

Dr. Victoria McGruer

Senior Research Technician

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Education

Ph.D., environmental toxicology, University of California, Riverside, 2021

B.S., environmental science and biology, Northeastern University, 2017

Professional Experience

Senior Research Technician, Southern California Coastal Water Research Project. Costa Mesa, CA. 2023-present

Postdoctoral Researcher, University of California, Riverside. Riverside, CA. 2021-2023

Graduate Student Researcher, University of California, Riverside. Riverside, CA. 2017-2021

Journal Articles

McGruer, V., G. Braun, D. Xin, B.I. Escher, E. Fassman-Beck, A.C. Mehinto. 2026. [Evaluating the Effectiveness of Street Sweeping for Reducing Toxicity of Urban Runoff](#). *ACS ES&T Water* 4:2301-2309.

McGruer, V., M. Gustavus, K.Z. Hess, H. Vaquero, K. Moody Wood, E. Israfil, J. Gonzalez-Estrella, V.M. Fulfer, S. Moore, W. Cowger. 2025. [Lost on the Pacific Crest Trail: a 4,270 km survey of wilderness waste distribution and characteristics](#). *Waste Management* 206:115063.

McGruer, V., A. Bhatia, J.T. Magnuson, D. Schlenk. 2023. Lipid profile altered in phenanthrene-exposed zebrafish embryos with implications for neurological development and early life nutritional status. *Environment & Health*

Magnuson, J.T., R.R. Leads, V. McGruer, L. Qian, P. Tanabe, A.P. Roberts, D. Schlenk. 2023. Transcriptomic profiling of miR-203a inhibitor and miR-34b-injected zebrafish (*Danio rerio*) validates oil-induced neurological, cardiovascular and eye toxicity response pathways. *Aquat Toxiol.*

Magnuson, J.T., N. Fuller, V. McGruer, K.E Huff Hartz, S. Acuna, G.W. Whitley, M.J. Lydy, D. Schlenk. 2023. Effect of temperature and dietary pesticide exposure on neuroendocrine and olfactory responses in juvenile Chinook salmon (*Oncorhynchus tshawytscha*). *Environ. Pollut.*

Fuller, N., J.T. Magnuson, K.E. Huff Hartz, G.W. Whitley, S. Acuna, V. McGruer, D. Schlenk, M.J. Lydy. 2022. Dietary exposure to environmentally relevant pesticide mixtures impairs swimming performance and lipid homeostatic gene expression in Juvenile Chinook salmon at elevated water temperatures. *Environ. Pollut.*

Magnuson, J.T., L. Qian, V. McGruer, V. Cheng, D.C. Volz, D. Schlenk. 2022. Relationship between miR-203a inhibition and oil-induced toxicity in early life stage zebrafish (*Danio rerio*). *Toxicol. Rep.*

Price, E.R., F. Bonatesta, V. McGruer, D. Schlenk, A.P. Roberts, E.M. Mager. 2022. Exposure of zebrafish larvae to water accommodated fractions of weathered crude oil alters steroid hormone concentrations with minimal effect on cholesterol. *Aquat Toxiol.*

Greer, J.B., J.T. Magnuson, V. McGruer, L. Qian, S. Dasgupta, D.C. Volz, D. Schlenk. 2021. miR133b microinjection during early development targets transcripts of cardiomyocyte ion channels and induces oil-like cardiotoxicity in zebrafish (*Danio rerio*) embryos. *Chem Res Toxicol.*

McGruer, V., A.J. Khursigara, J.T. Magnuson, A.J. Esbaugh, J.B. Greer, D. Schlenk. 2021. Exposure to Deepwater Horizon crude oil increases free cholesterol in larval red drum (*Sciaenops ocellatus*). *Aquat Toxiol.*

Ji, C., P. Tanabe, Q. Shi, L. Qian, V. McGruer, J. Magnuson, X. Wang, J. Gan, R.S. Gadepalli, J. Rimoldi, D. Schlenk. 2021. Stage-dependent enantioselective metabolism of bifenthrin in embryos of zebrafish (*Danio rerio*) and Japanese medaka (*Oryzias latipes*). *Environ Sci Technol.*

McGruer, V., P. Tanabe, S.M.F. Vliet, S. Dasgupta, L. Qian, D.C. Volz, D. Schlenk. 2021. Effects of phenanthrene exposure on cholesterol homeostasis and cardiotoxicity in zebrafish embryos. *Environ Toxicol Chem.*

Chen, Q., M.M. dos Santos, P. Tanabe, G.T. Harraka, J.T. Magnuson, V. McGruer, W. Qiu, H. Shi, S.A Snyder, D. Schlenk. 2020. Bioassay Guided Analysis coupled with Non-target Chemical Screening in Polyethylene Plastic Shopping Bag Fragments after Exposure to Simulated Gastric Juice of Fish. *J. Hazard. Mater.*

McGruer, V., C. Pasparakis, M. Grosell, J.D. Stieglitz, D.D. Benetti, J.B. Greer, D. Schlenk. 2019. Deepwater Horizon crude oil exposure alters cholesterol biosynthesis with implications for developmental cardiotoxicity in larval mahi-mahi (*Coryphaena hippurus*). *Comp. Biochem. Physiol. C. Toxicol. Pharmacol.* 220, 31-35.

Technical Reports

Thornton Hampton, L.M., V. McGruer, A.C. Mehinto, W. Cowger, R. McNeish, K.C. Schiff. 2026. Southern California Bight 2023 Regional Monitoring Program: Volume V. Trash and Marine Debris. Technical Report 1473. Southern California Coastal Water Research Project. Costa Mesa, CA.

Fassman-Beck, E., E. Tiernan, D. Xin, A.C. Mehinto, V. McGruer, S. Sauers. 2025. Development of a Method to Measure the Impacts of Street Sweeping on Wet Weather Runoff Water Quality. Technical Report 1411. Southern California Coastal Water Research Project. Costa Mesa, CA.

Mehinto, A.C., V. McGruer, E. Darin, K. Wong, D. Schlenk. 2024. Development and Standardization of Bioanalytical Screening Tools Part I - Final Report. Technical Report 1381.A. Southern California Coastal Water Research Project. Costa Mesa, CA.

Mehinto, A.C., V. McGruer, D. Schlenk. 2024. Development and Standardization of Bioanalytical Screening Tools Part II - Protocols for Laboratory and Data Analysis. Technical Report 1381.B. Southern California Coastal Water Research Project. Costa Mesa, CA.