

EDWARD P. KOLODZIEJ
Interdisciplinary Arts and Sciences (UW Tacoma)
Department of Civil and Environmental Engineering (UW Seattle)
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EDUCATION

University of California, Berkeley. Ph.D., Environmental Engineering, December 2004.

Dissertation topic: *The Occurrence and Environmental Fate of Steroid Hormones with Endocrine and Pheromonal Activity in Fish.*

-minor emphases in Chemical Ecology and Endocrinology

University of California, Berkeley. M.S., with honors in Environmental Engineering, May 1999.

Johns Hopkins University. B.S., with general honors in Chemical Engineering, May 1998.

PROFESSIONAL EXPERIENCE

University of Washington. September 2014 – Present. Associate Professor, Interdisciplinary Arts and Sciences (UW Tacoma); Associate Professor, Department of Civil and Environmental Engineering. (UW Seattle). Principal Investigator, Center for Urban Waters. Research expertise includes the occurrence, fate and transport of organic contaminants in natural and engineered systems, characterization of storm water and non-point source pollution, toxicity identification and evaluation, source apportionment, water reuse, optimization of engineered treatment systems, mitigation of contaminants in urban and agricultural runoff, transformations and retained bioactivity of emerging contaminants, high resolution mass spectrometry, environmental analytical chemistry, innovative and transformative technologies for water quality improvement and ecosystem health.

University of Nevada, Reno, Reno, NV. July 2013 – August 2014. Associate Professor. *January 2007 – June 2013*, Assistant Professor, Department of Civil and Environmental Engineering. Research expertise includes the occurrence, fate and transport of contaminants in natural and engineered systems, optimization of engineered water reuse and groundwater recharge systems, mitigation of contaminants in agricultural runoff, transformations of endocrine disruptors and other emerging contaminants, analytical method development, innovative and transformative technologies for water quality improvement, applications of high resolution mass spectrometry.

University of California, Berkeley, Berkeley, CA. January 2005 – December 2006. Post-Doctoral Scholar; CALFED Project Manager. Research focused on the fate and occurrence of endocrine disrupting compounds at regional scales and in agricultural watersheds. Additional duties included experimental design, writing, budgeting, and coordinating the multi-investigator CALFED research project “Identifying the Causes of Feminization of Chinook Salmon in the Sacramento and San Joaquin River System”. Responsibilities included project management, field sampling, analytical method development, data analysis, communication.

University of California, Berkeley, Berkeley, CA. August 1999 - December 2004. Ph.D. Candidate in Environmental Engineering. Research focused on the occurrence and environmental fate of steroid hormones that are implicated in endocrine disruption or disruption of pheromone signaling. Responsibilities included experimental design, GC/MS/MS analytical method development, field sampling, chemical analysis, and interpretation, presentation, and publication of experimental data.

University of California, Berkeley, Berkeley, CA. October 1998 - August 1999. Graduate Student Researcher. Research focused upon the design and implementation of a novel chemical treatment process for remediation of acid mine drainage in California’s Lake Shasta region.

PUBLICATIONS

(ORCID ID# 0000-0002-7968-4198)

- 1) Peter, K.T., Hou, F., Tian Z., Wu C., Goehring, M., Liu, F., Kolodziej E.P. 2020. "More Than a First Flush: Urban Creek Storm Hydrographs Reveal Broad Contaminant Pollutographs" *Environ. Sci. Technol.* **54**(10) 6152-6165. DOI: 10.1021/acs.est.0c00872
- 2) Tian, Z., Peter, K.T., Gipe, A.D., Zhou, H., Hou, F., Wark, D.A., Kolodziej, E.P., James, C.A. 2020. "Suspect and Non-target Screening for Contaminants of Emerging Concern in an Urban Estuary." *Environ. Sci. Technol.* **54**(2) 889-901. DOI: 10.1021/acs.est.9b06126
- 3) Peter, K.T., Tian, Z., Wu, C., Kolodziej, E.P. 2019. "Application of Non-Target High Resolution Mass Spectrometry Data to Quantitative Source Apportionment." *Environ. Sci. Technol.* **53**(21) 12257-12268. DOI: 10.1021/acs.est.9b04481
- 4) Hou, F., Tian, Z., Peter, K.T., Wu, C., Alegria, E., Gipe, A.D., Zhao, H., Liu, F., Kolodziej E.P. 2019. "Quantification of Organic Contaminants in Urban Stormwater by Isotope Dilution and Liquid Chromatography-Tandem Mass Spectrometry." *Anal. Bioanal. Chem.* **411**(29) 7791-7806. DOI: 10.1007/s00216-019-02177-3
- 5) Yang, X., Zhao, H., Cwiertny D.M., Kolodziej E.P. 2019. "Sorption and Transport of Trenbolone and Altrenogest Photoproducts in Soil-Water Systems." *Environ. Sci. Processes Impacts.* **21**(10) 1650-1663. DOI: 10.1039/C9EM00305C
-Front cover article, October 2019, *Environ. Sci. Processes Impacts.*
- 6) Pflug, N., Patterson, E., Martinovic-Weigelt, D., Kolodziej, E.P., Gloer, J., McNeill, K., Cwiertny, D.M., Wammer, K. 2019. "Intramolecular [2+2] Photocycloaddition of Altrenogest: Confirmation of Product Structure, Theoretical Mechanistic Insight, and Bioactivity Assessment." *J. Org. Chem.* **84**(17) 11366-11371. DOI: 10.1021/acs.joc.9b02070
- 7) Bains, A., Perez-Garcia, O., Lear, G., Greenwood, D., Swift, S., Middleditch, M., Kolodziej E.P., Singhal, N. 2019. "Induction of Microbial Oxidative Stress as a New Strategy to Enhance the Enzymatic Degradation of Organic Micropollutants in Synthetic Wastewater." *Environ. Sci. Technol.* **53**(16), 9553-9563. DOI: 10.1021/acs.est.9b02219
- 8) Kenyon, P., Zhao, H., Yang, X., Wu, C., Cwiertny, D.M., Kolodziej, E.P. 2019. "Detection and Quantification of Metastable Photoproducts of Trenbolone and Altrenogest Using Liquid Chromatography-Tandem Mass Spectrometry." *J. Chrom. A.* 1603, 150-159. DOI: 10.1016/j.chroma.2019.06.030
- 9) Peter, K.T., Herzog, S., Tian, Z., Wu, C., McCray, J.E., Lynch, K., Kolodziej, E.P. 2019. "Evaluating Emerging Organic Contaminant Removal in an Engineered Hyporheic Zone using High Resolution Mass Spectrometry." *Water Research.* **150** (3), 140-152. DOI: 10.1016/j.watres.2018.11.050
- 10) Peter, K.T., Tian, Z., Wu, C., Lin, P., White, S., Du, B., McIntyre, J.K., Scholz, N.L., Kolodziej E.P. 2018. "Using High-Resolution Mass Spectrometry to Identify Organic Contaminants Linked to Urban Stormwater Mortality Syndrome in Coho Salmon." *Environ. Sci. Technol.*, **52**(18) 10317-10327. DOI: 10.1021/acs.est.8b03287
- 11) Salls, K.A., Won, D., Kolodziej, E.P., Childress, A.E., Hiibel, S.R. 2018. "Transport of Metals and Semi-Volatile Contaminants In Direct Contact Membrane Distillation." *Desalination.* **427**, 35-41, DOI: 10.1016/j.desal.2017.11.001
- 12) Pflug, N.C., Hankard, M.K., Berg, S.M., O'Connor, M., Gloer, J.C., Kolodziej, E.P., Cwiertny, D.M., Wammer, K.H. 2017. "Environmental Photochemistry of Dienogest: Phototransformation to Estrogenic Products and Increased Environmental Persistence via Reversible Photohydration." *Environ. Sci. Processes Impacts.* **19**, 1414-1426, DOI: 10.1039/c7em00346c
- 13) Du, B., Lofton, J.M., Peter, K.T., Gipe, A.D., James, C.A., McIntyre, J.K., Scholz, N.L., Baker, J.E., Kolodziej, E.P. 2017. "Development of Suspect and Non-Target Screening Methods for Detection of Organic Contaminants in Highway Runoff and Fish Tissue with High-Resolution Time-of-Flight Mass Spectrometry." *Environ. Sci. Processes Impacts.* **19**, 1185-1196. DOI 10.1039/C7EM00243B

- 14) Kolodziej E.P., Choi, K., Marfil-Vega, R., Brooks, B.W. 2017. "The Necessity of Bioanalytical Tools for Advancing Water and Sediment Quality Assessment." *Environ. Sci. Processes Impacts*. **19**, 1113-1116. DOI: 10.1039/C7EM90032E
-Editorial content, non peer-reviewed
- 15) Pflug, N.C., Kupsco, A., Kolodziej, E.P., Schlenk, D., Teesch, L.M., Gloer, J.B., Cwiertny, D.M. 2017. "Formation of Bioactive Transformation Products During Glucocorticoid Chlorination." *Environmental Science: Water Research and Technology*. **3**, 450-461. DOI 10.1039/C7EW00033B
- 16) Wammer, K.H., Anderson, K.C., Erickson, P.R., Kliegman, S., Moffat, M.E., Heitzman, J.A., McNeill, K., Martinovic-Weigelt, D., Cwiertny, D.M., Kolodziej, E.P. 2016. "Environmental Photochemistry of Altrenogest: Photoisomerization Followed by Reversible Photohydration." *Environ. Sci. Technol.* **50**(14). 7480-7488. DOI 10.1021/acs.est.6b02608
- 17) Baltrusaitis, J., Patterson, E., O'Connor, M., Shen, Q., Kolodziej E.P., Cwiertny, D.M. 2016. "Reversible Photohydration of Trenbolone Acetate Metabolites: Mechanistic Understanding of Product-To-Parent Reversion through Complementary Experimental and Theoretical Approaches." *Environ. Sci. Technol.* **50**(13). 6753-6761. DOI 10.1021/acs.est.5b03905
- 18) Ward, A.S., Cwiertny, D.M., Kolodziej, E.P., Brehm, C.C. 2015. "Stream-Hyporheic Spiraling Increases Environmental Persistence of Trenbolone Metabolites." *Nature Communications*, **6**, Article #7067, DOI 10.1038/ncomms8067
- 19) Cole, E.A. McBride, S., Kimbrough K.C., Marchand, E.A., Cwiertny, D.M., Kolodziej, E.P. 2015. "Rates and Product Identification for Trenbolone Acetate Metabolite Biotransformation in Aerobic Conditions." *Environ. Toxicol. Chem.* **34**(7), 1472-1484, DOI: 10.1002/etc.2962
- 20) Qu, S., Kolodziej, E.P., Cwiertny, D.M. 2014. "Sorption and Mineral Promoted Transformation of Synthetic Hormone Growth Promoters in Soil Systems" *J. Agricul. Food Chem.* **62**(51), 12277-12286. DOI 10.1021/jf5035527
- 21) Jones, G.D., Benchetler, P.V., Tate, K.W., Kolodziej E.P. 2014. "Trenbolone Acetate Metabolite Transport in Rangelands and Irrigated Pastures: Observations and Conceptual Approaches for Agro-Ecosystems." *Environ. Sci. Technol.* **48**(21) 12569-12576. DOI: 10.1021/es503406h
- 22) Cwiertny, D.M. Schlenk, D., Snyder, S.A., Kolodziej E.P. 2014. "Environmental Designer Drugs: When Transformation Does Not Eliminate Risk." *Environ. Sci. Technol.* **48**(20) 11737-11745. DOI: 10.1021/es503425w
-Invited (EPK) feature article (cover article) for *Environ. Sci. Technol.*
-Ranked #6, Most Read Articles of 2014; First runner up, Best Feature Article of 2014
- 23) Jones, G.D., Benchetler, P.V., Tate, K.W., Kolodziej E.P. 2014. "Surface and Subsurface Attenuation of Trenbolone Acetate Metabolites and Manure-derived Constituents in Irrigation Runoff on Agro-Ecosystems" *Environ. Sci. Processes Impacts*. **16**, 2507-2516. DOI: 10.1039/c4em00385c
- 24) Jones, G.D., Benchetler, P.V., Tate, K.W., Kolodziej E.P. 2014. "Mass Balance Approaches to Characterizing the Leaching Potential of Trenbolone Acetate Metabolites in Agro-Ecosystems." *Environ. Sci. Technol.* **48**(7) 3715-3723. DOI 10.1021/es405701f
- 25) Cavallin, J.E., Durhan, E., Evans, N., Foreman, W.T., Jensen, K.M., Kahl, M.D., Kolodziej, E.P., Kolpin, D., LaLone, C.A., Makynen, E.A., Seidl, S.M., Thomas, L.M., Villeneuve, D.L., Weberg, M.A., Wilson, V., Ankley, G.A. 2014. "Integrated Assessment of Runoff from Animal Feeding Operations: Analytical Chemistry, In Vitro Bioassays, and In Vivo Fish Exposures." *Environ. Toxicol. Chem.* **33**(8) 1849-1857. DOI 10.1002/etc.2627
- 26) Qu, S., Kolodziej, E.P., Long, S.A., Gloer, J.B., Patterson, E.V., Baltrusaitis, J., Jones, G.D., Benchetler, P.V., Cole, E.A., Kimbrough, K.C., Tarnoff, M.D., Cwiertny, D.M. 2013. "Product-to-Parent Reversion of Trenbolone: Unrecognized Risks for Endocrine Disruption." *Science*. Published online 9/26/2013 in *Science Express*, in print 10/18/2013. **342**(6156), 347-351. DOI 10.1126/science.1243192
-Co-corresponding author and project Principal Investigator.

- 27) Kolodziej, E.P., Qu, S., Forsgren, K., Long, S.A., Gloer, J.B., Jones, G., Schlenk, D., Baltrusaitis, J., Cwiertny, D.M. 2013. "Identification and Environmental Implications of Photo-transformation Products of Trenbolone Acetate Metabolites." *Environ. Sci. Technol.* **47**(10), 5031-5041.
- 28) Qu, S., Kolodziej, E.P., Cwiertny, D.M. 2012. "Phototransformation Rates and Mechanisms for Synthetic Hormone Growth Promoters Used in Animal Agriculture." *Environ. Sci. Technol.* **46**(24), 13202-13211.
- 29) Parker, J.A., Webster, J.P., Kover, S.C., Kolodziej, E.P. 2012. "Analysis of Trenbolone Acetate Metabolites and Melengestrol Using Gas Chromatography-Tandem Mass Spectrometry." *Talanta*, **99**, 238-246.
- 30) Webster, J.P., Kover, S.C., Bryson, R.J., Harter, T., Mansell D.S., Sedlak D.L., Kolodziej, E.P. 2012. "Occurrence of Trenbolone Acetate Metabolites in Simulated Confined Animal Feeding Operation (CAFO) Runoff." *Environ. Sci. Technol.* **46**(7), 3803-3810.
- 31) Mansell, D.S., Bryson, R.J., Harter, T., Webster, J.P., Kolodziej, E.P., Sedlak, D.L. 2011. "Fate of Endogenous Steroid Hormones in Steer Feedlots Under Simulated Rainfall-Induced Runoff." *Environ. Sci. Technol.* **45**(20), 8811-8818.
- 32) Lavado, R., Loyo-Rosales, J.E., Floyd, E., Kolodziej, E.P., Snyder, S.A., Sedlak, D.L., Schlenk, D. 2009. "Site-Specific Profiles of Estrogenic Activity in California's Inland Waters." *Environ. Sci. Technol.* **43**(24), 9110-9116.
- 33) Kolodziej, E.P., and Sedlak D.L. 2007. "Rangeland Grazing as a Source of Steroid Hormones to Surface Waters." *Environ. Sci. Technol.* **41**(10), 3514-3520.
- 34) Fono, L.J., Kolodziej, E.P., Sedlak, D.L. 2006. "Attenuation of Wastewater-Derived Contaminants in a Wastewater-Dominated River." *Environ. Sci. Technol.* **40**(23), 7257-7263.
- 35) Schlenk, D., Sapozhnikova, Y., Irwin, M.A., Xie, L., Hwang, W., Reddy, S., Brownawell, B.J., Armstrong, J., Kelly, M., Montagne, D.E., Kolodziej, E.P., Sedlak, D.L., Snyder, S.A. 2005. "In Vivo Bioassay-guided Fractionation of Marine Sediment Extracts from the Southern California Bight, USA, for Estrogenic Activity." *Environ. Toxicol. Chem.*, **24**(11), 2820-2826.
- 36) Kolodziej E.P., Harter T.H., Sedlak D.L. 2004. "Dairy Wastewater, Aquaculture, and Spawning Fish as Sources of Steroid Hormones in the Aquatic Environment." *Environ. Sci. Technol.* **38**(23), 6377-6384.
- 37) Sedlak D.L., Pinkston K.L., Gray J.L. Kolodziej E.P. 2003. "Approaches for Quantifying the Attenuation of Wastewater-Derived Contaminants in the Aquatic Environment." *Chimia.* **57**(9), 567-569.
- 38) Kolodziej E.P., Gray J.L., Sedlak D.L. 2003. "Quantification of Steroid Hormones with Pheromonal Properties in Municipal Wastewater Effluent." *Environ. Toxicol. Chem.*, **22**(11), 2622-2629.

In Review or Preparation

- 39) Peter, K.T., Lundeen, J.I., Wu, C., Feist, B., Tian, Z., Cameron, J., Kolodziej, E.P., Scholz, N.L. "Measuring The Chemical Profile of Urbanization and Biological Decline." In preparation.
- 40) Pflug, N.C., Kral, A.K., Hankard, M.K., Breuckman, K.C., Kolodziej, E.P., Gloer, J.B., Wammer, K.H., Cwiertny, D.M. "Overlooked Environmental Fate Pathways for Trienone Steroids: Reversible Photo-Nucleophilic Addition and Thermal Binding of Photohydrates to Dissolved Organic Matter." In review.
- 41) Tian, Z., Zhao, H.Q., Peter, K.T., Gonzalez, M., Wetzal, J., Wu, C., Hu, X., Prat, J., Murdock, E., Hettlinger, R., Cortina, A.E., Biswas, R.G., Kock, F.V.C., Soong, R., Jenne, A., Du, B., Hou, F., He, H., Lundeen, R., Gilbreath, A., Sutton, R., Scholz, N.L. Davis, J.W., Dodd, M.C., Simpson, A., McIntyre, J.K., Kolodziej, E.P. "Ubiquitous Tire Rubber-Derived Chemical Induces Acute Mortality in Coho Salmon." In review.
- 42) Du, B., Tian, Z., Peter, K.T., Kolodziej, E.P., Wong, C. "Identification of Unique Non-Target High Resolution Mass Spectrometry Signatures to Track Contaminant Sources in Urban Waters." In preparation.

- 43) McIntyre, J.K., Prat, J., Peter, K.T., Tian, Z., Kolodziej, E.P., Cameron, J., King, K., Wetzel, J., Stark, J.D., Davis, J.W., Scholz, N.L. "Tire Leachate Recapitulates the Pathophysiology, Sensitivity, and Acute Lethality of Coho Salmon Exposed to Urban Stormwater Runoff." In preparation.
- 44) Wang, R., Dodd, M.C., Kolodziej, E.P. "Kinetics and Mechanisms of Chlorination of 1,3-Diphenylguanidine from Density Functional Theory and Experimental Data." In preparation.
- 45) Tang, T, Kolodziej, E.P.K. "Sorption and Desorption of Urban Stormwater-Derived Organic Contaminants in Soils." In preparation.

TECHNICAL REPORTS

- 1) Tian, Z., Peter, K.T., Wu, C., Du, B., Leonard, B., McIntyre, J. Kolodziej, E.P. "Performance Evaluation Of Compost-Amended Biofiltration Swales For Highway Runoff Treatment In Field And Laboratory." 08/09/2019. Washington Department of Transportation, Federal Highway Administration.
- 2) Peter, K.T., Herzog, S., Tian, Z., McCray, J., Kolodziej, E.P. "Flow Path Delineation and Water Quality Assessment in the Thornton Creek Engineered Hyporheic Zone." 03/09/2018. Seattle Public Utilities.
- 3) Du, W., Kolodziej E.P. "Literature Review and Comment on Groundwater Aquifer Recharge and Recovery Systems. 06/21/2011. City of Reno, NV.
- 4) Callahan, S., Kolodziej E.P. "Assessment and Optimization of Aquifer Recharge and Recovery Systems for the Removal of Trace Organic Contaminants." 04/16/2010. City of Reno, NV.

SELECT PRESENTATIONS

- 1) Kolodziej, E.P., Katherine Peter, Zhenyu Tian, Nina Zhao, Christopher Wu, Melissa Gonzalez, Allan Cortina, Jen McIntyre. "Characterizing the Environmental Chemistry of Roads, Salmon, and Water with High Resolution Mass Spectrometry." Invited presentation, Duke University Integrated Toxicology and Environmental Health Seminar series. Durham, NC, February 20, 2020
- 2) Kolodziej, E.P., Katherine Peter, Zhenyu Tian, Christopher Wu, Melissa Gonzalez, Jen McIntyre. "Stormwater and Salmonid Health." Invited presentation, Northwest Indian Fisheries Commission Water Quality Board. Olympia, WA, November 19, 2019.
- 3) Kolodziej, E.P., Katherine Peter, Zhenyu Tian, Christopher Wu, Allan Cortina, Melissa Gonzalez, Jen McIntyre, Nat Scholz. "Impacts of Vehicles and Roads on Urban Water Quality." Invited presentation, ESPI Editors Symposium, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology. Cambridge, MA, June 24, 2019.
- 4) Kolodziej, E.P. "Chemistry in Stormwater." Invited presentation, *2nd Annual Green-Duwamish Sustainability Talks* to Auburn High School Students. Auburn Performing Arts Center, Auburn WA, May 24, 2019.
- 5) Kolodziej, E.P., Katherine Peter, Zhenyu Tian, Christopher Wu. "Characterizing Urban Stormwater Impacts on Water Quality to Understand Ecosystem Health." Invited presentation, WA Department of Ecology, Lacey WA, April 17, 2019.
- 6) Kolodziej, E.P., Katherine Peter, Zhenyu Tian, Christopher Wu. "Using HRMS to Link Organic Contaminants to Urban Runoff Mortality Syndrome." Invited presentation, 2019 Salmon Recovery Conference, Tacoma, WA, April 9, 2019.
- 7) Kolodziej, E.P., Katherine Peter, Zhenyu Tian, Christopher Wu. "Characterizing Urban Stormwater Impacts on Water Quality to Understand Ecosystem Health." Invited presentation, Department of Chemical Oceanography, University of Washington. Seattle WA, March 15, 2019.
- 8) Kolodziej, E.P., Katherine Peter, Zhenyu Tian, Christopher Wu. "Characterizing Urban Stormwater Impacts on Water Quality to Understand Ecosystem Health." Invited presentation, NIEHS Superfund Research Program 2018 Annual Meeting. Sacramento CA, November 29, 2018.

- 9) Kolodziej, E.P., Katherine Peter, Zhenyu Tian, Christopher Wu. "Using High-Resolution Mass Spectrometry to Characterize Urban Stormwater and Impacts on Water Quality." Invited presentation, M. Gordan Wolman Seminar, Johns Hopkins University. November 13, 2018.
- 10) Kolodziej, E.P., Katherine Peter, Zhenyu Tian, Christopher Wu. "Using High-Resolution Mass Spectrometry to Characterize Urban Stormwater and Impacts on Water Quality." Invited presentation, University of Delaware. November 12, 2018.
- 11) Kolodziej, E.P., Katherine Peter, Zhenyu Tian, Christopher Wu. "Using High-Resolution Mass Spectrometry to Characterize Urban Stormwater and Impacts on Water Quality." Invited presentation, Jianying Hu Research group, Peking University. October 24, 2018.
- 12) Kolodziej, E.P., Katherine Peter, Zhenyu Tian, Christopher Wu. "Using High-Resolution Mass Spectrometry to Characterize Urban Stormwater and Impacts on Water Quality." Invited departmental seminar, College of Urban and Environmental Sciences, Peking University. Beijing, China, October 23, 2018.
- 13) Kolodziej, E.P., Katherine Peter, Zhenyu Tian, Christopher Wu. "Using High-Resolution Mass Spectrometry to Characterize Urban Stormwater and Impacts on Water Quality." Invited presentation, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences. Beijing, China, October 22, 2018.
- 14) Kolodziej, E.P. "Occurrence and Sources of Organic Contaminants in Urban Stormwater and Receiving Waters." Invited presentation, Northwest Indian Fisheries Commission Salmon Stormwater Summit, The Point Casino, Suquamish Tribe, Kingston WA. September 20, 2018.
- 15) Kolodziej, E.P. "Stormwater Derived Chemicals and Ecosystem Health." Keynote Speaker, 6th International Conference on Emerging Contaminants (EmCon 2018), Oslo Norway. June 25, 2018.
- 16) Kolodziej, E.P. "Underexplored Bioactive Contaminants in Urban Stormwaters." Invited presentation, Department of Civil and Environmental Engineering, University of California, Berkeley. April 13, 2018.
- 17) Kolodziej, E.P. "Chemistry and the Environment: Why Puget Sound Needs Clean Water." Invited Keynote Address, ACS Career Day, PNW Regional Chapter, Center for Urban Waters, Jan. 31, 2018.
- 18) Kolodziej, E.P. "Analysis of Urban Water Quality With High Resolution Mass Spectrometry." Invited presentation, Southern California Coastal Water Research Project, Santa Ana, CA. Nov. 3, 2017.
- 19) Kolodziej, E.P. Du, B. Peter, K., Lofton, J. "Detection and Evaluation of Organic Contaminant Flows in the Puget Sound Region". Invited Presentation. NOAA Montlake Lab Monster Jam. Seattle, WA. May 18, 2017
- 20) Kolodziej, E.P. "Understanding Our Chemical Fingerprints on Water: Occurrence and Concerns for Our Contaminants". University of California, San Diego, School of Pharmacy, San Diego, CA. February 6, 2017.
- 21) Kolodziej, E.P. "Our Chemical Fingerprints: Safer Water for Our Cities". Invited Presentation. Grit City Think and Drink. The Swiss, Tacoma, WA. December 13, 2016
- 22) Kolodziej, E.P. "Our Chemical Fingerprints: Safer Water for Our Cities". Invited Presentation. UW College of Engineering 2016 Engineering Lecture Series: "City Smarts: Engineering Resilient Communities." Seattle, WA. November 16, 2016 -Televised presentation.
- 23) Kolodziej, E.P. "Emerging Contaminants in Our Waters: The State of the Science". Invited Presentation. Northwest Toxics Community Coalition Annual Conference. Seattle, WA. October 22, 2016
- 24) Kolodziej, E.P. "Emerging Contaminants In Our Waters: The State of the Science." Pacific Northwest WaterReuse Conference, Spokane, WA May 18, 2016.
- 25) Kolodziej, E.P. "Potential Environmental Impacts of the NWIW Methanol Plant in Tacoma." UWT Methanol Plant Informational Seminar Series. UW-Tacoma, March 3, 2016.
- 26) Kolodziej, E.P. "Linking Contaminant Structure to Bioactivity: Key Issues and Uncertainties for Environmental Health." Invited presentation, Oregon Health & Science University, Institute of Environmental Health. November 20, 2015.

- 27) Kolodziej, E.P. "Linking Contaminant Structure to Bioactivity: Key Issues and Uncertainties for Environmental Health" Invited presentation, Oregon State University, Department of Environmental and Molecular Toxicology. November 18, 2015.
- 28) Kolodziej, E.P. "Characterization and Environmental Implications of Pharmaceutical Transformation Products in Water" Invited presentation, "Environmental Analysis" Session, Beijing Conference and Exhibition on Instrumental Analysis, China National Convention Center, Beijing, China, October 29, 2015.
- 29) Kolodziej, E.P. "Addressing the Challenge of Agricultural Pharmaceuticals and Bioactive Contaminants in Aquatic Systems." Invited presentation, Pennsylvania State University, Department of Ecosystem Science and Management; Department of Agricultural and Biological Engineering. April 24, 2015.
- 30) Baker, J., and Kolodziej, E.P. "Next Generation Design of Integrated Urban Water Systems." National Science Foundation, Invited presentation, EFRI program, Washington D.C. March 11, 2015.
- 31) Kolodziej, E.P. "Conserved Structure, Conserved Risk: Environmental Transformations of Steroidal Pharmaceuticals" Invited presentation, Gordon Research Conference, Environmental Sciences: Water. Holderness, NH, June 26, 2014.
- 32) Kolodziej, E.P. "The Implications of Structural Conservation During Environmental Transformations of Steroidal Pharmaceuticals" Invited presentation, session keynote. Canadian Society of Chemistry National Meeting, Vancouver, BC, June 5, 2014.
- 33) Kolodziej, E.P. "The Implications of Novel Transformations of Steroidal Pharmaceuticals for Endocrine Disruption and Environmental Risk Assessment." Invited presentation, Department of Civil and Environmental Engineering, Stanford University, Nov. 15, 2013.
- 34) Kolodziej, E.P. "In the Twilight of Trenbolone: The Vampire Steroid." Invited presentation, Environmental Science Graduate Program, Ohio State University, Sept. 6, 2013.
- 35) Kolodziej, E.P. "Trenbolone Transport And Transformation: What Do We Know and What Do We Need To Know?" Invited presentation, Department of Civil and Environmental Engineering, University of Iowa, March 9, 2013.
- 36) Kolodziej E.P. "Sources, Transport, and Transformations of Endocrine Disrupting Steroid Hormones Derived From Animal Agriculture." Invited Presentation, Washington State University. April 9, 2012.
- 37) Kolodziej E.P. "Agricultural Sources and Transformation of Steroid Hormones in Receiving Waters." Invited Presentation, University of Missouri. Oct. 4, 2011.
- 38) Kolodziej E.P. "Steroid Hormone Occurrence, Fate, and Transport in Northern California's Watersheds." Invited presentation, University of California, Riverside, April 4, 2008.
- 39) Kolodziej E.P. "Occurrence and Fate of Steroidal Hormones in Surface Waters Impacted by Cattle Grazing and Animal Agriculture." Plenary Speaker, Water and The Future of Kansas Conference, Topeka, Kansas, March 25, 2008.
- 40) Kolodziej E.P. "Steroid Hormone Occurrence, Fate, and Transport in Northern California's Watersheds." Invited Presentation, University of California, Davis, March 17, 2008.
- 41) Kolodziej E.P., Sedlak, D.L. "Occurrence and Fate of Steroid Hormones in Northern California." Invited presentation, Northern California Chapter of the Society of Environmental Toxicology and Chemistry 14th annual meeting, Davis, CA, May 12, 2004.
-1st Place award for Best Student Presentation.

WORKSHOPS AND PROFESSIONAL DEVELOPMENT (Partial List)

"Reflections on Teaching: Where We Were, Where We Are, and Where We Could Be", UW Advance, Jim Borgford-Parnell April 19, 2019.

RESEARCH GROUP AND STUDENT ADVISING

Post-Doctoral Scholars:

1) Zhenyu Tian (CUW/UW)	02/2018-Present
2) Rachel Lundeen (CUW/UW)	07/2019-02/2020
3) Katherine Peter (CUW/UW)	12/2016-04/2019
4) Bowen Du (CUW/UW)	12/2014-06/2017

Ph.D. Students (UW):

1) Ximin Hu	9/2019 – Present
2) Haoqi (Nina) Zhao	9/2016 – Present
2) Rui Wang	10/2018 – Present
Two year visiting PhD student, UW VISIT program.	
3) Ting Tang	10/2018 – Present
Two year visiting PhD student, UW VISIT program.	
2) Fan Hou	9/2017-1/2019

Quantification of organic contaminants in urban stormwater by isotope dilution and liquid chromatography-tandem mass spectrometry. 16 month visiting PhD student, UW VISIT program.

3) Xingjian Yang 9/2015-10/2016.

Differential Transport of Photoactive, Metastable Steroids in Soil-Water Systems. One year visiting PhD student, UW VISIT program.

Ph.D. Students (UNR): 1) Gerrad Jones 1/2010 - 1/2014

Dissertation: The Environmental Fate and Transport of Trenbolone Acetate Metabolites in Agro-Ecosystems. Currently: Assistant Professor, Department of Biological and Ecological Engineering, Oregon State University. Post-Doctoral Scholar (Dr. Lenny Winkel), Swiss Federal Institute of Technology, ETH, Zurich.

M.S. Students (UW):

1) Philip Kenyon, 1/2014 – 12/2015
2) Danbi Won, 12/2015-03/2017

M.S. Students (UNR):

1) Jed Parker, 1/2008 - 5/2009.	6) Emily Cole, 10/2011 to 12/2013.
2) Silas Callahan, 1/2008 - 8/2010.	7) Philip Benedetti, 1/2013-1/2015
3) Jackson Webster, 1/2009 - 12/2010.	8) Philip Kenyon, 1/2014 -6/2014
4) Wenjun Du, 1/2010 - 8/2011.	9) Tianlin Song, 1/2013 -7/2014
5) Jaewoong Lee, 6/2010 - 12/2011.	

Undergraduate Students Participating in Funded Research Projects (UWT/CUW/UW)

1) Craig Rideout, UWT SAM	9) Sarah White, UWT SAM
2) Lindsay Quast, UWT SAM	10) Christopher Wu, UWT SAM
3) Rachel Hettinger, UWT SAM	11) Peter Lim, UWT SAM
4) Melissa Gonzalez, UWT SAM	12) Harpreet Kang, UW CEE
5) Allan Cortina, UWT SAM	13) Samantha Randall, UW CEE
6) Keefe Brockman, UWT SAM	14) Jonathan Lofton, UWT CUW
7) David Wark, UWT SAM	15) Esther Chang, UW CEE
8) Kenji Lam, UW CEE	

Mentor: Undergraduate Student Capstone Research Projects

1) Rachel Hettinger, UWT SAM	4) Susanne Gov, UW Seattle Program for the Environment
2) David Wark, UWT SAM	5) Jordan Williams UWT SAM
3) Ernesto Alegria, UWT SAM	6) Nicole Smith, UWT SAM

7) Don Rollalazo, UWT SAM

Undergraduate Students Participating in Funded Research (UNR):

- | | |
|-------------------------|---------------------------|
| 1) Jackson Webster | 9) Claire Johnson |
| 2) Doug Holderman, | 10) Peter Benchetler |
| 3) Collin Emmerson | 11) Kaitlin Kimbrough |
| 4) Jonathan Ebert | 12) Emily Ruskowitz |
| 5) Robert (Alex) Vaughn | 13) Jasmine Miller |
| 6) Stephanie Kover | 14) Rachel Weber |
| 7) Melissa DeVera | 15) Tatum Demay (NSF REU) |
| 8) Samantha McBride | |

Graduate Student Committee Member (UNR):

- | | |
|---------------------------|----------------------------|
| 1) Jazmin Aravena (Ph.D.) | 4) Winn Wilson (M.S.) |
| 2) Nalelli Herrera (M.S.) | 5) Alissa Backman (Ph.D.) |
| 3) Miranda Hutton (M.S.) | 6) Sanjeev Ryaprolu (M.S.) |

FUNDED RESEARCH

- 1) Water Treatment Performance of Engineered Hyporheic Zones in Urban Creeks. Seattle Public Utilities. PI Dr. Edward Kolodziej, University of Washington (Tacoma/Seattle), Center for Urban Waters. Co-Investigators Dr. David Butman, UW School of the Environment. Dr. Skuyler Herzog, University of Indiana. Katherine Lynch, Seattle Public Utilities. Total Award \$50,000. 12/5/2019-12/5/2021.
- 2) Performance Evaluation of Engineered Hyporheic Zones for In-Stream Water Quality Improvement in Urban Creeks. 2018-2022 Near Term Action (NTA) program. WA Department of Ecology/EPA National Estuary Program. PI Dr. Edward Kolodziej, University of Washington (Tacoma/Seattle), Center for Urban Waters. Co-Investigators Dr. David Butman, UW School of the Environment. Dr. Skuyler Herzog, University of Indiana. Katherine Lynch, Seattle Public Utilities. Total Award \$243,387. 6/1/2019-5/31/2021.
- 3) Development of Chemical Indicators to Detect, Track, and Assess Treatment of Novel and Emerging Toxic Stormwater Pollutants. 2018-2022 Near Term Action (NTA) program. WA Department of Ecology/EPA National Estuary Program. PI Dr. Edward Kolodziej, University of Washington (Tacoma/Seattle), Center for Urban Waters. Total Award \$241,937. 6/1/2019-5/31/2021.
- 4) Suspect Screening Identification of Organic Contaminants in Vehicle Fluids Using UPLC-HRMS. WA Department of Ecology/EPA National Estuary Program. PI Dr. Edward Kolodziej, University of Washington (Tacoma/Seattle), Center for Urban Waters. Total Award \$74,762. 6/1/2019-12/31/2020.
- 5) RAPID Collaborative Proposal: Characterization of Upland Watershed Contamination from Wildland-Urban Burning. PI Dr. Edward P. Kolodziej. Co-Investigator: Dr. Joyce Dinglasan-Panlilio. National Science Foundation. Award \$13,982. 4/30/2019-5/1/2020.
- 6) Improving Environmental Forensics: Resolving and Apportioning Stormwater and Legacy Pollutant Sources with Non-Target High Resolution Mass Spectrometry. PI Dr. Edward P. Kolodziej. Royalty Research Fund, University of Washington (Tacoma/Seattle). Award \$39,973. 5/1/2019 - 4/31/2020.
- 7) Diagnosing Urban Stream Syndrome: Identifying Novel Contaminants and Toxicants in Our Stormwater. National Science Foundation. PI Dr. Edward P. Kolodziej, University of Washington (Tacoma/Seattle). Award \$329,577. 9/15/2018 - 9/14/2021.
- 8) Stormwater Treatment Support Grant, WA State Governors Funds. PI Dr. John Stark, Washington State University-Puyallup; Subcontract Dr. Edward Kolodziej, University of Washington (Tacoma/Seattle). Kolodziej Lab: \$130,000. 3/1/2018 - 2/28/2020.

- 9) Highway Runoff Treatment Performance Evaluation of Compost Amended Bioswales. WA Department of Transportation, Federal Highway Administration. PI Team: Dr. Edward Kolodziej, University of Washington (Tacoma/Seattle), Dr. Jenifer McIntyre (WSU-Puyallup Stormwater Research Center). Total Award \$124,997 Kolodziej Lab: \$77,747. 2/1/2018 - 6/30/2019.
- 10) Treatment Media for Control of Persistent Organic Pollutants and Metals in Stormwater. SERDP Stormwater-Sediment Recontamination Statement of Need. PI Dr. Birthe Kjellerup, U. Maryland. Co-Investigators. Dr. Allen Davis (U. Maryland); Dr. Marc Mills (EPA); Dr. Mandy Michaelson (US Army COE); Dr. Edward P. Kolodziej, University of Washington (Tacoma/Seattle). Total Award \$1,340,000. Kolodziej Lab: \$187,666. 5/1/2018 - 1/31/2021.
- 11) Assessment of Hyporheic Zone Water Quality in Thornton Creek. Seattle Public Utilities. PI. Dr. Edward Kolodziej, U. of Washington (Tacoma/Seattle). \$20,000. 9/1/2017-12/31/2017.
- 12) Stormwater Chemical Characterization and Watershed Prioritization. 2016-2018 Near Term Action (NTA) program. WA Department of Ecology/EPA National Estuary Program. PI Dr. Edward Kolodziej, University of Washington (Tacoma/Seattle), Center for Urban Waters. Total Award \$232,000. 4/1/2017-3/31/2019.
- 13) Identification and Treatment of Toxicants in Highway Runoff Using Green Stormwater Infrastructure and Bioassays. WA Department of Transportation, Federal Highway Administration. PI Team: Dr. Jenifer McIntyre (WSU-Puyallup Stormwater Research Center), Dr. Nathaniel Scholz (NOAA-NMFS Montlake Lab) , Dr. Edward Kolodziej University of Washington (Tacoma/Seattle). Total Award \$176,000 Kolodziej Lab: \$69,099. 11/1/2016 - 9/30/2017.
- 14) Collaborative Research: Integrated In Silico and Non-Target Analytical Framework for High Throughput Prioritization of Bioactive Transformation Products. National Science Foundation. Team: Dr. David Cwiertny, University of Iowa; Dr. Edward P. Kolodziej, University of Washington (Tacoma/Seattle); Dr. Ruben Abagyan, University of California, San Diego; Dr. Eric Patterson, SUNY-Stonybrook. Total Award \$696,000. Kolodziej Lab: \$156,000. 9/1/2016 - 8/31/2019.
- 15) Reversible Photohydration in Diene and Triene Steroids: A Mechanism for Unexpected Persistence of Unique, Biologically Active Contaminants. National Science Foundation. PI: Dr. David Cwiertny, University of Iowa. Co-Investigators: Dr. Edward P. Kolodziej, University of Washington; Dr. P. Lee Ferguson, Duke University, Dr. Kristine H. Wammer, University of St. Thomas. Dr. Christopher Jeffrey, University of Nevada, Reno. Total Award \$394,746. Kolodziej Lab: \$118,281. 9/1/2013 - 8/31/2016.
- 16) Water Quality Implications of Unique Transformation Processes of Synthetic Steroids Used as Agricultural Pharmaceuticals. USDA Agriculture and Food Research Initiative; Water and Watersheds Program. PI: Dr. Edward P. Kolodziej, University of Nevada, Reno. Co-Investigators: Dr. David Cwiertny, U. Iowa; Dr. Adam Ward, U. Iowa; Dr. Chris Jeffrey, University of Nevada, Reno; Dr. Ken Tate, University of California, Davis. Total Award: \$500,000. UNR Award: \$262,076. 9/1/2013 – 8/31/2016.
- 17) NSF EPSCOR: Collaborative Research: The Western Consortium For Watershed Analysis, Visualization, and Exploration (WC-WAVE). National Science Foundation. PI Dr. Gayle Dana. Co-Investigators (NV Only): Dr. Sajjad Ahmed, Dr. Fred Harris, Dr. Scott Tyler, Dr. Tom Jackman, Dr. Edward Kolodziej, Dr Sergio Dasculu, Dr. Lynn Fenstermaker, Dr. Laurel Saito, Dr. Stephen Haroon. Total NV Award: \$2,000,000. Kolodziej/Tyler Award: \$104,273. 8/1/2013 – 7/31/2016.
- 18) Contaminant Removal Using Membrane Distillation for Sustainable Drinking Water Treatment. Environmental Protection Agency Science to Achieve Results (STAR) Program. PI: Dr. Amy Childress, University of Nevada, Reno. Co-Investigators: Dr. Edward P. Kolodziej, University of Nevada, Reno; Dr. Chanwoo Park, University of Nevada, Reno. Total Award \$499,743. Kolodziej Lab: \$166,581. 8/1/2012 - 7/31/2015.
- 19) In Season Insecticide Control of Naval Orangeworm, Assessment of Application Coverage and Relative Environmental Stability of Insecticides: Fungal Metabolism on Nut Hulls. USDA/CA Almond Board. PI: Dr. Edward P. Kolodziej, University of Nevada, Reno. Total Award \$58,959. 2/2013 - 12/2014.

- 20) OMEGA Biofuels Wastewater Derived Organic Contaminants Assessment. National Aeronautics and Space Administration. PI: Dr. Edward P. Kolodziej, University of Nevada, Reno. Total Award \$32,807. 4/2012 - 5/2012.
- 21) Environmental Fate of Synthetic Growth Promoters Used in Animal Agriculture: Mechanistic Studies of Hormone Photolysis, Biodegradation and Sorption in Natural Systems. USDA Agriculture and Food Research Initiative; Water and Watersheds Program. PI: Dr. Edward P. Kolodziej, University of Nevada, Reno. Co-Investigators: Dr. David Cwiertny, U. Iowa; Dr. Eric Marchand, University of Nevada, Reno. Total Award: \$399,945. UNR Award: \$206,990. 1/1/2010 – 12/31/2012.
- 22) Transport and Mitigation of Beef Cattle Veterinary Pharmaceuticals and Hormones in Surface and Sub-surface Runoff from Grazed Watersheds. USDA Agriculture and Food Research Initiative; Water and Watersheds Program. PI: Dr. Ken Tate, UC Davis. Co-Investigators: Dr. Edward P. Kolodziej, University of Nevada, Reno; Dr. Robert Atwill, UC Davis; Dr. Arthur Craigmill, UC Davis; Dr. Toby O'Geen, UC Davis; Dr. Dirk Holstege, UC Davis. Total Award: \$399,809. UNR Award: \$141,041. 11/1/2009 – 10/31/2012.
- 23) Transport and Transformation of Natural and Synthetic Steroid Hormones at Beef Cattle and Dairy Concentrated Animal Feeding Operations. Environmental Protection Agency Science to Achieve Results (STAR) Program. PI: Dr. David Sedlak, UC Berkeley. Co-Investigators: Dr. Edward P. Kolodziej, University of Nevada, Reno; Dr. Thomas Harter, UC Davis. Total Award \$698,103. UNR Award: \$210,360. 10/1/2007 – 9/30/2011.
- 24) Assessment and Optimization of Aquifer Recharge and Recovery Systems for the Removal of Trace Organic Contaminants. City of Reno, Nevada. PI: Dr. Edward P. Kolodziej, University of Nevada, Reno. Total Award: \$138,974. 10/1/2008 - 12/31/2010.
- 25) Proposal for a Literature Review and Comment on Endocrine Disruptors and the Truckee River. City of Reno, Nevada. PI: Dr. Edward P. Kolodziej, University of Nevada, Reno. Total Award: \$9,372. 10/1/2007 – 9/30/2008.
- 26) Junior Faculty Research Grant: Analysis of Synthetic Steroid Hormones used as Growth Promoters in Beef Cattle. University of Nevada, Reno. PI: Dr. Edward P. Kolodziej, University of Nevada, Reno. Total Award: \$14,850. 5/1/2007 – 4/30/2009.

Student Directed Research and Mentoring

1. Faculty Mentor: Mary Gates Research Scholarship, Undergraduate Student, Kenji Lam (UW CEE). Transformation Kinetics and Products of Synthetic Progestins and their Environmental Implications. 2019. \$5000.
2. Faculty Mentor: EPSCOR Summer Research Award, Undergraduate Student, Kaitlin Kimbrough. Anaerobic Biodegradation of Water Quality Contaminants. Summer 2013, Total award: \$5500.
3. Faculty Mentor: GURA Undergraduate Research Award, Undergraduate Student, Peter Benchetler. 2013-2014. Total Award: \$1,200.
4. Faculty Mentor: EPSCOR Summer Research Award, Undergraduate Student, Peter Benchetler. Riparian Buffer Strip Efficiency in Removal Of Contaminants From Agricultural Runoff. Summer 2012. Total Award: \$5,500.
5. Faculty Mentor: EPSCOR Summer Research Award, Undergraduate Student, Samantha McBride. Manipulation of Redox States Applied to Wastewater Treatment. Summer 2011. Total Award: \$5,500.
6. Faculty Mentor: GURA Undergraduate Research Award, Undergraduate Student, Stephanie Kover. 2010-2011. Total Award: \$1,200.
7. Faculty Mentor: EPSCOR Summer Research Award, Undergraduate Student, Stephanie Kover. Fate and Transport Studies of Synthetic Growth Hormones with Adverse Effects on Water Quality. Summer 2010. Total Award: \$5,500.
-2011 Undergraduate Student Award In Environmental Chemistry, American Chemical Society.

8. Faculty Mentor: EPSCOR Summer Research Award, Undergraduate Student, Robert (Alex) Vaughn. Biological Dissolved Organic Carbon and its Effect on the Removal of Pharmaceuticals and Personal Care Products in Wastewater Treatment Plant Effluent. Summer 2009. Total Award: \$5,500.
9. Faculty Mentor: EPSCOR/General Undergraduate Research Award, Undergraduate Student, Jackson Webster. Analysis of Endocrine Disrupting Chemicals in Surface Water. Summer and Fall 2008 Semesters. Total Award: \$5,981

SERVICE

Professional:

- NWRI (National Water Research Institute) Experts Panel for LOTT Clean Water Alliance, Olympia, WA. Invited. 2017-present
- Puget Sound Clean Cars Stormwater Partnership Working Group. Invited. 2017-present
- Associate Editor, *Environmental Science: Processes and Impacts*, August 2014-present
- Conference Session Chair: “Stormwater Characterization and Management Using a Watershed Approach”. Salish Sea Ecosystem Conference, Seattle WA, April 4-6, 2018.
- Invited Session Facilitator and Technical Content Contributor: “Contaminants in the Food Web” session, Southern Resident Killer Whale Symposium and Workshop. Sponsored by Environment Canada. Vancouver, BC October 10-12, 2017.
- Conference Session Co-Chair/Organizer: “Integrated Tools For Improving Environmental Fate And Risk Assessment For Unregulated Contaminants And Their Mixtures” Society of Environmental Toxicology and Chemistry National Meeting, Minneapolis, MN, November 12-16, 2017
- Science Committee, The 18th IWA International Conference on Diffuse Pollution and Eutrophication. Los Angeles CA, August 13-17, 2017. Invited. 2016-2017
- Member at Large (Academic), PNW Chapter of Society for Environmental Toxicology and Chemistry (PNW-SETAC), Regionally elected leadership position. 2017-2019.
- Conference Session Co-Chair/Organizer: “Endocrine Disrupting Compounds and Pharmaceuticals in the Environment” Society of Environmental Toxicology and Chemistry National Meeting, Tampa Bay, FL, November 5-10, 2016
- Associate Editor, *Critical Reviews in Environmental Science and Technology*, 2012-2015
- Member at Large, ACS Division of Environmental Chemistry, Nationally elected leadership position. 2013-2015.
- Faculty Mentor and Senior Discussion Leader, 2012 Gordon Research Seminar, Environmental Sciences: Water. “Processes in Ecosystems” Session.
- Adjunct Faculty, UNR Graduate Program in Hydrologic Sciences, 2012-2014
- Member, AWWA Organic Contaminants Research Committee, 2011-2013
- Project Advisory Committee, Water Research Foundation Project #4334
- AAESP Student Award Committee, 2013-2015
- Conference Session Co-Chair/Organizer: “Frontiers in Water Reuse: Detection, Advanced Treatment, and Environmental Fate.” ACS National Conference, Salt Lake City 2009.
- NSF Proposal Review panels: 2009, 2010, 2012, 2017, 2019
- External Reviewer: UIUC, MIT, CUNY, AOAC, EPA, USGS, USDA, others
- Journal Peer Review: *Environmental Science and Technology*, *Environmental Science and Technology Letters*, *Environmental Sciences: Processes and Impacts*, *Environmental Pollution*, *Environmental Toxicology and Chemistry*, *Critical Reviews in Environmental Science and Technology*, *Journal of Chromatography, A*, *Journal of Environmental Quality*, *Water Resources Research*, *Aquatic Toxicology*, *Science of the Total Environment*, *Journal of Chemical Ecology*

TEACHING PORTFOLIO

- UW Tacoma:* TESC 201: The Science of Sustainability (W15-W20)
 TESC 333: Environmental Chemistry (W15-W20)
- UW Seattle:* CEE 496/CEWA 596: Contaminant Fate and Transport (A18)
 CEE 356: Quantitative and Conceptual Tools for Sustainability (S18, S20)
 CEE 498/598: Environmental Analyses (S16, S17)
- UNR:* CEE 204/390: Introduction to Environmental Engineering.
 CEE 417/617: Introduction to Environmental Quality and Analysis.
 CEE 458/658: Fundamentals of Environmental Chemistry.
 CEE 756: Environmental Chemistry. (Graduate Course)
 CEE 771: Anthropogenic Contaminants in the Environment. (Graduate Course)

AWARDS AND HONORS

- Distinguished Research Award (2020), U. of Washington-Tacoma
- Keynote Speaker, 6th International Conference on Emerging Contaminants (EmCon 2018), Oslo Norway
- Invited Speaker, 2014 Gordon Research Conference, Environmental Sciences: Water
- Exceptional Reviewers of 2014 Award, *Environmental Toxicology and Chemistry*
- Excellence in Review Award, 2012, *Environmental Science and Technology*
- College of Engineering 2011 Senior Scholar Faculty Mentor, Stephanie Kover

SELECTED MEDIA LINKS (links current at time of publication)

Documentary Films:

Engineering With Nature: An Ode to Wood, Water and Stone. Leaping Frog Films.
World Premier June 8, 2019 at the Seattle International Film Festival (SIFF). Seattle, WA.
<http://www.leapingfrogfilms.com/thorton.html>

Select News Media:

Science: <http://www.sciencemag.org/content/341/6153/1441.full>
Nature: <http://www.nature.com/news/hormone-disruptors-rise-from-the-dead-1.13831>
U.S. News and World Report: <http://health.usnews.com/health-news/news/articles/2013/09/26/evidence-shows-steroid-used-in-livestock-can-impact-waterways>
Scientific American: <http://www.scientificamerican.com/article.cfm?id=hormone-disruptors-rise-from-the-dead-like-zombies>
Science Daily: <http://www.sciencedaily.com/releases/2013/09/130926142829.htm>
Chemistry World (Royal Society of Chemistry): <http://www.rsc.org/chemistryworld/2013/09/night-nearly-dead-steroid-trenbolone-acetate>
Chemical and Engineering News: <http://cen.acs.org/articles/91/i39/Growth-Hormones-Knack-Regenerating.html>
Yahoo Health News: <http://health.yahoo.net/articles/healthcare/vampire-steroid-may-haunt-us-rivers-and-streams>
Phys.org: <http://phys.org/news/2013-09-steroids-persist-longer-environment.html>
Huffington Post: http://www.huffingtonpost.com/andrew-gunther/industry-assurances-over-b_4039594.html

Huffington Post: http://www.huffingtonpost.com/andrew-gunther/big-ags-gifts-for-2013_b_4493687.html

The Scientist: [http://www.the-scientist.com/?articles.view/articleNo/37702/title/Steroids-Stick-Around/National Science Foundation, "Science360", 9/30/2013 News: http://news.science360.gov/files/ACS%20%22Molecule%20of%20the%20Week%22%2012/30/2013](http://www.the-scientist.com/?articles.view/articleNo/37702/title/Steroids-Stick-Around/National%20Science%20Foundation,%20%22Science360%22,%209/30/2013%20News): <http://www.acs.org/content/acs/en/molecule-of-the-week/archive/trenbolone.html>

January 2020: <http://www.washington.edu/news/2020/01/22/puget-sound-technique-casts-net-for-concerning-chemicals>

Forbes.com: <https://www.forbes.com/sites/allenelizabeth/2020/01/27/sixty-four-new-chemicals-discovered-in-washingtons-puget-sound/#10a27ef15d93>

KING5 news: <https://www.king5.com/article/news/local/whats-in-puget-sound/281-c122de89-af35-41a6-a47a-42f7345b6389>

Twitter links:

<https://twitter.com/Healthline/status/383459992193343488>

<http://inagist.com/all/383486732064129024/>

<http://t.co/zIIfuj8Qm1>

Facebook, IFLS, 9/26/2013: (~6000 likes, 300 comments)

<https://www.facebook.com/IFeakingLoveScience#!/photo.php?fbid=673860729301608&set=a.456449604376056.98921.367116489976035&type=1&theater>

Radio: BBC "Inside Science" on 10/03/2013: <http://www.bbc.co.uk/programmes/b03bs0z6>

Podcast: *Environmental Science & Technology*, Oct 21, 2014.

<http://pubs.acs.org/page/esthag/multimedia/index.html>

KOUW radio:

<https://www.kuow.org/stories/coho>