engineering, Penn  
State. Committee Member. (2013 - 2015).

#### **College**

Director of Research, Institute for Sustainable Agricultural, Food, and Environmental Science  
(SAFES), College of Agricultural Sciences, Penn State. (March 2024 - Present).

Associate Director of Research, Institute for Sustainable Agricultural, Food, and Environmental  
Science (SAFES), College of Agricultural Sciences, Penn State. (September 2022 – March  
2024).

Critical Issues Initiative Lead, Institute for Sustainable Agricultural, Food, and Environmental  
Science, College of Agricultural Sciences, Penn State. (March 2021 - Present).

Water Insights Seminar Organizer, Institute for Sustainable Agricultural, Food, and  
Environmental Science, College of Agricultural Sciences, Penn State. (2021-2023).

Search Committee for Assistant/Associate/Full Professor of Water Resources Engineering (CEE Department), Committee Member. (2019 - 2020).

College of Agricultural Sciences Environmental and Natural Resources Institute (ENRI), College of Agricultural Sciences, Penn State, Committee Member. (2013 – 2020).  
Co-organize "Water Insights" Seminar (2017-2021)

Gamma Sigma Delta, College of Agricultural Sciences, Penn State, Historian. (April 2019 - May 2020).

Student Scholarships & Awards Committee, College of Agricultural Sciences, Penn State, Chairperson. (2016 - 2018).

College of Agricultural Sciences Student Scholarships and Awards Committee, College of Agricultural Sciences, Penn State, Committee Member. (2014 - 2016).

College of Agricultural Sciences Harbaugh Scholar Award Committee, College of Agricultural Sciences, Penn State, Committee Member. (2014 - 2015).

College of Agricultural Sciences United Way Committee, College of Agricultural Sciences, Penn State, Committee Member. (2013 - 2015).

College of Agricultural Sciences Environmental Stewardship and Resilience Strategic Initiative, College of Agricultural Sciences, Penn State. Committee Member. (2014).

## **University**

Visiting Water Scholar Program Committee, Penn State Water Consortium, Chairperson. (February 2022 - October 2022).

Led committee of 4 Water Faculty Members to develop program text for a new Visiting Water Scholars Program.

Wastewater Surveillance Team for SARS-CoV-2, Penn State. (July 2020 - Present).

Water Council, Penn State, Elected. (July 2019 - June 2022).  
Elected position, 3-year term  
Co-chair (July 2020-June 2022)

College of Agricultural Sciences Representative, Stewarding Our Planet's Resources Steering Committee, Committee Member. (2017 - 2020).

Penn State Institutes of Energy and the Environment (IEE), Panelist. (2018 - 2019).  
Review panel for seed grant proposals.

Water Research and Education at Penn State (WREAPS) Steering Committee, Committee Member. (2017 - 2018).

College of Agricultural Sciences Representative, Energy and Environmental Sustainability Laboratory (EESL) Advisory Board, Institutes of Energy and the Environment (IEE), Board Member. (2016 - 2020).

Penn State Institutes of Energy and the Environment (IEE), Panelist. (2015 - 2016).  
Review panel for seed grant proposals.

Wastewater Management Committee, Office of Physical Plant, Penn State, Member. (2013 - Present).

## **Participation in Recruitment and Retention Activities**

### **Department**

Search Committee for Water Resources Engineer Faculty Position, Department of Agricultural and Biological Engineering, Penn State, Chair. (May 2023 – May 2024).

Search Committee for Biodegradable Sensors Faculty Position, Department of Agricultural and Biological Engineering, Penn State, Committee Member. (February 2021 - August 2022).

Search Committee for Post-Doc, Department of Agricultural and Biological Engineering, Penn State. Committee Chair. (2020).

Search Committee for ABE Department Head, Department of Agricultural and Biological Engineering, Penn State, Committee Member. (2019 - 2020).

Search Committee for Assistant Research Professor of Watershed Management and Water Resources, Department of Agricultural and Biological Engineering, Penn State, Committee Chair. (2019 - 2020).

Search Committee for Financial Staff Position, Department of Agricultural and Biological Engineering, Department, Penn State, Committee Member. (2017).

### **College**

Search Committee for Program Coordinator and Academic Advisor for the Environmental Resources Management Program. Penn State, Committee Chair. (August 2024 – January 2025).

Search Committee for Dean, College of Agricultural Sciences. Penn State, Committee Member. (January 2024 – May 2024).

Search Committee for Assistant Research Professor of Watershed Management and Water Resources, Department of Ecosystem Science and Management, Penn State, Committee Member. (2019 - 2020).

College of Engineering and College of Agricultural Sciences Search Committee, Committee Member. (2015 - 2016).

Two jointly appointed Water Resources Engineering faculty positions in Agricultural and Biological Engineering and Civil Engineering

College of Engineering Search Committee for Engineering and Ethics of Drones Faculty Position, Department of Aerospace Engineering, Penn State, Committee Member. (2014 - 2015).

### **University**

Search Committee for Executive Vice President and Provost (EVPP), Committee Member. (December 2022 -April 2023).

Water Research Director Search Committee, Penn State Water Consortium, Institute of Energy and the Environment, Committee Member. (February 2022 - April 2022).

Search Committee for Organic Chemist, Energy and Environment Sustainability Laboratories, Institute of Energy and the Environment, Committee Member. (2020).

## **Organizing Conferences**

### **University**

Wastewater Reuse: 50-plus Years of Research, Management, and Lessons Learned, Office of Physical Plant, Penn State, Committee Member. (2020 - April 2022).

## **Service to the Disciplines and to the Profession**

### **Organizing Conferences and Service on Conference Committees**

American Society of Agricultural and Biological Engineers, Hydrology Division (NRES-21), Chair. Elected. (2022 - 2024).

Northeast Agricultural and Biological Engineering Conference (NABEC), Organizer. (2022 - 2024).  
Host Location Planning Committee.

American Society of Agricultural and Biological Engineers, Hydrology Division (NRES-21), Vice Chair. Elected. (2020 - 2022).

American Society of Agricultural and Biological Engineers, Hydrology Division (NRES-21), Secretary. Elected. (2018 - 2020).

Northeast Agricultural and Biological Engineering Conference (NABEC), Organizer. (2019 - 2020).  
Host Location Planning Committee  
(Meeting was switched to virtual because of COVID-19 pandemic)

Blue Ribbon Award Reviewer, American Society of Agricultural and Biological Engineers, Reviewer. (2019).  
Reviewed five Extension materials that were nominated for the ASABE Blue Ribbon Award.

American Society of Agricultural and Biological Engineers (ASABE), Erosion Control Group (NRES-22), Committee Member. (2016 - Present).

American Society of Agricultural and Biological Engineers (ASABE), Hydrology Division (NRES-21), Member. (2013 - Present).

K.K. Barnes Student Paper Competition, American Society of Agricultural and Biological Engineers, Reviewer. (2014 - 2019).

American Society of Agricultural and Biological Engineers, Graduate Student Poster Competition, Judge. (2018).

American Society of Agricultural and Biological Engineers, Session Organizer. (2018).  
Convened and moderated one technical session.

American Society of Agricultural and Biological Engineers, Secretary-Elect of Hydrology Division (NRES-21), Elected. (2016 - 2018).

American Society of Agricultural and Biological Engineers, Nomenclature (NRES-07), Vice-Chair, Elected. (2016 - 2018).

Northeast Agricultural and Biological Engineering Conference (NABEC), ASABE Publications Council, Representative. (2014 - 2018).

Northeast Agricultural and Biological Engineering Conference, Graduate Student Poster Competition, Judge. (2015 - 2017).

American Geophysical Union (AGU), Hydrology Water Quality Committee, Member. (2013 - 2017).

American Society of Agricultural and Biological Engineers, NRES-07 Nomenclature representative for NRES-21 Hydrology Group, Member. (2015 - 2016).

Hydrology Division (NRES-21), Graduate Student Oral Competition, Judge. (2015).

Outstanding Student Paper Awards Judge, American Geophysical Union, Judge. (2014 - 2015).

American Geophysical Union, National Fall Meeting. (2012).  
Convened two technical sessions

American Society of Civil Engineers (ASCE), Watershed Management Conference, Moderator. (2009).  
Convened one technical session

Watershed Management Conference, Reviewer. (2009).  
Reviewed 3 conference proceedings

### **Advisory Board**

National Reviewer, Hydrology Undergraduate Program, University of California – Davis. (2024).  
Review and provide recommendations for UC-Davis Hydrology program.

Biological Engineering (BIOE) Program Advisory Board, Committee Member. (2015, 2017 – 2021).  
Review and provide recommendations for NC A&T's BIOE program.

### **External Evaluator for Promotion and/or Tenure**

Provided a review of dossier for an assistant professor seeking promotion and tenure in the Department of Environmental and Sustainable Engineering at University of Albany- State University of New York. (September 2024)

Provided a review of dossier for an assistant professor seeking promotion and tenure in the Department of Biological and Ecological Engineering at Oregon State University. (September 2023)

Provided a review of dossier for an assistant professor seeking promotion and tenure in the Department of Biological Sciences at Michigan Technological University. (November 2022)

Provided a review of dossier for an assistant professor seeking promotion and tenure in the Department of Biosystems Engineering at the University of Kentucky. (September 2022)

**Service to Governmental Agencies**

California EPA, External Reviewer. (October 2022 – January 2023).

Reviewed Draft Staff Report for the Action Plan for the Laguna de Santa Rosa Watershed  
Sediment, Phosphorus, Nitrogen, and Temperature Total Maximum Daily Loads