

# Scott Coffin, Ph.D.

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## Employment

**Research Scientist III (Chemical Sciences)** September, 2019 – Present  
State Water Resources Control Board; Sacramento, CA

**Environmental Scientist (Range C)** January 2019 – September, 2019  
State Water Resources Control Board; Sacramento, CA

**Graduate Student Researcher** September 2014 – December 2018  
University of California, Riverside; Riverside, CA

**Paid Intern** January – June 2014  
United States Senate; Senator Mike Enzi (WY); Washington, D.C.

**International Outdoor Guide** Summers 2013, 2014  
Wilderness Adventures; Jackson, WY

## Education

**Ph.D. Environmental Toxicology** 2014 - December 2018  
University of California, Riverside; Riverside, CA  
National Science Foundation Integrated Graduate Education and Research  
Traineeship Fellow  
Chancellor's Distinguished Fellow

**B.S. Chemistry, Spanish Minor, Honors** August 2010- December 2013  
University of Wyoming; Laramie, WY  
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 to Spring 2010

## Skills and Expertise

**Policy/Regulations:** Lead technical staff on SB 1422: Microplastics in Drinking Water.

**Risk Assessment:** Human health and ecotoxicological stochastic risk assessments.

**Analytical Chemistry:** Gas/liquid chromatography, mass spectrometry, fluorescence.

**Bioassays:** *In vitro* bioanalytical tools and *in vivo* genetic and biochemical analysis

**Statistical Data Analysis:** Comfortable using Graphpad, MS Excel, Minitab, R.

**Communication:** Native English speaker, fluent in written and spoken Spanish.

**Reviewer:** Peer reviewer for over 10 journal publications.

## Selected Publications

1. **Coffin, S.**, Magnuson, J., Vliet, S., Volz, D., Schlenk, D. "Effects of short-term exposure to environmentally-relevant concentrations of benzo(a)pyrene-sorbed polystyrene to White seabass (*Atractoscion nobilis*). *Environmental Pollution* (2020) 263:114617.
2. **Coffin, S.**, Huang, G., Lee, I., Schlenk, D. "Fish and Seabird Gut Conditions Enhance Desorption of Estrogenic Chemicals from Commonly-Ingested Plastic Items." *Environmental science & technology* (2019) 53: 4588-4599.
3. **Coffin, S.**, Lee, I., Gan, J., Schlenk, D. Simulated digestion of polystyrene foam enhances desorption of diethylhexyl phthalate (DEHP) and *In vitro* estrogenic activity in a size-dependent manner. *Environmental pollution*, (2019); 246: 452-462.

4. **Coffin, S.**, Dudley, S., Taylor, A., Wolf, D., Wang, J., Lee, I., Schlenk, D. “Comparisons of Biological Activities of Extracts from North Pacific Gyre Plastics with UV-treated and Untreated Plastics using *In Vitro* and *in vivo* Models.” *Environment International* (2018); 121:942-954.
5. **Coffin, S.** Gan, J., Schlenk, D. “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* (2017); 601:1139-1146.
6. **Coffin, S.** “Plastic as a Vector for Pollutants in Estuarine and Marine Environments.” *Doctoral dissertation, University of California, Riverside* (2018).
7. Wang, J., **Coffin, S.**, Sun, C., Schlenk, D., Gan, J. Negligible effects of microplastics on animal fitness and HOC bioaccumulation in earthworm *Eisenia fetida* in soil. *Environmental Pollution* (2019) 249: 776-784.
8. Moreira, L.B., Diamante, G., Giroux, M., **Coffin, S.**, Xu, E.G., Moledo De Souza Abessa, D., Schlenk, D. “Impacts of Salinity and Temperature on the Thyroidogenic Effects of the Biocide Diuron in *Menidia beryllina*.” *Environmental Science and Technology* (2018); 52: 3146–3155.
9. Huang, Y., Liu, Y., **Coffin, S.**, Xu, G., Schlenk, D., Dionysiou, D. “Efficient degradation of cytotoxic contaminants of emerging concern by UV/H<sub>2</sub>O<sub>2</sub>.” *Environmental Science: Water Research & Technology* (2018); 4: 1272-1281.
10. Huang, Y., Kong, M., **Coffin, S.**, Cochran, K., Zhu, N., Schlenk, D., Richardson, S., Dionysiou, D. “Effects of HCO on Degradation of Toxic Contaminants of Emerging Concern by IV/NO.” *Environmental Science and Technology* (2018); 52(21):12697-707.

#### Selected Conference Presentations

- “Microplastics Regulatory Efforts.” *Forum on Environmental Accreditation* (2020). Newport Beach, CA. *Presenter*.
- “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*.
- “Analytical and *in vitro* estimates of estrogenicity from simulated digests of plastic items.” *Microplastics 2018*, Ascona, Switzerland. *Best Contribution Award*.
- “Characterization of Estrogenic Compounds from Simulated Digests of Plastic Items.” *Southern California Society of Toxicology and Chemistry* (2018). Los Angeles, CA. *Organizer*.

#### Selected Science Outreach Activities and Projects

- Producer.** *Getting to Know H<sub>2</sub>O*. Environmental documentary. Riverside, Ca. 2018-2019.
- Organizer and Presenter.** *Earth Day Festival*. University of Riverside, CA. April 2018.
- Organizer and Presenter.** *SoCal SETAC Earth Day Event*, Whittier CA. April 2018.
- Organizer and Board Member.** *SoCal SETAC Annual Meeting*, CA. 2018 & 2019.
- Presenter.** *Environmental Health Day*, Nature Center, Riverside, CA. April 2016.
- Graduate Student Peer Mentor.** University of California, Riverside CA. 2016-2018.

#### Honors, Awards and Certifications

- Eagle Scout Award*; Boy Scouts of America, 2008.
- Fellow*; NSF Integrated Graduate Education and Research Traineeship. 2018.
- Best Contribution*; Presentation at *Microplastics 2018*, Ascona, Switzerland.
- Yoga Instructor*; 200-hour certification, Western Yoga College, 2018.
- SCUBA certification*; Advanced Open Water, PADI, 2014.