

## **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 III (Chemical Sciences), State Water Resources Control Board, Sacramento, CA, 2019-Present
- Environmental Scientist (Range C), State Water Resources Control Board, Sacramento, CA, 2019
- Paid Intern, United States Senate, Senator Mike Enzi (WY), Washington, D.C., 2014
- International Outdoor Guide, Wilderness Adventures, Jackson, WY, 2013-2014

#### **Academic Experience**

- Graduate Student Researcher, University of California, Riverside, Riverside, CA 2014-2018
- Teacher's Assistant, Introduction to Environmental Science, University of California, Riverside, Riverside CA 2015-2016
- Academic Tutor, General Chemistry, University of Wyoming, Laramie, WY 2010-2011

#### **Research Fellowships**

- National Science Foundation Integrated Graduate Education and Research Traineeship Fellow, University of California, Riverside, Riverside CA 2017-2018
- Chancellor's Distinguished Fellow, University of California, Riverside, Riverside CA 2014-2015
- National Science Foundation Established Program to Stimulate Competitive Research Grant Recipient, University of Wyoming, Laramie, WY 2012-2013

### **HONORS AND AWARDS**

*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.

## Scott Coffin, Ph.D.

*First Place*: “Water’s Impact on People”; Audience Choice Awards. American Chemical Society Environmental Film competition. San Diego, California, 2019. Documentary: “Getting to Know H<sub>2</sub>O.” <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.

### **CONFERENCE PRESENTATIONS**

Scott Coffin. “State Water Board Research and Regulations on Microplastics in Drinking Water.” *National Environmental Monitoring Conference*. August, 2021. Virtual.

Scott Coffin. “What am I drinking? Microplastics impacts on human health.” *North Carolina Coastal Federation Virtual Microplastics Forum*. July, 2021. Virtual.

Scott Coffin. “Meeting the Challenge of Microplastic Management to Protect Human Health and the Environment.” *Renewable Natural Resources Foundation Round Table*. July, 2021. Virtual.

Scott Coffin. “Untangling microplastics toxicity with an interactive data exploration application.” *Water Data Science Symposium*. June, 2021. Virtual.

Scott Coffin. “Leveraging Big Data to Predict Microplastics Toxicity for Aquatic Organisms.” *Water Data Science Symposium*. June, 2021. Virtual.

Scott Coffin. “Key Ingredients to Effective Science Communication: Focus on Microplastics Science and Policy.” *Online Workshop on Microplastic Research. ETH Zurich*. June, 2021.

Scott Coffin. “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.

Scott Coffin. “California’s Regulatory Investigation of Microplastics in Drinking Water.” *Groundwater Resources Association of California*. March, 2021. Virtual.

Scott Coffin. “Implementation of Senate Bill 1422 - Microplastics in Drinking Water.” *California Assembly Environmental Safety And Toxic Materials Committee Information Hearing: “Microplastics in our Water and Environment: Understanding a Growing Pollution Source.”* February, 2021. Virtual.

## Scott Coffin, Ph.D.

Scott Coffin and Charles Wong. "Microplastics: Characterization, Identification, Monitoring, and Accreditation." *Forum on Environmental Accreditation*. January, 2021. Virtual.

Scott Coffin. "Science to Policy: California's Path Towards Microplastics Regulations: US Coastal Research Group Human & Ecosystem Health Workshop. January, 2021. Virtual.

Scott Coffin. "Microplastics in drinking water: California's path towards assessing risks and developing regulations." Society for Risk Analysis Annual Meeting. December, 2020. Virtual.

Scott Coffin. "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.

Scott Coffin. "California Division of Drinking Water Update on Microplastics." *American Water Works Association California-Nevada Section Annual Fall Conference*. 2020. Virtual.

Scott Coffin, Wesley Smith. "Human Exposure to Microplastics from Food and Water." *International Society of Exposure Science*. 2020. Virtual.

Scott Coffin. "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, CA.

Scott Coffin. "Microplastics Regulatory Efforts." *Forum on Environmental Accreditation*, 2020. Santa Ana, CA.

Scott Coffin, Shahla Farahnak. "California Water Board's Actions on Per-and Polyfluoroalkyl Substances (PFAS)." *Groundwater Resource Association*, 2019. Sacramento, CA.

Scott Coffin. "Plastic as a Vector for Pollutants in Estuarine and Marine Environments." *Impacts of Microplastics in the Urban Environment* (2019). Rutgers University, New Brunswick, NJ. *Expert Panelist*.

Scott Coffin. "Analytical and *in vitro* estimates of estrogenicity from simulated digests of plastic items." *Microplastics 2018*, Ascona, Switzerland. *Best Contribution Award*.

Scott Coffin. "Characterization of Estrogenic Compounds from Simulated Digests of Plastic Items." *Southern California Society of Toxicology and Chemistry* (2018). Los Angeles, CA. *Organizer*.

Scott Coffin. "Characterization of Estrogenic Compounds from Simulated Digests of Plastic Items." *Southern California Chapter of Society of Toxicology and Chemistry Conference*, April, 2018. Platform Presentation.

Scott Coffin. "Comparisons of biological activities of extracts from North Pacific Gyre Plastics with UV-treated and untreated materials using In Vitro and In Vivo Model." · *Pollutant Responses in Marine Organisms*, Matsuyama, Japan, June, 2017. Poster Presentation.

## Scott Coffin, Ph.D.

Scott Coffin. "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, CA. Platform Presentation.

Scott Coffin. "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*, San Juan Puerto Rico, November, 2015. Poster Presentation

Scott Coffin. "Understanding the Ecological effects of North Pacific Gyre Plastics using *In Vitro* Models." *Society of Environmental Toxicology and Chemistry*, Salt Lake City, November 1-5, 2015. Poster Presentation

## **PUBLICATIONS**

Grønnestad, Randi, Daniel Schlenk, Åse Krøkje, Veerle L.B. Jaspers, Bjørn Munro Jenssen, **Scott Coffin**, Luísa Becker Bertotto, Marissa Giroux, Jan L. Lyche, and 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*, November, 143745.  
<https://doi.org/10.1016/j.scitotenv.2020.143745>.

**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*. In Press.

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*, August, acs.est.0c02922.  
<https://doi.org/10.1021/acs.est.0c02922>.

Wang, Jie, **Scott Coffin**, Chengliang Sun, Daniel Schlenk, and Jay Gan. 2019. "Negligible Effects of Microplastics on Animal Fitness and HOC Bioaccumulation in Earthworm *Eisenia Fetida* in Soil." *Environmental Pollution* 249 (June): 776–84.  
<https://doi.org/10.1016/j.envpol.2019.03.102>.

**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>.

Wyer, Holly, Darrin Polhemus, Shelly Moore, Steve Weisberg, **Scott Coffin**, and Chelsea Rochman. 2020. "EXPRESS: Steps Scientists Can Take to Inform Aquatic Microplastics Management: A Perspective Informed by the California Experience." *Applied Spectroscopy*, July, 000370282094603. <https://doi.org/10.1177/0003702820946033>.

## Scott Coffin, Ph.D.

- Li, Shuying, Yao Jiang, Qianqian Sun, **Scott Coffin**, Lili Chen, Kun Qiao, Wenjun Gui, and Guonian Zhu. "Tebuconazole induced oxidative stress related hepatotoxicity in adult and larval zebrafish (*Danio rerio*).*"* *Chemosphere* 241 (2020): 125129.
- 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): 4588–99.  
<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): 452–62. <https://doi.org/10.1016/j.envpol.2018.12.011>.
- Wang, Jie, **Scott Coffin**, Chengliang Sun, Daniel Schlenk, and Jay Gan. 2019. "Negligible Effects of Microplastics on Animal Fitness and HOC Bioaccumulation in Earthworm *Eisenia Fetida* in Soil." *Environmental Pollution* 249 (June): 776–84.  
<https://doi.org/10.1016/j.envpol.2019.03.102>.
- Li, Shuying, Kun Qiao, Yao Jiang, Qiong Wu, **Scott Coffin**, Wenjun Gui, and 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, and Guonian Zhu. 2019. "Parental Exposure to Tebuconazole Causes Thyroid Endocrine Disruption in Zebrafish and Developmental Toxicity in Offspring." *Aquatic Toxicology* 211 (June): 116–23.  
<https://doi.org/10.1016/j.aquatox.2019.04.002>.
- 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): 942–54.  
<https://doi.org/10.1016/j.envint.2018.10.012>.
- Moreira, Lucas Buruaem, Gracieli Diamante, Marissa Giroux, **Scott Coffin**, Elvis Genbo Xu, Denis Moledo de Souza Abessa, and Daniel Schlenk. 2018. "Impacts of Salinity and Temperature on the Thyroidogenic Effects of the Biocide Diuron in *Menidia Beryllina*." *Environmental Science & Technology* 52 (5): 3146–55.
- Huang, Ying, Yiqing Liu, Minghao Kong, Elvis Genbo Xu, **Scott Coffin**, Daniel Schlenk, and Dionysios D Dionysiou. 2018. "Efficient Degradation of Cytotoxic Contaminants of Emerging Concern by UV/H<sub>2</sub>O<sub>2</sub>." *Environmental Science: Water Research & Technology* 4 (9): 1272–81.
- Huang, Ying, Minghao Kong, Danielle Westerman, Elvis Genbo Xu, **Scott Coffin**, Kristin H. Cochran, Yiqing Liu, Susan D. Richardson, Daniel Schlenk, and Dionysios D. Dionysiou. 2018. "Effects of HCO<sub>3</sub><sup>–</sup> on Degradation of Toxic Contaminants of Emerging Concern by UV/NO<sub>3</sub><sup>–</sup>." *Environmental Science & Technology* 52 (21): 12697–707.  
<https://doi.org/10.1021/acs.est.8b04383>.

## Scott Coffin, Ph.D.

Huang, Ying, Minghao Kong, Danielle Westerman, Elvis Genbo Xu, **Scott Coffin**, Kristin H. Cochran, Yiqing Liu, Susan D. Richardson, Daniel Schlenk, and Dionysios D. Dionysiou. 2018. "Effects of HCO<sub>3</sub><sup>-</sup> on Degradation of Toxic Contaminants of Emerging Concern by UV/NO<sub>3</sub><sup>-</sup>." *Environmental Science & Technology* 52 (21): 12697–707.  
<https://doi.org/10.1021/acs.est.8b04383>.

**Coffin, Scott**, Jay Gan, and Daniel Schlenk. 2017. "Comparisons of Field and Laboratory Estimates of Risk of DDTs from Contaminated Sediments to Humans That Consume Fish in Palos Verdes, California, USA." *Science of the Total Environment* 601: 1139–46.

### **ARTICLES AND TECHNICAL REPORTS**

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](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).

### **COMMUNITY SERVICE and SCIENCE COMMUNICATION**

#### **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.

#### **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.

## **Scott Coffin, Ph.D.**

### **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*, Virtual, August 2020.

### **Interviewee**

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

### **Guest Speaker**

Sacramento Science Distilled, Sacramento, CA, January 2020.

### **Guest Lecturer**

University of Redlands, Redlands, CA, November 2019.

### **Presenter**

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

### **Presenter**

*America Recycles Day at California EPA*, Sacramento, CA, November, 2019

### **Educational Documentary Producer**

"Getting to Know H2O", Riverside, CA, 2018-2019.

### **Presenter**

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

### **Presenter**

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

### **Organizer and Publicity Manager**

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

### **Test Writer**

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

### **Organizer**

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

### **Presenter**

"Environmental Health Day," Nature Center, Riverside, CA, 2016

## **Scott Coffin, Ph.D.**

### **Graduate Student Peer Mentor**

University of California, Riverside, Riverside, CA, 2016-2018

### **Career Speaker**

Amino Ralph Bunche Charter High, Los Angeles, CA, 2015

### **Presenter**

“Environmental Health Day”, Riverside, CA, 2014

### **Science Fair Judge**

St. Catherine of Alexandria, Riverside, CA, 2016

### **Test Writer, Proctor**

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

### **Presenter**

Annual Science Night, Stork Elementary School, Rancho Cucamonga, CA, 2016

## **PROFESSIONAL MEMBERSHIPS AND APPOINTMENTS**

*Review Editor.* Frontiers in Water and Human Health, May 2021 - current.

*Vice 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.* Microplastics Policy Advisory Committee; Ocean Science Trust. 2020.

*Student Representative.* Southern California Society of Toxicology and Chemistry. 2017-2019.

## **TRAININGS AND CERTIFICATES**

*ABT Narrative Training with Randy Olson.* August – September, 2021.

*Experiential Learning with MateRevolve & Call of the Sea.* San Francisco Bay. May, 2021.

*ArcGIS Training, University of California, Davis,* 2020

*Yoga Instructor,* 200-hour certification, Western Yoga College, 2018

*SCUBA certification,* Advanced Open Water, PADI, 2014

## **SPECIAL PROJECTS**

*Lead Developer.* The Plastisphere.

*Lead Developer.* Toxicity of Microplastics Explorer Application (ToMEx).



## **Scott Coffin, Ph.D.**

*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. *Shelter in Space.*

*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:** Fluent