

Scott Coffin, Ph.D.

Curriculum Vitae

EDUCATION

PhD, Environmental Toxicology, *University of California, Riverside*, Riverside, CA, 2018

Dissertation Title: "Plastic as a Vector for Pollutants in Estuarine and Marine Environments"

BS, Chemistry, Spanish Minor, Honors, *University of Wyoming, Laramie*, WY, 2013

National Student Exchange - University of Puerto Rico, Mayaguez, Fall 2013

National Student Exchange - University of Massachusetts, Amherst, Fall 2011

Grinnell College; Grinnell, IA, Fall 2009 - Spring 2010

WORK HISTORY

Professional Experience

Research Scientist IV (Chemical Sciences). Feb 2024 - present

Office of Environmental Health and Hazard Assessment, Sacramento, CA.

Planned and conducted original research into the development of novel risk assessment methods to evaluate unassessed chemicals that have little or no toxicology testing in laboratory animals; served as subject-matter expert in pharmacokinetics and developed and applied pharmacokinetic models; translated complex data from *in-vitro* and other novel experimental systems to human exposures; applied new computational-toxicology approaches to develop hazard and dose-response assessments to support regulatory standards for unassessed chemicals of high priority to California state agencies; established collaborations with academic researchers on the development and refinement of novel risk assessment methods; published scientific papers and technical reports; presented work at conferences and lectures.

Research Scientist III (Chemical Sciences). Sept. 2019 – Jan. 2024

State Water Resources Control Board, Sacramento, CA.

Served as subject-matter expert for microplastics for State of California. Planned and conducted original research into health effects and analytical methods of microplastics. Developed and applied novel risk assessment frameworks for microplastics in drinking water and aquatic ecosystems. Developed first-ever quantitative health-protective concentrations of microplastics in drinking water. Developed the first regulatory definition of microplastics, and the State's four-year microplastics drinking water monitoring program. Founded and led the Microplastics Subcommittee of the Water Quality Monitoring Council. Oversaw contracts to develop and validate analytical methods for emerging contaminants, including nitrosamines and microplastics. Served on numerous advisory committees to guide research and policies for microplastics. Disseminated research at conferences worldwide and engaged in scientific communication through news outlets (print, video, radio, podcasts). Responded to public comments on regulatory documents and policies. Managed Division of Drinking Water's website for microplastics. Authored scientific publications and reports.

Environmental Scientist (Range C). Jan. 2019 – Sept. 2019.

State Water Resources Control Board, Sacramento, CA.

Served as primary technical scientist overseeing the development and implementation of the Constituents of Emerging Concern (CEC) program. Oversaw contracts to develop resources, databases, and tools to prioritize CECs for monitoring and management in recycled water and ambient ecosystems. Wrote the Quality Assurance Project Plan template for *in vitro* bioassay monitoring of CECs in potable reuse waters. Served on the State Water Board's PFAS team. Developed and led the PFAS Datathon (2019).

Paid Intern. Jan. 2014 – Jun. 2014

United States Senate, Senator Mike Enzi (WY), Washington, D.C.

Conducted targeted research, attended and took notes on committee hearings, recorded correspondence with constituents, provided tours of the Capitol building, and conducted basic office work.

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International Outdoor Guide. 2013-2014

Wilderness Adventures, Jackson, WY.

Led outdoor eco-tourism expeditions in Costa Rica, Peru and Belize for youth (aged 13 – 17 years). Responsibilities included ensuring safety and wellbeing of participants; orchestrating logistics; handling finances; and assisting in teaching hard skills (e.g., SCUBA diving, surfing, etc.). Spanish language proficiency and wilderness first aid training were required.

Academic Experience

Graduate Student Researcher. 2014 - 2018

University of California, Riverside, Riverside, CA

Teacher's Assistant. 2015-2016

"Introduction to Environmental Science", *University of California*, Riverside, Riverside CA

Academic Tutor. 2010 - 2011

"General Chemistry", *University of Wyoming*, Laramie, WY 2010-2011

Research Fellowships

National Science Foundation Integrated Graduate Education and Research

Traineeship Fellow. 2017-2018

University of California, Riverside, Riverside CA 2017-2018

Chancellor's Distinguished Fellow. 2014 – 2015.

University of California, Riverside, Riverside CA

National Science Foundation Established Program to Stimulate Competitive Research Grant Recipient. 2012 – 2013.

University of Wyoming, Laramie, WY

HONORS AND AWARDS

40 under 40. *University of California, Riverside.* Spring 2022. Recognized as one of 40 remarkable alumni under the age of 40 from the University of California, Riverside.
<https://news.ucr.edu/ucr-magazine/spring-2022/40-under-40/list>

Best Mission Concept. *NASA Covid19 Space Apps Challenge*, 2020. Global hackathon sanctioned by NASA to develop innovative solutions to global issues related to the Covid-19 pandemic using space data, science and technology. "Shelter in Space" project awarded Best Mission Concept out of 1,422 project submissions by a special committee.

First Place: "Water's Impact on People"; Audience Choice Awards. American Chemical Society Environmental Film competition. San Diego, California, 2019. Documentary: "Getting to Know H2O." <https://gluckprogram.ucr.edu/glucktv-steam-channel>

Fellow; *National Science Foundation Integrated Graduate Education and Research Traineeship.* 2018.

Best Contribution; *Microplastics* 2018, Ascona, Switzerland, November 2018. Nominations for this honor are made by a special committee. The Award is given to the best contribution to the field at the Microplastics 2018 conference.

Dean's list, *University of Wyoming*, Laramie, WY 2013.

This Award is made to undergraduate students who have a grade point average of 3.4 or greater.

Eagle Scout Award, *Boy Scouts of America*, 2008.

This is the highest achievement attainable in the Boy Scouts of America.

PEER-REVIEWED PUBLICATIONS

40 Peer-reviewed publications (11 first-author); 2,379 citations; h-index: 22; i10 index: 28

First-Author Publications

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- Coffin, Scott**, Lidwina Bertrand, Kazi Towsif Ahmed, Luan de Souza Leite, Win Cowger, Mariella Siña, Andrew Barrick, Anna Kukkola, Bethanie Carney Almroth, Ezra Miller, Andrew Yeh, Stephanie Kennedy, Magdalena M. Mair. *"A Probabilistic Risk Framework for Microplastics Integrating Uncertainty Across Toxicological and Environmental Variability: Development and Application to Marine and Freshwater Ecosystems."* Submitted.
- Coffin, Scott**. 2023. *"The emergence of microplastics: charting the path from research to regulations."* Environmental Science: Advances 2 (3): 356–367.
- Coffin, Scott**, Stephen Weisberg, Chelsea Rochman, Merel Kooi, Albert Koelmans. 2022. *"Risk Characterization of Microplastics in San Francisco Bay, California."* Microplastics and Nanoplastics.
- Coffin, Scott** and Stephen Weisberg. 2022. *"Understanding health effects pathways and thresholds: filling a critical need to support microplastics management."* Microplastics and Nanoplastics.
- Coffin, Scott**, Hans Bouwmeester, Susanne Brander, Pauliina Damdimopoulou, Todd Gouin, Ludovic Hermabessiere, Elaine Khan, Albert A. Koelmans, Christine L. Lemieux, Katja Teerds, Martin Wagner, Stephen B. Weisberg, Stephanie Wright. 2022. *"Development and application of a health-based framework for informing regulatory action in relation to exposure of microplastic particles in California drinking water."* Microplastics and Nanoplastics.
- Coffin, Scott**, Holly Wyer, and J.C. Leapman. 2020. *"Addressing the environmental and health impacts of microplastics requires open collaboration between diverse sectors."* PLOS Biology.
- Coffin, Scott**, Jason T. Magnuson, Sara M.F. Vliet, David C. Volz, and Daniel Schlenk. 2020. *"Effects of Short-Term Exposure to Environmentally-Relevant Concentrations of Benzo(a)Pyrene-Sorbed Polystyrene to White Seabass (Atractoscion Nobilis)."* Environmental Pollution 263 (August): 114617. <https://doi.org/10.1016/j.envpol.2020.114617>.
- Coffin, Scott**, Guo-Yong Huang, Ilkeun Lee, and Daniel Schlenk. 2019. *"Fish and Seabird Gut Conditions Enhance Desorption of Estrogenic Chemicals from Commonly-Ingested Plastic Items."* Environmental Science & Technology 53 (8): 4588–4599. <https://doi.org/10.1021/acs.est.8b07140>.
- Coffin, Scott**, Ilkeun Lee, Jay Gan, and Daniel Schlenk. 2019. *"Simulated Digestion of Polystyrene Foam Enhances Desorption of Diethylhexyl Phthalate (DEHP) and In Vitro Estrogenic Activity in a Size-Dependent Manner."* Environmental Pollution 246 (March): 452–462. <https://doi.org/10.1016/j.envpol.2018.12.011>.
- Coffin, Scott**, Stacia Dudley, Allison Taylor, Douglas Wolf, Jie Wang, Ilkeun Lee, and Daniel Schlenk. 2018. *"Comparisons of Analytical Chemistry and Biological Activities of Extracts from North Pacific Gyre Plastics with UV-Treated and Untreated Plastics Using in Vitro and in Vivo Models."* Environment International 121 (December): 942–954. <https://doi.org/10.1016/j.envint.2018.10.012>.
- Coffin, Scott**, Jay Gan, and Daniel Schlenk. 2017. *"Comparisons of Field and Laboratory*

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Estimates of Risk of DDTs from Contaminated Sediments to Humans That Consume Fish in Palos Verdes, California, USA. Science of the Total Environment 601: 1139–1146.

Co-Author Publications

Kennedy, Stephanie, Ana L. Antonio Vital, Anna Kukkola, Ezra Miller, Andrew Yeh, **Scott Coffin**, Towsif K. Ahmed, Lidwina Bertrand, Andrew Barrick, Win Cowger, Magdalena M. Mair, Darragh Doyle. *“Trends in Quality and Risk Assessment Applicability of Microplastic Ecotoxicity Studies.”* Submitted.

Thornton Hampton, Leah, Dana Briggs Wyler, Bethanie Carney Almroth, **Scott Coffin**, Win Cowger, Darragh Doyle, Eden K. Hataley, Sara J. Hutton, Magdalena M. Mair, Ezra L. Miller, Laura Monclús, et al. 2025. *“The Toxicity of Microplastics Explorer (ToMEx) 2.0.”* Microplastics & Nanoplastics. In Press.

Almeida, Nuno, Heather Bolstad, **Scott Coffin**, Sana Majid, Angela Wilson, Anatoly Soshilov. *“Elucidating the Role of PFAS Binding to Transthyretin in PFAS-Dependent Thyroid Toxicity.”* Environmental Science & Technology. Submitted.

Fillman, Toki, **Scott Coffin**, Brandon Ta, Emily Beglarian, Wendy Linck, Hyoung-Gee Baek, Songmei Gao, Sabrina Smith, June-Soo Park, Nerissa Wu, Kathleen Attfield. 2025. *“Associations between PFAS in Public Water System Drinking Water and Serum Among Southern California Adults.”* Journal of Exposure Science and Environmental Epidemiology. In Press.

Bălan, Simona A., Saskia K. Van Bergen, Ann Blake, Topher Buck, **Scott Coffin**, Jamie C. DeWitt, Gretta Goldenman, et al. 2025. *“Confronting the Interconnection of Chemical Pollution and Climate Change.”* Environmental Innovation and Societal Transitions 55: 100966. <https://doi.org/10.1016/j.eist.2025.100966>.

Sherrod, Hannah, Nicholas Leong, Hannah Hapich, Fabian Gomez, Shelly Moore, Ben Maurer, **Scott Coffin**, et al. 2024. *“One4All: An Open Source Portal to Validate and Share Microplastics Data and Beyond.”* Journal of Open Source Software 9 (99): 6715. <https://doi.org/10.21105/joss.06715>.

Koelmans, Albert A., Todd Gouin, Alvine C. Mehinto, and **Scott Coffin**. 2024. *“On the Need to Avoid Apple-to-Orange Comparisons in Microplastic Research.”* Canadian Journal of Fisheries and Aquatic Sciences, cjfas-2023-0325.

Wong, Charles S., **Scott Coffin**, Chelsea M. Rochman, and Stephen B. Weisberg. 2024. *“Informing Methods for Detecting and Quantifying Microplastics through the Lens of a Global Intercalibration Exercise: An Editorial Overview of the Special Issue and Beyond.”* Chemosphere 356: 141662.

Cochran, Kristin, Danielle Westerman, Cassiana Montagner, **Scott Coffin**, Lorivic Diaz, Benjamin Fryer, Gary Harraka, Elvis Xu, Ying Huang, Daniel Schlenk, Dionysios D. Dionysiou, Susan Richardson. 2023. *“Chlorination of Emerging Contaminants for Application in Potable Wastewater Reuse: Disinfection By-Product Formation, Estrogen Activity, and Cytotoxicity.”* Environmental Science & Technology.

Mitrano, Denise M., Moritz Bigalke, Andy M. Booth, Camilla Catarci Carteny, **Scott Coffin**, Matthias Egger, Andreas Gondikas, et al. 2023. *“Training the Next Generation of*

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- Plastics Pollution Researchers: Tools, Skills and Career Perspectives in an Interdisciplinary and Transdisciplinary Field.* Microplastics and Nanoplastics 3 (1): 24.
- Eriksen, Marcus, Win Cowger, Lisa M. Erdle, **Scott Coffin**, Patricia Villarrubia-Gómez, Charles J. Moore, Edward J. Carpenter, Robert H. Day, Martin Thiel, Chris Wilcox. 2023. "A Growing Plastic Smog, Now Estimated to Be Over 170 Trillion Plastic Particles Afloat in the World's Oceans—Urgent Solutions Required." PLOS One 18 (3): e0281596.
- Elko, N., Foster, D., Kleinheinz, G., Raubenheimer, B., Brander, S., Kinzelman, J., Kritzer, J.P., Munroe, D., Storlazzi, C., Sutula, M., Mercer, A., **Coffin, S.**, Fraioli, C., Ginger, L., Morrison, E., Parent-Doliner, G., Akan, C., Canestrelli, A., DiBenedetto, M., Lang, J., Simm, J. 2021. "Human and Ecosystem Health in Coastal Systems." Shore & Beach 90 (1): 64–91. <http://doi.org/10.34237/1009018>.
- Thornton Hampton, Leah M., Heili Lowman, **Scott Coffin**, Emily Darin, Hannah De Frond, Ludovic Hermabessiere, Ezra Miller, Vera N. de Ruijter, Andrea Faltynkova, Syd Kotar, Laura Monclús, Samreen Siddiqui, Johannes Völker, Susanne Brander, Albert A. Koelmans, Chelsea M. Rochman, Martin Wagner, Alvine C. Mehinto. 2022. "A Living Tool for the Continued Exploration of Microplastic Toxicity." Microplastics and Nanoplastics.
- Simona Balan, Gretta Goldenman, Ann Blake, Xenia Trier, Martin Scheringer, Topher Buck, David Rist, Chris Leonetti, Saskia Van Bergen, **Scott Coffin**. "The Glasgow Statement on Chemicals in a Changing Climate." In Press.
- Thornton Hampton, Leah M., Susanne Brander, **Scott Coffin**, Matthew Cole, Ludovic Hermabessiere, Albert A. Koelmans, Chelsea M. Rochman. 2022. "Characterizing Microplastic Hazards: Which Concentration Metrics and Particle Characteristics Are Most Informative for Understanding Toxicity in Aquatic Organisms?" Microplastics and Nanoplastics.
- Thornton Hampton, Leah M., Hans Bouwmeester, Susanne Brander, **Scott Coffin**, Matthew Cole, Ludovic Hermabessiere, Alvine C. Mehinto, Ezra Miller, Chelsea M. Rochman, Stephen B. Weisberg. 2022. "Research Recommendations to Better Understand the Potential Health Impacts of Microplastics to Humans and Aquatic Ecosystems." Microplastics and Nanoplastics.
- Mehinto, Alvine C., **Scott Coffin**, Albert A. Koelmans, Susanne M. Brander, Martin Wagner, Leah M. Thornton Hampton, G. Allen Burton Jr, Ezra Miller, Todd Gouin, Stephen B. Weisberg, Chelsea M. Rochman. 2022. "Risk-Based Management Framework for Microplastics in Aquatic Ecosystems." Microplastics and Nanoplastics.
- Grønnestad, Randi, Daniel Schlenk, Åse Krøkje, Veerle L.B. Jaspers, Bjørn Munro Jenssen, **Scott Coffin**, Luísa Becker Bertotto, Marissa Giroux, Jan L. Lyche, Augustine Arukwe. 2020. "Alteration of Neuro-Dopamine and Steroid Hormone Homeostasis in Wild Bank Voles in Relation to Tissue Concentrations of PFAS at a Nordic Skiing Area." Science of the Total Environment 143745. <https://doi.org/10.1016/j.scitotenv.2020.143745>.

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- Wang, Jie, **Scott Coffin**, Daniel Schlenk, and Jay Gan. 2020. "Accumulation of HOCs via Precontaminated Microplastics by Earthworm *Eisenia Fetida* in Soil." *Environmental Science & Technology*. <https://doi.org/10.1021/acs.est.0c02922>.
- Wyer, Holly, Darrin Polhemus, Shelly Moore, Steve Weisberg, **Scott Coffin**, Chelsea Rochman. 2020. "EXPRESS: Steps Scientists Can Take to Inform Aquatic Microplastics Management: A Perspective Informed by the California Experience." *Applied Spectroscopy*. <https://doi.org/10.1177/0003702820946033>.
- Li, Shuying, Yao Jiang, Qianqian Sun, **Scott Coffin**, Lili Chen, Kun Qiao, Wenjun Gui, Guonian Zhu. 2020. "Tebuconazole Induced Oxidative Stress Related Hepatotoxicity in Adult and Larval Zebrafish (*Danio rerio*)." *Chemosphere* 241: 125129.
- Wang, Jie, **Scott Coffin**, Chengliang Sun, Daniel Schlenk, Jay Gan. 2019. "Negligible Effects of Microplastics on Animal Fitness and HOC Bioaccumulation in Earthworm *Eisenia Fetida* in Soil." *Environmental Pollution* 249: 776–784. <https://doi.org/10.1016/j.envpol.2019.03.102>.
- Li, Shuying, Kun Qiao, Yao Jiang, Qiong Wu, **Scott Coffin**, Wenjun Gui, Guonian Zhu. 2019. "Disruptive Effects of Two Organotin Pesticides on the Thyroid Signaling Pathway in *Xenopus laevis* During Metamorphosis." *Science of the Total Environment* 697: 134140.
- Li, Shuying, Qiong Wu, Qianqian Sun, **Scott Coffin**, Wenjun Gui, Guonian Zhu. 2019. "Parental Exposure to Tebuconazole Causes Thyroid Endocrine Disruption in Zebrafish and Developmental Toxicity in Offspring." *Aquatic Toxicology* 211: 116–123. <https://doi.org/10.1016/j.aquatox.2019.04.002>.
- Moreira, Lucas Buruaem, Gracieli Diamante, Marissa Giroux, **Scott Coffin**, Elvis Genbo Xu, Denis Moledo de Souza Abessa, Daniel Schlenk. 2018. "Impacts of Salinity and Temperature on the Thyroidogenic Effects of the Biocide Diuron in *Menidia Beryllina*." *Environmental Science & Technology* 52 (5): 3146–3155.
- Huang, Ying, Yiqing Liu, Minghao Kong, Elvis Genbo Xu, **Scott Coffin**, Daniel Schlenk, Dionysios D. Dionysiou. 2018. "Efficient Degradation of Cytotoxic Contaminants of Emerging Concern by UV/H₂O₂." *Environmental Science: Water Research & Technology* 4 (9): 1272–1281.
- Huang, Ying, Minghao Kong, Danielle Westerman, Elvis Genbo Xu, **Scott Coffin**, Kristin H. Cochran, Yiqing Liu, Susan D. Richardson, Daniel Schlenk, Dionysios D. Dionysiou. 2018. "Effects of HCO₃⁻ on Degradation of Toxic Contaminants of Emerging Concern by UV/NO₃⁻." *Environmental Science & Technology* 52 (21): 12697–12707. <https://doi.org/10.1021/acs.est.8b04383>.

SELECTED CONFERENCE PRESENTATIONS

Provided >270 presentations, including 103 conference presentations (16 keynote).

Selected Complete list at <https://scottcoff.in>

"Challenges and Advances in Assessing Ecological Risks of Microplastics: Findings from a Large International Working Group's Meta-Analysis." Gordon Research Conference - Environmental Nanotechnology. June, 2025. Newry, Maine.

"A Comprehensive Probabilistic Framework for Deriving Microplastic Hazard Thresholds: Development and Application to Marine and Freshwater Ecosystems with ToMEx 2.0

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- Data." Microplastic Pollution: Impacts on the SF Bay Delta and Remediation Strategies, UC Davis. May, 2025. Davis, California.
- "Monitoring and Assessing Risks of Microplastics – Insights from California." Association of Public Health Laboratories Annual Conference. May, 2025. [City TBD].
- "ITRC Microplastics Training." ALGA EcoForum. October, 2023. Melbourne, Australia.
- "Microplastics in Groundwater: Knowns, Unknowns, and California's Monitoring Plans." Groundwater Resources Association of California / UC Irvine Research Park. October, 2023. Irvine, California.
- "The State Water Board's Plan for Monitoring Microplastics in Drinking Water." Groundwater Resources Association of California (Sacramento Branch Meeting). July, 2023. Sacramento, California.
- "Leveraging Big Data to Predict Microplastics Toxicity for Aquatic Organisms." American Chemical Society. August, 2023. San Francisco, California.
- "Assessing Risks of Microplastics in Drinking Water and the Aquatic Environment to Inform Risk Management Strategies in California." ICCA MARII Workshop. June, 2023. Seattle, Washington.
- "California's Regulatory Investigations of Microplastics in Drinking Water." Association of Public Health Laboratories. June, 2023. Virtual.
- "Microplastics in the Environment: Not Just a Surface Water / Ocean Issue." American Groundwater Trust. June, 2023. Sacramento, California.
- "Drinking Water Investigative Orders – Next Steps." Clean Water SoCal Microplastics Workshop. May, 2023. Irvine, California.
- "Risk Based Management Framework for Microplastics." Clean Water SoCal Microplastics Workshop. May, 2023. Irvine, California.
- "Update on the California Drinking Water Microplastics Monitoring Program." American Water Works Association: Microplastics Monitoring – The Mandate and the Messaging. May, 2023. Virtual.
- "Charting the Path from Research to Regulations of Microplastics: Insights from California." 2023 Spring ITRC Meeting. March, 2023. Boston, Massachusetts.
- "A California Regulator's Perspective on Microplastics and PFAS." CalCOFI Pollutant Monitoring Workshop. December, 2022. Virtual.
- "Assessing and Managing Risks of Microplastics in Ecosystems and Drinking Water – Insights from California's Research and Regulations." 5th International Microplastics Symposium. December, 2022. Seoul, South Korea.
- "Path to Regulations for Microplastics." International Seminar of Environmental Health. December, 2022. Virtual.
- "Tackling Microplastics Risks through Science, Policy and Regulations." American College of Toxicology Annual Symposium. November, 2022. Denver, Colorado.
- "Microplastics Research and Regulations." California Lake Management Society Annual Meeting. October, 2022. Oakland, California.
- "California's Path to Microplastics Pollution Monitoring and Regulation." Macro to Microplastics in Narragansett Bay. October, 2022. Bristol, Rhode Island.
- "California's Efforts to Address PFAS Contamination in Water Resources." International Cleanup Conference. September, 2022. Adelaide, Australia.
- "Assessing and Managing Risks of Microplastics in Ecosystems and Drinking Water." International Cleanup Conference. September, 2022. Adelaide, Australia.
- "Risk Characterization of Microplastics in San Francisco Bay, California." Southern California Academy of Sciences Annual Symposium. May, 2022. Fullerton, California.
- "Assessing and Managing Risks of Microplastics in Ecosystems and Drinking Water." Emerging

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- Contaminants in the Environment Conference. April, 2022. Virtual.
- “Assessing and Managing Risks of Microplastics in Ecosystems and Drinking Water.” American Water Works Association – California/Nevada Section Annual Spring Conference. April, 2022. Anaheim, California.
- Scott Coffin, Rick Zimmer. “Microplastics - Regulations, Toxicology & Testing for a new emerging contaminant.” WaterReuse. March, 2022. San Antonio, Texas.
- “Microplastics - Regulations, Toxicology & Testing for a new emerging contaminant.” Pacific Water Conference. February, 2022. Virtual.
- “Management of Microplastics in Ecosystems and Drinking Water in California.” Asia-Pacific Economic Co-operation Workshop on Nanoplastics in Marine Debris. December, 2021. Virtual.
- “Policy and regulatory strategies for managing human risks of microplastics: a California perspective.” Plastics and microplastics in food and the impact on human health; National Academies of Sciences, Engineering, and Medicine. December, 2021. Virtual.
- “What’s the deal with microplastics?” Los Angeles County Bar Association Environmental Section Fall Symposium. November, 2021. Virtual.
- “Leveraging Big Data to Predict Microplastics Toxicity for Aquatic Organisms.” SETAC North America. November, 2021. Virtual.
- “Assessing Risks of Microplastics in Drinking Water for Humans: Insights From California's Expert Workshop.” SETAC North America. November, 2021. Virtual.
- “Microplastics Contamination in Terrestrial Environments.” California Bioresources Alliance. November, 2021. Virtual.
- “Microplastics: what's the big deal, and what is California doing about it?” California Clean Boating Network Meeting. November, 2021. Virtual.
- “Microplastics as an Emerging Contaminant Suite – A California Waterboards Perspective.” Green Ribbon Science Panel Microplastics Research and Policy Meeting. November, 2021. Virtual.
- “Preliminary Findings of an Assessment of the Human Health Impacts of Microplastics in Drinking Water.” Water All-Star Talk. American Water Works Association California-Nevada Section Annual Fall Conference. October, 2021. Virtual.
- “Research and Actions on Microplastics in Drinking Water by the California State Water Resources Control Board.” Microplastics in the Potomac River Basin: Drinking Water & Source Water Protection Perspectives. October, 2021. Virtual.
- “Preliminary Comparison of Ecotoxicological Thresholds to Microplastics Occurrence Data in San Francisco Bay.” San Francisco Estuary Institute RMP Microplastic Workgroup. September, 2021. Virtual.
- “Microplastics Health Workgroup Findings.” Federal-State Toxicology and Risk Analysis Committee (FSTRAC) Webinar. September, 2021. Virtual.
- “Adoption of standard methods for microplastics measurement in California's regulatory programs.” Challenges of Microplastic Analysis – Bridging state of the art and policy needs. European Commission. September, 2021. Virtual.
- “Microplastics – The Latest Contaminant of Concern.” Eurofins. August, 2021.
- “Contaminants of Emerging Concern Series- Microplastics.” Water Education Seminar 2021, American Water Works Association California-Nevada Section. August, 2021. Virtual.
- “State Water Board Research and Regulations on Microplastics in Drinking Water.” National Environmental Monitoring Conference. August, 2021. Virtual.
- “What am I drinking? Microplastics impacts on human health.” North Carolina Coastal Federation Virtual Microplastics Forum. July, 2021. Virtual.
- “Meeting the Challenge of Microplastic Management to Protect Human Health and the

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- Environment.” Renewable Natural Resources Foundation Round Table. July, 2021. Virtual.
- “Untangling microplastics toxicity with an interactive data exploration application.” Water Data Science Symposium. June, 2021. Virtual.
- “Leveraging Big Data to Predict Microplastics Toxicity for Aquatic Organisms.” Water Data Science Symposium. June, 2021. Virtual.
- “Key Ingredients to Effective Science Communication: Focus on Microplastics Science and Policy.” Online Workshop on Microplastic Research. ETH Zurich. June, 2021.
- “California’s Path Towards Regulating Microplastics in Water.” University of Toronto Virtual Technology Transfer Day. June, 2021. Virtual.
- “California’s Path Towards Assessing Risks and Developing Regulations for Microplastics.” Southern California Regional Chapter of the Society of Environmental Toxicology and Chemistry 2021 Annual Meeting. April, 2021. Virtual.
- “California’s Regulatory Investigation of Microplastics in Drinking Water.” Groundwater Resources Association of California. March, 2021. Virtual.
- “Implementation of Senate Bill 1422 - Microplastics in Drinking Water.” California Assembly Environmental Safety And Toxic Materials Committee Information Hearing. February, 2021. Virtual.
- Scott Coffin and Charles Wong. “Microplastics: Characterization, Identification, Monitoring, and Accreditation.” Forum on Environmental Accreditation. January, 2021. Virtual.
- “Science to Policy: California’s Path Towards Microplastics Regulations.” US Coastal Research Group Human & Ecosystem Health Workshop. January, 2021. Virtual.
- “Microplastics in drinking water: California’s path towards assessing risks and developing regulations.” Society for Risk Analysis Annual Meeting. December, 2020. Virtual.
- “California Water Board Perspective.” Human and Ecological Health Effects of Microplastics in Water: Characterizing Current Knowledge and Identifying Research Priorities, Southern California Coastal Water Research Project. 2020. Virtual.
- “California Division of Drinking Water Update on Microplastics.” American Water Works Association California-Nevada Section Annual Fall Conference. September, 2020. Virtual.
- Scott Coffin, Wesley Smith. “Human Exposure to Microplastics from Food and Water.” International Society of Exposure Science. 2020. Virtual.
- “Microplastics in Drinking Water: California’ Regulatory Actions.” National Environmental Monitoring Conference. 2020. Virtual.
- Scott Coffin, Shahla Farahnak, Dan Kippen. “Regulatory Update on PFAS and Microplastics.” Los Angeles County Bar Association. 2020. Los Angeles, California.
- “Microplastics Regulatory Efforts.” Forum on Environmental Accreditation. 2020. Santa Ana, California.
- Scott Coffin, Shahla Farahnak. “California Water Board's Actions on Per- and Polyfluoroalkyl Substances (PFAS).” Groundwater Resource Association. 2019. Sacramento, California.
- “Plastic as a Vector for Pollutants in Estuarine and Marine Environments.” Impacts of Microplastics in the Urban Environment. 2019. Rutgers University, New Brunswick, New Jersey. Expert Panelist.
- “Analytical and in vitro estimates of estrogenicity from simulated digests of plastic items.” Microplastics 2018. June, 2018. Ascona, Switzerland. Best Contribution Award.
- “Characterization of Estrogenic Compounds from Simulated Digests of Plastic Items.” Southern California Chapter of Society of Toxicology and Chemistry Conference. April, 2018. Platform Presentation.
- “Comparisons of biological activities of extracts from North Pacific Gyre Plastics with UV-

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- treated and untreated materials using In Vitro and In Vivo Model.” Pollutant Responses in Marine Organisms. June, 2017. Matsuyama, Japan. Poster Presentation.
- “Biological and chemical activities of extracts from plastics collected from the North Pacific Gyre and plastics treated with UV-light.” Southern California Society of Toxicology and Chemistry. April, 2017. Dana Point, California. Platform Presentation.
- “Use of solid phase microextraction and laboratory models to estimate risk of DDTs from consumption of fish from contaminated sediments in Palos Verdes California.” Superfund Research Program. November, 2015. San Juan, Puerto Rico. Poster Presentation.
- “Understanding the Ecological effects of North Pacific Gyre Plastics using In Vitro Models.” Society of Environmental Toxicology and Chemistry. November, 2015. Salt Lake City, Utah. Poster Presentation.

NON-JOURNAL ARTICLES, GOVERNMENT DOCUMENTS, AND TECHNICAL REPORTS

- Interagency Marine Debris Coordinating Committee (Carlie Herring, Sam Athey, Anna Posacka, Rob Hale, Scott Coffin, Sherri Mason, Diana Lin, Steph Karba, Roland Geyer). “Report on Microfiber Pollution. 2022 Report to Congress.” August 8, 2022.
<https://marinedebris.noaa.gov/interagency-marine-debris-coordinating-committee-reports/report-microfiber-pollution>
- Coffin, Scott (State Water Resources Control Board). “Policy Handbook Establishing a Standard Method of Testing and Reporting of Microplastics in Drinking Water.” August 2022.
https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/docs/2022/mp-hndbk.pdf
- Wong, Charles & Scott Coffin (State Water Resources Control Board). “SWB-MP1-rev1: Standard Operating Procedures for Extraction and Measurement by Infrared Spectroscopy of Microplastic Particles in Drinking Water.” May 2022.
https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/microplastics/swb-mp1-rev1.pdf
- Wong, Charles & Scott Coffin (State Water Resources Control Board). “SWB-MP2-rev1: Standard Operating Procedures for Extraction and Measurement by Raman Spectroscopy of Microplastic Particles in Drinking Water.” May 2022.
https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/microplastics/swb-mp2-rev1.pdf
- Coffin, Scott. “Accounting for Plastic’s True Costs.” *The Debate*. March 2022.
<https://www.eli.org/sites/default/files/files-pdf/tef-march-april-2022-debate.pdf>
- SOS 2.0 Microfiber Report to U.S. Congress. *MateRevolve*. Report co-author and served on Expert Advisory Committee. 2021.
- Coffin, Scott. Staff Report for Proposed Definition of ‘Microplastics in Drinking Water.’ June 3, 2020. *State Water Resources Control Board*.
https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/docs/stffrprt_jun3.pdf
- Hayman, Nicholas and Coffin, Scott. Per- and polyfluoroalkyl substances (PFAS): Overview and Recent California Actions. Feature Article. *SoCal SETAC News* Volume 27, Number 2. 2020.
- Martindale, Scott; Weisberg, Stephen; Coffin, Scott. “Status of Legislation and Regulatory Drivers for Microplastics in California.” *HORIBA Readout*; No. 54, May 2020.
- Coffin, Scott. “Plastic as a Vector for Pollutants in Estuarine and Marine Environments.” *Doctoral dissertation, University of California, Riverside* (2018).

Scott Coffin, Ph.D.

COMMUNITY SERVICE and SCIENCE COMMUNICATION

Volunteer Yoga Instructor

Weekly class offered for free at CalEPA building (2024 – current)

Trainer

Developed and led training program for GitHub at OEHHA.

Trainer

Experiential Learning with MateRevolve & Call of the Sea. San Francisco Bay. May 2025.

Science Communication and Digital Arts Instructor

Artists Expression of Original Research. Anza Borrego, California. February 2023.

Keynote Speaker and Session Organizer

Microplastics Workshop for Early Career Researchers. Ascona, Switzerland. 2023.

Symposium Organizer and Keynote Speaker

CalEPA & South Korea NIER Symposium. Sacramento, California. August 2023.

Guest Lecturer

Sacramento State. May 2023.

Podcast Interviewee

Episode 13 – Microplastics. Dockside Podcast.

Podcast Interviewee

Data Science Beginnings Podcast.

Trainer

Experiential Learning with MateRevolve & Call of the Sea. San Francisco Bay. May 2023.

Guest Lecturer

California State University, Sacramento: Geology, Environmental Studies, & USGS Colloquium. December, 2022.

Keynote Speaker and Session Organizer

Microplastics Workshop for Early Career Researchers: Best Practices and Expert Insights. COST. Athens, Greece. June 2022.

Podcast Interviewee

EnviroChat. March 2022.

Expert Panelist

Science to Policy Class. University of California, Riverside. November 2021.

Interviewee

KQED and PBS. Microplastics. November 2021.

Guest Lecturer

Palomar College. Water Technology Education Topics. November 2021.

Interviewee

Spectrum News Los Angeles. October 2021.

Podcast Interviewee

Make Peas, not Beef. August, 2021.

Guest Lecturer

University of California. Environmental Health and Development Course. July, 2021.

Public Speaker

Rotary International, Wyoming Chapter. July, 2021.

Interviewee

Los Angeles Times. "Opinion: Microplastics are getting into our bodies. We need to understand what that means." July, 2021.

Podcast Discussion Facilitator

5 Gyres. "World Oceans Day Science 'State of the Union.'" June, 2021.

Scott Coffin, Ph.D.

Project Adviser

University of California, Berkeley. SDG Undergraduate Research Group. 2021.

Guest Lecturer

University of California, Berkeley School of Public Health. January, 2021.

Interviewee

"Endocrine Disruptors and Plastics." The Zero Waste Countdown Podcast. October 2020.

Guest Speaker

Scott Coffin, Susanne Brander, Anastasia Telesetsky. "Microplastics: Science and Policy." University of Oregon School of Law. September 2020.

Guest Speaker

"Microplastics: Human and Ecological Impacts." Rotary International, Cheyenne Chapter. September 2020.

Guest Speaker

"Microplastics in Drinking Water: California's Investigations." Microplastics Awareness Day. County of Santa Clara. September 2020.

Guest Lecturer

"Microplastics in Drinking Water: California's Pioneering Regulatory Investigation." Biological Oceanography Seminar Series. University of Rhode Island. September 2020.

Guest Speaker

"Microplastics Hit Home: Human Exposure, Health Effects, and Inland Impacts." Inland Ocean Coalition, Wyoming Chapter. August 2020. Virtual.

Interviewee

"Plasticast Episode 3: Dr. Scott Coffin." Pacific Northwest Consortium on Plastics.

Guest Speaker

Sacramento Science Distilled. Sacramento, California. January 2020.

Guest Lecturer

University of Redlands. Redlands, California. November 2019.

Presenter

Green Jobs Shadowing. California Center for Civic Participation. Sacramento, California. November 2019.

Presenter

America Recycles Day. California EPA. Sacramento, California. November 2019.

Educational Documentary Producer

"Getting to Know H2O." Riverside, California. 2018–2019. People's Choice Awards (American Chemical Society 2019 Meeting, San Diego, California).

Presenter

Earth Day Festival. University of California, Riverside. Riverside, California. 2018.

Conference Organizer

SoCAL SETAC / Earth Day Event. Whittier, California. 2018.

Organizer and Publicity Manager

Earth Day Festival. University of California, Riverside. Riverside, California. 2018.

Test Writer

Science Olympiad "Potions and Poisons." Ramona High School. Riverside, California. 2018.

Organizer

California Public Interest Research Group, UCR chapter. 2014–2016.

Presenter

"Environmental Health Day." Nature Center. Riverside, California. 2016.

Graduate Student Peer Mentor

University of California, Riverside. Riverside, California. 2016–2018.

Scott Coffin, Ph.D.

Science Fair Judge

St. Catherine of Alexandria. Riverside, California. 2016.

Test Writer, Proctor

Science Olympiad “Green Generation.” Ramona High School. Riverside, California. 2016.

Presenter

Annual Science Night. Stork Elementary School. Rancho Cucamonga, California. 2016.

Career Speaker

Amino Ralph Bunche Charter High. Los Angeles, California. 2015.

Presenter

“Environmental Health Day.” Riverside, California. 2014.

PROFESSIONAL MEMBERSHIPS AND APPOINTMENTS

Board Member and Secretary

Moore Institute for Plastic Pollution Research. 2021 – current.

Editorial Board Member

Cambridge University Press – Cambridge Prisms: Plastics.

Committee Chair

CA-NV AWWA Research Committee. 2022-2024.

Policy Advisory Committee Member

WRF 5155: "Developing Strategic Consumer Messaging for Microplastics in Drinking Water Supplies." *Water Research Foundation*. 2021 – current.

Planning Committee

Society of Environmental Toxicology and Chemistry Global Microplastics Workshop Planning Committee. 2021- current.

Committee Co-Chair and Founder

California Water Quality Monitoring Council Microplastics Monitoring Workgroup Subcommittee. 2021 – current.

Review Editor

Frontiers in Water and Human Health. Research Topic: “Alternatives to petroleum-based plastics as a potential solution to the global plastic pollution crisis in marine environments: Do they provide sustainable solutions?” January 2022 – current.

Review Editor

Frontiers in Water and Human Health. Research Topic: “Microplastics in Water and Potential Impacts on Human Health.” May 2021 - current.

Vice Committee Chair

CA-NV AWWA Research Committee. 2020-2021.

Writer

USCRP Human and Ecosystem Health in Coastal Systems report. 2021.

Grant Committee Member

Plastics Science for a Cleaner Future Selection Committee, Natural Sciences and Engineering Research Council of Canada. 2020-2021.

PAC Member

WRF 5088, Defining Exposures of Microplastics/Fibers (MPs) in Treated Waters and Wastewaters: Occurrence, Monitoring, and Management Strategies, Water Research Foundation. 2020-2021.

Member

Microplastics Grant Selection Committee, California State University Council on Ocean Affairs, Science & Technology (COAST). 2019-2020

Member

Scott Coffin, Ph.D.

Microplastics Policy Advisory Committee; Ocean Science Trust. 2020.
Student Representative
Southern California Society of Toxicology and Chemistry. 2017- 2019.

TRAININGS AND CERTIFICATES

Verbal Judo. June 2023.
Sexual Harassment Prevention. August 2022.
Intermediate R for Water Resources. August, 2021.
Introduction to Emotional Intelligence. August, 2021.
ABT Narrative Training with Randy Olson. August – September 2021.
ArcGIS Training, University of California, Davis, 2020.
Mastering Grammar. January 2020.
Web Accessibility Training. January, 2020.
3-Day Rulemaking Training Course for State Agency Personnel. October 2020.
A2LA Introduction to Method Validation. October 2019.
Contract Manager Training. October 2019.
Yoga Instructor, 200-hour certification, Western Yoga College, 2018.
SCUBA certification, Advanced Open Water, PADI, 2014.

SPECIAL PROJECTS

Contract Manager

In Vitro Bioassays Research. Contractor: Southern California Coastal Water Research Project. Office of Environmental Health Hazard Assessment.

Founder and Lead Developer

www.Plastiverse.org

Lead Developer

Toxicity of Microplastics Explorer Application (ToMEx).
https://sccwrp.shinyapps.io/aq_mp_tox_shiny/

Lead Data Scientist

Economic Impacts to Water Systems from COVID-19 (2020). State Water Resources Control Board.

Contract Manager

Microplastics in Drinking Water Method Development and Health Effects Workshop.
Contractor: Southern California Coastal Water Research Project. State Water Resources Control Board.

NASA Covid19 Space Apps Challenge (2020)

Virtual. Participant. Challenge Winner for contribution: *Shelter in Space*.
<https://shelterinspace.app/>

PFAS Datathon (2019)

Sacramento, CA. *Organizer and facilitator*.

Southern California Society of Toxicology and Chemistry (2018)

Los Angeles, CA. *Organizer*.

LANGUAGES

English: Native Language

Spanish: Advanced

R programming language: Expert in statistics, machine learning, visualization.

Python programming language: Intermediate

Dance: Native Language