

CURRICULUM VITAE

Eunha Hoh, PhD, MSES

Environmental Health Division

School of Public Health

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I. PROFESSIONAL APPOINTMENTS

- 8/2018- Division Head of Environmental Health, School of Public Health, San Diego State University, San Diego, CA
- 8/2017- Professor, Environmental Health Division, School of Public Health, San Diego State University, San Diego, CA
- 8/2012-8/2017 Associate Professor, Environmental Health Division, Graduate School of Public Health, San Diego State University, San Diego, CA
- 8/2014-8/2016 Division Head of Environmental Health, Graduate School of Public Health, San Diego State University, San Diego, CA
- 1/2009-8/2012 Assistant Professor, Environmental Health Division, Graduate School of Public Health, San Diego State University, San Diego, CA.
- 1/2006-12/2008 Postdoctoral Fellow/Research Chemist, United States Department of Agriculture, Agricultural Research Service (USDA ARS), Wyndmoor, PA. (Supervisor: Steven Lehotay)
- 1/2001-1/2006 Research Assistant, School of Public and Environmental Affairs, Indiana University, Bloomington, IN.
- 1/2001-5/2001 Teaching Assistant, School of Public and Environmental Affairs, Indiana University, Bloomington, IN.
- 2/1997-7/1999 Researcher, Samsung SDI, Suwon, Kyongki-Do, Republic of Korea.

II. ADDITIONAL APPOINTMENTS

- 2013-present Advisory Board Member of *Environmental Science and Technology Letters*
- 10/2012-present Adjunct Faculty, Chemistry, Oregon State University,
- 3/2013-present Adjunct Faculty, Chemistry and Biochemistry, San Diego State University
- 9/2018-present California Environmental Contaminant Biomonitoring Program Scientific Guidance Panel (appointed by Speaker of the Assembly)
- 7/2019-present California Ocean Protection Council's Science Advisory Team

III. ACADEMIC TRAINING

- Ph.D. Environmental Science: Indiana University, School of Public and Environmental Affairs, Bloomington, IN, 2006
Advisor: Distinguished Professor Ronald A. Hites.
Title of Dissertation: Investigation of Organochlorine and Organobromine Contaminants in the Atmosphere
- MSES. Environmental Science: Indiana University, School of Public and Environmental Affairs, Bloomington, IN, 2003

- M.S. Chemistry: Korea Advanced Institute of Science and Technology, Daejeon, Republic of Korea, 1997
Title of Thesis: Synthetic Studies on (-)-Allosamizoline
- B.S. Chemistry: Korea Advanced Institute of Science and Technology, Daejeon, Republic of Korea, 1995

IV. PROFESSIONAL GROWTH

A. Articles Published In Peer-Reviewed Journals

(* indicates student and postdoc co-author)

1. Matt, G.E.; Quintana, P.J.E.; Hoh, E.; Zakarian, J.M.; Dodder, N.G.; Record, R.A.; Hovell, M.F.; Mahabee-Gittens, E.M.; Padilla, S.; Markman, L.; Watanabe, K.; Novotny, T.E. “Remediating thirdhand smoke pollution in multiunit housing: temporary reductions and the challenges of persistent reservoirs”. *Nicotine & Tobacco Research*. In publication: ntaa151, <https://doi.org/10.1093/ntr/ntaa151>
2. Northrup, T.F.; Stotts, A.L.; Suchting, R.; Khan, A.M.; Green, C.; Klawans, M.R.; Quintana, P.J.E.; Hoh, E.; Hovell, M.F.; Matt, G.E. “Thirdhand smoke contamination and infant nicotine exposure in a neonatal intensive care unit: An observational study”. *Nicotine & Tobacco Research*, In publication, ntaa167, <https://doi.org/10.1093/ntr/ntaa167>
3. Quintana, P.J.E.; Lopez-Galvez, N.; Dodder, N.G.; Hoh, E.; Matt, G.E.; Zakarian, J.M.; Vyas, M.; Chu, L.; Akins, B.; Padilla, S.; Anderson, K.A.; Hovell, M.F. “Nicotine, Cotinine, and Tobacco-Specific Nitrosamines Measured in Children’s Silicone Wristbands in Relation to Secondhand Smoke and E-cigarette Vapor Exposure”. *Nicotine & Tobacco Research*. In publication: ntaa140, <https://doi.org/10.1093/ntr/ntaa140>
4. Kassem, N.O.F.; Peterson, L.A.; Liles, S.; Kassem, N.O.; Zaki, F.K.; Lui, K.-J.; Vevang, K.R.; Dodder, N.G.; Hoh, E.; Hovell, M.F. “Urinary metabolites of furan in waterpipe tobacco smokers compared to non-smokers in home settings in the US”. *Toxicology Letters*. 2020, 333, 202-210.
5. Matt, G.E.; Quintana, P.J.E.; Hoh, E.; Dodder, N.G.; Mahabee-Gittens, E.M.; Padilla, S.; Markman, L.; Watanabe, K. “Thirdhand Tobacco Smoke is a Likely Source of Lead and Cadmium in Settled House Dust”. *Journal of Trace Elements in Medicine and Biology*. 2021, 63, 126656.
6. Parada, H. Jr.; Benmarhnia, T.; Sun, X.A.; Tse, C.-K.; Engel, L.S.; Hoh, E.; Olshan, A.F.; Troester, M.A. A congener-specific and mixture analysis of plasma polychlorinated biphenyl (PCB) levels and incident breast cancer in the Carolina Breast Cancer Study. *International Journal of Hygiene and Environmental Health*. 2020, 228, 113522.
7. Matt, G.E.; Quintana, P.J.E.; Hoh, E.; Zakarian, J.M.; Dodder, N.G.; Record, R.A.; Hovell, M.F.; Mahabee-Gittens, E.M.; Padilla, S.; Markman, L.; Watanabe, K.; Novotny, T.E. “Persistent tobacco smoke residue in multiunit housing: Legacy of permissive indoor smoking policies and challenges in the implementation of smoking bans”. *Preventive Medicine Reports*. 2020, 18, 101088.
8. Xu, E.G.; Richardot, W.H.; Li, S.; Buruaem, L.; Wei, H.; Dodder, N.G.; Schick, S.F.; Novotny, T.; Schlenk, D.; Gersberg, R.M.; Hoh, E. “Assessing Toxicity and in Vistro Bioactivity of Smoked Cigarette Leachate Using Cell-Based Assays and Chemical

- Analysis”. *Chemical Research in Toxicology*. 2019, 32, 1670-1679.
9. Stotts, A.L.; Northrup, T.F.; Green, C.; Suchting, R.; Hovell, M.F.; Khan, A.; Villarreal, Y.R.; Schmitz, J.M.; Velasquez, M.M.; Hammond, S.K.; Hoh, E.; Tyson, J. “Reducing Tobacco Smoke Exposure in High-Risk Infants: A Randomized, Controlled Trial”. *The Journal of Pediatrics*. 2020;218:35-41. E1.
doi: <https://doi.org/10.1016/j.jpeds.2019.10.070>
 10. Matt, G.E.; Mahabee-Gittens, E.M.; Zakarian, J.M.; Quintana, P.J.E.; Hoh, E.; Myers, M. “Nicotine in thirdhand smoke residue predicts relapse from smoking cessation: A pilot study”. *Addictive Behaviors*. 2019, 98, 106041.
doi:10.1016/j.addbeh.2019.106041
 11. Tran, C.D.*; Dodder, N.G.; Quintana, P.J.E.; Watanabe, K.; Kim, J.H.; Hovell, M.F.; Chambers, C.D.; Hoh, E.: “Organic contaminants in human breast milk identified by non-targeted analysis”. *Chemosphere*. 2020, 238, 124677-124683.
 12. Trego, M.L.*; Hoh, E.; Whitehead, A.; Keller, N.M.; Lauf, M.; Datuin, D.O.; Lewison, R.L. “Contaminant Exposure Linked to Cellular and Endocrine Biomarkers in Southern California Bottlenose Dolphins”. *Environmental Science and Technology*. 2019, 53, 3811-3822.
 13. Mahabee-Gittens, E.M.; Matt, G.E.; Hoh, E.; Quintana, P.J.E.; Stone, L.; Gerarci, M.A.; Wullenweber, C.A.; Koutsanadis, G.N.; Ruwe, A.G.; Meyers, G.T.; Zakrajsek, M.A.; Witry, J.K.; Merianos, A.L. “Contribution of Thirdhand Smoke to Overall Tobacco Smoke Exposure in Pediatric Patients: Study Protocol”. *BMC Public Health*. 2019, 19, 1-9.
 14. Northrup, T.F.; Stotts, A.L.; Suchting, R.; Khan, A.; Green, C.; Quintana, P.J.E.; Hoh, E.; Hovell, M.F.; Matt, G.E. *In Press*. “Medical staff contributions to thirdhand smoke contamination in a neonatal intensive care unit”. *Tobacco Induced Diseases*. 2019, 17, 37. doi:10.18332/tid/106116.
 15. Mahabee-Gittens, E.M.; Merianose, A.L.; Hoh, E.; Quintana, P.J.E.; Matt, G.E. “Nicotine on Children’s Hands: Limited Protection of Smoking Bans and Initial Clinical Findings”. *Tobacco Use Insights*. 2019, 12, 1-6.
 16. Sapozhnikova, Y.; Hoh, E. “Suspect Screening of Chemicals in Food Packaging Plastic Film by Comprehensive Two-Dimensional Gas Chromatography Coupled to Time-of-Flight Mass Spectrometry. *LCGC* January 2019.
 17. Cossaboon J.M.*; Hoh, E.; Chivers, S.J.; Weller, D.W.; Danil, K.; Maruya, K.A.; Dodder, N.G. “Apex Marine Predators and Ocean Health: Proactive Screening of Halogenated Organic Contaminants reveals Ecosystem Indicator Species”. *Chemosphere*. 2019, 221, 656-664.
 18. Manzano, C.A.; Dodder, N.G.; Hoh, E.; Morales, R. “Patterns of Personal Exposure to Urban Pollutants Using Personal Passive Samplers and GC×GC/TOF-MS”. *Environmental Science and Technology*. 2019, 53, 614-624.
 19. Quintana, P.; Hoh, E.; Dodder, N.; Matt, G.; Zakarian, J.; Anderson, K.; Akins, B*.; Chu, L.; Hovell, M. “Nicotine Levels in Silicone Wristband Samplers Worn by Children Exposed to Secondhand Smoke and Electronic Cigarette Vapor are highly correlated with Child’s Urinary Cotinine”. *Journal of Exposure Science and Environmental Epidemiology*. 2019, 29, 733-741.
 20. Matt, G.; Hoh, E.; Quintana, P.J.E.; Zakarian J. M.; Arceo, J*. “Cotton Pillows: A Novel Field Method for Assessment of Thirdhand Smoke Pollution, *Environmental Research*. 2018, 168, 206-210. doi: 10.1016/j.envres.2018.09.025

21. Trego, M.*; Hoh, E.; Keller, N.; Meszaros, S.; Robbins, M.; Dodder, N.; Whitehead, A.; Lewison, R. “Comprehensive screening links halogenated organic compounds with testosterone levels in male Delphinids from the southern California Bight”, *Environmental Science and Technology*. 2018, 52, 3101-3109.
22. Titaley, I.A.*; Ogba, O.M.; Chibwe, L.; Hoh, E.; Cheong, P.H.Y.; Massey Simonich, S.L. “Automating Data Analysis for Two-Dimensional Gas Chromatography/Time-of-Flight Mass Spectrometry Non-Targeted Analysis of Comparative Samples”. *Journal of Chromatography A* 2018, 1541, 57-62. doi.org/10.1016/j.chroma.2018.02.016
23. Neira C.; Vales M.*; Mendoza G.; Hoh E.; Levin L.A. “Polychlorinated Biphenyls (PCBs) in Recreational Marina Sediments of San Diego Bay, Southern California”. *Marine Pollution* 2018, 126, 204-214.
24. Matt G.E.; Quintana P.J.E.; Hoh E.; Zakarian J.M.; Chowdhury Z.; Hovell M.F.; Jacob P.; Watanabe K.; Theweney T.S.; Flores V.; Nguyen A.; Dhaliwal N.; Hayward G. “A Casino Goes Smoke-Free: A Longitudinal Study of Secondhand and Thirdhand Smoke Pollution and Exposure”. *Tobacco Control* 2018 Feb 8. pii: tobaccocontrol-2017-054052. doi: 10.1136/tobaccocontrol-2017-054052
25. Hong M.Y.; Hoh, E.; Kang, B.; Dehamer, R.; Kim, J.Y.; Lumibao, J. “Effects of Contaminated Fish Oil on Aberrant Crypt Foci Formulation, Colonic Cell Kinetics and Gene Expression Involved in Inflammation and DNA Repair Enzyme”. *Journal of Nutrition* 2017, 147, 1524-1530. doi: 10.3945/jn.117.251082
26. Melstrom, P; Koszowski, B; Thanner, M.H.; Hoh, E.; King, B.; Bunnell, R. et al. “Measuring PM2.5, Ultrafine Particles, Air Nicotine and Wipe Samples Following the Use of Electronic Cigarettes” *Nicotine & Tobacco Research*. 2017; doi:10.1093/ntr/ntx058
27. Chibwe, L.*; Davie-Martin, C.L.; Aitken, M.D.; Hoh, E.; Massey Simonich, S.L. “Identification of polar transformation products and high molecular weight polycyclic aromatic hydrocarbons (PAHs) in contaminated soil following bioremediation” *Science of the Total Environment* 2017, 599–600, 1099–1107. doi:10.1016/j.scitotenv.2017.04.190
28. Alonso, M.B.*; Maruya, K.A.; Dodder, N.G.; Brito, J.L.; Azevedo, A.; Santos-Neto, E.; Torres, J.P.M.; Malm, O.; Hoh, E. “A Comprehensive Non-Targeted Screening of Halogenated Organic Compounds in Bottlenose Dolphins from Brazil”. *Environmental Science and Technology* 2017, 51, 1176–1185. doi:10.1021/acs.est.6b04186
29. Chibwe, L.*; Titaley, I.A.; Hoh, E.; Simonich S.L.M. “Integrated Framework for Identifying Toxic Transformation Products in Complex Environmental Mixtures”. *Environmental Science and Technology Letters* 2017, 4, 32-43. doi: 10.1021/acs.estlett.6b00455
30. Neira, C.; Cossaboon, J.*; Mendoza, G.; Hoh, E.; Levin, L.A. “Occurrence and distribution of polycyclic aromatic hydrocarbons in surface sediments of San Diego Bay marinas”, *Marine Pollution Bulletin* 2017, 114, 466-479. doi: 10.1016/j.marpolbul.2016.10.009
31. Mackintosh, S.A.*; Dodder, N.G.; Shaul, N.J.; Aluwihare, L.I.; Maruya, K.A.; Chivers, S.J.; Danil K.D.; Weller, D.W.; Hoh, E. “Newly Identified DDT-Related Compounds Accumulating in Southern California Bottlenose Dolphins”, *Environmental Science and Technology* 2016, 50, 12129-12137. doi: 10.1021/acs.est.6b03150
32. Matt, G.E.; Quintana, P.J.; Zakarian, J.M.; Hoh, E.; Hovell, M.F.; Mahabee-Gittens,

- M.; Watanabe, K.; Datuin, K.; Vue, C.; Chatfield, D.A. “When smokers quit: exposure to nicotine and carcinogens persists from thirdhand smoke pollution” *Tobacco Control*. 2016 Sep 21. pii: tobaccocontrol-2016-053119. doi: 10.1136/tobaccocontrol-2016-053119.
33. Northrup, T.F.; Jacob, P 3rd.; Benowitz, N.L.; Hoh, E.; Quintana, P.J.E.; Hovell, M.F. et al. “Thirdhand Smoke: State of the Science and a Call for Policy Expansion” *Public Health Reports* 2016, *131*, 233–238. doi: 10.1177/003335491613100206
 34. Maldonado A, Lavado R, Knuston S, Slattery M, Ankisetty S, Goldstone JV, Hoh E. et al. Biochemical Mechanisms for Geographical Adaptations to Novel Toxin Exposures in Butterflyfish. *PLoS One*. 2016;11: e0154208. doi:10.1371/journal.pone.0154208
 35. Northrup TF, Khan AM, Jacob P 3rd, Benowitz NL, Hoh E., Hovell MF, et al. Thirdhand smoke contamination in hospital settings: assessing exposure risk for vulnerable paediatric patients. *Tobacco Control* 2015; doi:10.1136/tobaccocontrol-2015-052506
 36. Millow, C.J.*; Mackintosh, S.A.*; Lewsion, R.L.; Dodder, N.G.; Hoh, E. “Identifying Bioaccumulative Halogenated Organic Compounds Using a Nontargeted Analytical Approach: Seabirds as Sentinels”, *PLoS ONE* 2015, *10*(5): e0127205. doi:10.1371/journal.pone.0127205
 37. Hong, M.Y.; Lumibao, J.; Mistry, P.; Saleh, R.*; Hoh, E. “Fish Oil Contaminated with Persistent Organic Pollutants Reduce Antioxidant Capacity and Induce Oxidative Stress without Affecting its Capacity to Lower Lipid Concentrations and Systemic Inflammation in Rats”, *Journal of Nutrition* 2015, *145*, 939-945. doi: 10.3945/jn.114.206607. doi:10.3945/jn.114.206607.
 38. Shaul, N.J.*; Dodder, N.G.; Aluwihare, L.I.; Mackintosh*, S.A.; Maruya, K.A.; Chivers, S.J.; Danil, K.; Weller, D.W.; Hoh, E. “Nontargeted Biomonitoring of Halogenated Organic Compounds in Two Ecotypes of Bottlenose Dolphins (*Tursiops truncatus*) from the Southern California Bight”, *Environmental Science and Technology* 2015, *49*, 1328-1338. doi: 10.1021/es505156q
 39. Matt, G.E.; Quintana, P.J.; Fortmann, A.L.; Zakarian, J.M.; Vanessa, G.; Chatfield, D.A.; Hoh, E.; Hovell, M.F. “Thirdhand smoke and exposure in California hotels: non-smoking rooms fail to protect non-smoking hotel guests from tobacco smoke exposure”, *Tobacco Control* 2014, *23*, 264–272. doi:10.1136/tobaccocontrol-2012-050824
 40. Rochman, C.M.*; Hoh, E.; Kurobe, T.; Teh, S. “Plastic Ingested by Fish Transfers Contaminants and Induces Hepatic Stress”, *Scientific Reports* 2013, *3*, 3263. doi:10.1038/srep03263
 41. Rochman, C.M.*; Manzano, C.*; Hentschel, B.T.; Simonich, S.L.M.; Hoh, E. “Polystyrene Plastic: A Source and Sink for Polycyclic Aromatic Hydrocarbons in the Marine Environment” *Environmental Science and Technology* 2013, *47*, 13976-13984. doi:10.1021/es403605f
 42. Quintana, P.J.E.; Matt, G.E.; Chatfield, D.; Zakarian, J.M.; Fortmann, A.L.; Hoh, E. “Wipe Sampling for Nicotine as a Marker of Thirdhand Tobacco Smoke Contamination on Surfaces in Homes, Cars, and Hotels” *Nicotine & Tobacco Research* 2013; doi: 10.1093/ntr/ntt014
 43. Ngo, H.L.; Dunn, R.O.; Hoh, E. “C18-Unsaturated branched-chain fatty acid isomers: characterization and physical properties” *European Journal of Lipid Science and Technology* 2013, *115*, 676-683. doi:10.1002/ejlt.201200323

44. Rochman, C.M.*; Browne M.A.; Halpern, B.S.; Hentschel, B.T.; Hoh, E.; Karapanagioti, H.K.; Rios, L.M.; Takada, H.; The, S.; Thompson, R.C. "Closing the loop: Repackaging plastic debris as a hazardous substance" *Nature* 2013, *494*, 169-171. doi:10.1038/494169a
45. Rochman, C.M.*; Hoh, E.; Hentschel, B.T.; Kaye, S. "Long-term field measurement of sorption of organic contaminants to five types of plastic pellets: Implications for plastic marine debris" *Environmental Science and Technology* 2013, *47*, 1646-4654.
46. Manzano, C.*; Hoh, E.; Staci, M.S. "Quantification of Complex Polycyclic Aromatic Hydrocarbon Mixtures Using Novel Column Combinations in GC×GC/ToF-MS" *Journal of Chromatography A* 2013, *1307*, 172-179. doi: 0.1016/j.chroma.2013.07.093.
47. Matt, G.E.; Fortmann, A.L.; Quintana, P.J.; Zakarian, J.M.; Romero, R.A.; Chatfield, D.A.; Hoh, E.; Hovell, M.F. "Toward Smoke-Free Rental Cars: An Evaluation of Voluntary Smoking Restrictions in California" *Tobacco Control* 2013, *22*, 201-207. doi:10.1136/tobaccocontrol-2011-050231
48. Hoh, E.; Dodder, N. G.; Lehotay, S. J.; Pangallo, K. C.; Reddy, C. M.; Maruya, K. A. "A non-targeted GC×GC/TOF-MS method and software for inventorying persistent and bioaccumulative contaminants in marine environments" *Environmental Science and Technology* 2012, *46*, 8001-8008.
49. Manzano, C.*; Hoh, E.; Staci, M.S. "Improved Separation of Complex Polycyclic Aromatic Hydrocarbon Mixtures Using Novel Column Combinations in GC×GC/ToF-MS" *Environmental Science and Technology* 2012, *46*, 7677-7684.
50. Hoh, E.; Hunt, R. N.*; Quintana, P. J. E.; Zakarian, J. M.; Chatfield, D. A.; Wittry, B. C.; Rodriguez, E.; Matt, G. E. "Environmental Tobacco Smoke as a Source of Polycyclic Aromatic Hydrocarbons in Settled Household Dust" *Environmental Science and Technology* 2012, *46*, 4174-4183.
51. Van, A.*; Rochman, C. M.*; Flores, E. M.*; Hill, K. L.*; Vargas, E.*; Vargas, S. A.*; Hoh, E. "Persistent Organic Pollutants in Plastic Marine Debris Found on Beaches in San Diego, California" *Chemosphere* 2012, *86*, 258-263.
52. Ngo, H.L.; Hoh, E.; Foglia, T.A.; Lin, W. "Improved Synthesis and Characterization of Saturated Branched-Chain Fatty Acid" *European Journal of Lipid Science and Technology*. 2012,*114*, 213-221
53. Matt, G.E.; Quintana, P.J.E.; Zakarian, J.M.; Fortmann, A.L.; Chatfield, D.A.; Hoh, E.; Uribe, A.M.; Hovell, M.F. "When Smokers Move Out and Nonsmokers Move In: Residential Thirdhand Smoke Pollution and Exposure" *Tobacco Control*.2011, *20*, e1.
54. Lehotay, S.J.; Son, K.A.; Kwon, H.; Koesukwiwat, U.; Fu, W.; Mastovska, K.; Hoh, E.; Leepipatpiboon, N. "Comparison of QuEChERS Sample Preparation Methods for the Analysis of Pesticide Residues in Fruits and Vegetables" *Journal of Chromatography A*. 2010, *1217*, 2548-2560.
55. Hoh, E.; Lehotay, S.J.; Pangallo, J.C.; Mastovska, K.; Ngo, H.L.; Reddy, C.M.; Vetter, W. "Simultaneous Quantitation of Multiple Classes of Organohalogen Compounds in Fish Oils with Direct Sample Introduction Comprehensive Two-Dimensional Gas Chromatography and Time-of-Flight Mass Spectrometry", *Journal of Agricultural and Food Chemistry*, 2009, *57*, 2653-2660.
56. Hoh, E.; Lehotay, S.J.; Mastovska, K.; Ngo, H.L.; Vetter, W.; Pangallo, J.C.; Reddy, C.M. "Capabilities of Direct Sample Introduction-Comprehensive Two-Dimensional Gas Chromatography-Time-of-Flight Mass Spectrometry to Analyze Organic Chemicals of Interest in Fish Oils" *Environmental Science and Technology*, 2009, *57*,

2653-2660.

57. Hoh, E.; Lehotay, S.J.; Mastovska, K.; Huwe, J.K. "Evaluation of automated direct sample introduction with comprehensive two-dimensional gas chromatography/time-of-flight mass spectrometry for the screening analysis of dioxins in fish oil" *Journal of Chromatography A*, 2008, 1201, 69-77.
58. Hoh, E.; Mastovska, K. "Large Volume Injection Techniques in Capillary Gas Chromatography" *Journal of Chromatography A*, 2008, 1186, 2-15.
59. Hoh, E.; Mastovska, K.; Lehotay, S.J. "Optimization of Separation and Detection Conditions for GC×GC-TOF analysis of Polychlorinated dibenzo-*p*-dioxins and dibenzofurans" *Journal of Chromatography A*, 2007, 1145, 210-221.
60. Hoh, E.; Zhu, L.Y.; Hites, R.A. "Dechlorane Plus, a Chlorinated Flame Retardant, in the Great Lakes" *Environmental Science and Technology*, 2006, 40, 1184-1189.
61. Hoh, E.; Hites, R.A. "Brominated Flame Retardants in the Atmosphere of the Eastern United States" *Environmental Science and Technology*, 2005, 39, 7794-7802.
62. Hoh, E.; Zhu, L.Y.; Hites, R.A. "Novel Flame Retardants, 1,2-Bis(2,4,6-tribromophenoxy)ethane and 2,3,4,5,6-Pentabromoethylbenzene, in United States' Environmental Samples" *Environmental Science and Technology*, 2005, 39, 2472-2477.
63. Hoh, E.; Hites, R.A. "Sources of Toxaphene and Other Organochlorine Pesticides in North America As Determined By Air Measurements and Potential Source Contribution Function Analysis" *Environmental Science and Technology*, 2004, 38, 4187-4194.

C. Presentations in Professional Conferences As 1st Author/Presenter (Refereed)

1. May 2019 – "Comprehensive Organic Contaminant Assessment: Nontargeted Analysis" at SoCAL annual meeting of Society of Environmental Toxicology and Chemistry, San Diego, CA.
2. Feb 2019- "Determination of leachable organic compounds in smoked cigarettes and their bioaccumulation potentials in the marine mussel, *Mytilus galloprovincialis*" at Society for Research on Nicotine and Tobacco, San Francisco, CA.
3. November 2018 – "Dietary Histroy and Persistent Organic Pollutants in San Diego Mothers' Breast Milk" at American Public Health Association, San Diego, CA.
4. January 2018 – "Non-Targeted Analysis to Characterize Trace Organics in Reverse Osmosis and UV/AOP Product Waters of Potable Reuse Facility" at American Water Works Association International Symposium Potable Reuse, Austin, Texas.
5. April 2017 – "Persistent Organic Pollutants in Breastmilk and Dietary History" at Children's Environmental Health Network, Arlington, Virginia
6. May 2016 – "An Analytical Framework for the Discovery of Bio-accumulative Organic Compounds" (Invited Keynote Speaker) at first International Non-Target Analysis Workshop, Ascona, Switzerland
7. August 2015 – "Non-targeted Biomonitoring of Halogenated Organic Compounds in Marine Species" at EPA Non-Targeted Analysis Workshop (Invited Keynote Speaker)
8. October, 2015 – "PAHs and related toxic compounds in THS contaminated house dust", Henderson, Nevada
9. September 2014 – Oral "Halogenated Natural Products Identified in Two Ecotypes of Southern California Bottlenose Dolphins: a Nontargeted Analytical Approach and Profile Comparison" Presented at the 34th International Symposium on Halogenated Persistent Organic Pollutants, Madrid, Spain.

10. May 2013 – Oral “Simultaneous Analysis for Complex PAH Mixtures Using Novel Column Combinations in GC×GC/TOF-MS” Presented at the ISCC 10th GC×GC Symposium, Palm Spring, CA
11. November 2012 – Oral “Comparing Polycyclic Aromatic Hydrocarbon (PAH) Profiles in Polystyrene Foam Before and After Deployment in San Diego, CA” Presented at the SETAC North America 33rd Annual Meeting, Long Beach, CA
12. November 2012 – Oral “A Non-Targeted GC×GC/TOF-MS method, data analysis tools, and data reporting system for the advancement of environmental monitoring” Presented at the SETAC North America 33rd Annual Meeting, Long Beach, CA
13. June 2012 – Oral “Organic Chemicals Found in Settled Household Dust Collected in San Diego County by Non-targeted Analysis” Presented at the Teratology Society’s 52nd Annual Meeting in Baltimore, Maryland
14. April 2012 – Oral “The Capabilities of GC×GC/ToF-MS and Its Application Towards Challenging Environmental Problems” Presented at Southern California Regional Chapter of the Society of Environmental Toxicology and Chemistry, Costa Mesa, CA
15. Nov 2010 – Oral. “Occurrence of Small Plastic Debris in San Diego Beaches and Their POP Content” Presented at 31st SETAC Annual Meeting at Portland, OR.
16. March 2010 – Poster. “Untargeted analysis of organic contaminants in dolphin blubber using DSI-GC×GC/TOF-MS” Presented at ACS Spring 2010 National Meeting & Exposition at San Francisco, CA
17. November 2009 – Poster. “Untargeted analysis of marine mammal exposure to multiple classes of man-made and naturally occurring halogenated organic chemicals” Presented at 30th SETAC Annual Meeting at New Orleans, LA.
18. November 2009 – Poster. “Analysis of untargeted organic contaminants in dietary fish oils using DSI-GC×GC/TOF-MS” Presented at 2009 Symposium on Food Systems & Public Health at San Diego, CA.
19. November 2008 – Oral. “Targeted/untargeted screening analysis of organic contaminants in cod liver oil using GC×GC/TOF-MS with direct sample introduction (DSI)” Presented at SETAC North America 29th Annual Meeting, Tampa, FL.
20. August 2007 – Oral. “Non-regulated Flame Retardants in Environment and their Sources” Presented at UKC2007, Reston, VA.
21. June 2007 – Poster. “Optimization of GC×GC-TOF MS with Automated Direct Sample Introduction for Dioxin Analysis” Presented at 55th ASMS Conference on Mass Spectrometry and Allied Topics, Indianapolis, IN.
22. November 2006 – Poster. “Optimization of GC×GC-TOF MS and DSI approach for Dioxin Analysis.” Presented at the Eastern Analytical Symposium & Exposition, Somerset, NJ.
23. October 2005 – Oral. “Dechlorane Plus in Great Lakes” Presented at the 28th Midwest Environmental Chemistry Workshop, Evanston, IL.
24. May 2005 – Oral. “Atmospheric Brominated Flame Retardants in Lake Michigan.” Presented at the 48th Annual Conference on Great Lakes Research (IAGLR) Meeting, Ann Arbor, MI.
25. November 2004 – Poster. “Behavior of Polybrominated Diphenyl Ethers in the Atmosphere of the U.S.” Presented at the 25th SETAC Annual Meeting, Portland, OR.

D. Invited Talks

1. November 2019 – “Non-targeted Screening of Marine Sentinel Species: Newly Identified Persistent Pollutants” at Western University One Health Symposium, Ramona, CA.
2. March 2019 – “Non-targeted Screening of Marine Sentinel Species and Drinking Water: Newly Identified Persistent Pollutants” at California Biomonitoring Science Guidance Panel Meeting, Sacramento, CA.
3. March 2018 – “Plastic Debris in Marine Environment” at Meeting of the Board on Chemical Science and Technology: Marine Plastic Debris Scoping SessionL Chemical Aspects, Washington, DC.
4. Oct 2018 – “Comprehensive Organic Contaminant Assessment: Nontargeted Analysis” at Division of Environmental Health, Keck School of Medicine, University of Southern California.
5. November 2017 – “State of Science: Environmental Tobacco” at UC NRS and 2018 TRDRP Workshop at UCSB.
6. May 2016 – “An Analytical Framework for the Discovery of Bio-accumulative Organic Compounds” (Invited Keynote Speaker) at first International Non-Target Analysis Workshop, Ascona, Switzerland
7. January, 2016 – “Ocean and Freshwater Plastic Pollution” at the California Legislative Latino Caucus and Monterey Bay Aquarium for a Science-Policy Briefing, Sacramento, California.
8. August 2015 – “Non-targeted Biomonitoring of Halogenated Organic Compounds in Marine Species” at EPA Non-Targeted Analysis Workshop (Invited Keynote Speaker), Raleigh, North Carolina
9. November 2014 – “Growing Concern in Chemical Contaminants & Human Health” at San Diego WIC Program
10. October 2014 – “Chemical Contaminants & Human Health” at 2014 Clinical Research Workshop by US Navy Marine Mammal Program and National Marine Mammal Foundation.
11. March 2014 – “Diversity of Persistent Bioaccumulative Halogenated Organic Compounds in Southern California Bight” at Ocean and Human Health (OHH) Grantee Conference SIO Forum
12. January 2014 – “GC×GC/TOF-MS Nontargeted Analysis and Its Application Towards Challenging Environmental Problems”, Environmental Science and Environmental Toxicology Programs at University of California Riverside
13. December 2012 – “A non-targeted GC×GC/TOF-MS method, data analysis tools, and data reporting system for the advancement of environmental monitoring” Oregon State University
14. November 2012 – “GC×GC/TOF-MS Nontargeted Analysis and its Application Towards Challenging Environmental Problems” University of California at Davis
15. Oct 2011 – “Application of Non-Targeted Analysis in Chemical Food Safety” Presented at Wiley Award Symposium, 125th AOAC Annual Meeting & Exposition at New Orleans, LA.
16. Nov 2010 – “Occurrence of Small Plastic Debris in San Diego Beaches and Their POP Content and Toxicity Assessment” Presented at Second Research Workshop on Microplastic Debris, Tacoma, WA.
17. June 2010 – “Potential benefits of an untargeted analytical approach for environmental health studies” at Korean-American Women in Science and

- Engineering 4th West Coast Symposium at U.S. FDA, Irvine, CA.
18. March 2010 – “Untargeted analysis of organic chemicals of interest in environmental samples using GC×GC-TOF mass spectrometry” at Environmental Chemistry Laboratory, California Department of Toxic Substance Control, Berkeley, CA.
 19. March 2010 – “Potential benefits of an untargeted analytical approach for environmental health studies” at California Department of Public Health, Richmond, CA.
 20. December 2007 – “Flame retardants in environment and their sources” at Korea Advanced Institute of Science and Technology”, Daejeon, Korea.
 21. December 2007 – “Flame retardants in environment and their sources” at Pohang University of Science and Technology, Pohang, Korea.
 22. February 2007 – Poster. “Optimization of GC×GC-TOF MS and DSI approach for Dioxin Analysis.” Presented at ARS-FSIS Food Safety Research Planning Meeting, National Conservation Training Center, Shepherdstown, WV
 23. March 2005 – Oral. “Brominated Flame Retardants in the Atmosphere of the U.S.” Presented at the Environmental Science and Policy Seminar Series, Indiana University

E. Funded Research Grants (chronological order)

1. Project Title: Smoking Policies and Secondhand Smoke in Rental Cars
 Source of Support: TRDRP
 Award Amount: \$609,853
 Period Covered: 07/01/06-06/30/09
 Location: San Diego State University
 Role: Co-I
2. Project Title: Fast and Cost Effective Analytical Method Development: Untargeted Analytical Method for Simultaneous Analysis of Multiple Classes of Toxic Organic Chemicals in Breast Milk and Dust (LOI3-RT-01-G)
 Source of Support: NIH, National Children Study
 Award Amount: \$108,430
 Period Covered: 09/28/2010 – 09/27/2011
 Location: San Diego State University
 Role: PI
3. Project Title: Untargeted analysis using GC×GC/TOF-MS for a thorough investigation of persistent and bioaccumulative chemicals in Pacific marine species
 Source of Support: California State University Program for Education and Research in Biotechnology (CSUPERB)
 Award Amount: \$15,000
 Period Covered: 06/01/11-12/31/12
 Location: San Diego State University
 Role: PI
4. Project Title: Thirdhand Smoke Pollution and Exposure in Ex-Smokers’ Homes
 Source of Support: Tobacco Related Disease Research Program (TRDRP)
 Award Amount: \$770,378
 Period Covered: 07/01/10-6/30/13
 Location: San Diego State University

- Role: Co-I
5. Project Title: Untargeted Analytical Approach for Screening Mixtures of Toxic Chemicals in House Dust
Source of Support: SDSU UGP
Award Amount: \$9,957
Period Covered: 01/15/10-6/30/11
Location: San Diego State University
Role: PI
 6. Project Title: Identification of Anthropogenic and Naturally Occurring Organic Compounds in California Sea Turtles and Dolphins
Source of Support: SDSU UGP
Award Amount: \$9,994
Period Covered: 01/15/11-6/30/12
Location: San Diego State University
Role: PI
 7. Project Title: A High-Throughput Method Development Using Dispersive SPE for Screening Mixture of Toxicants in Breast Milk
Source of Support: SDSU UGP
Award Amount: \$8,813
Period Covered: 01/15/12-6/30/13
Location: San Diego State University
Role: PI
 8. Project Title: Certifying Smoke-Free Used Cars: Effects on Value and Consumer Behavior (TRDRP)
Source of Support: Tobacco Related Disease Research Program (TRDRP)
Award Amount: \$687,545
Period Covered: 08/01/12-07/31/15
Location: San Diego State University
Role: Co-I
 9. Proposal Title: Desert Tortoise Contaminant Testing and Analysis
Source of Support: Ironwood Consulting, Inc.
Award Amount: \$ 25,000
Period Covered: 10/01/2012 – 06/30/2014
Location: San Diego State University
Role: PI
 10. Proposal Title: Subaward from the SIO center grant “Scripps Center for Oceans and Human Health advancing the biology and chemistry of marine contaminants of emerging concern”.
Source of Support: NIH NIEHS/NSF
Award Amount: \$ 844,564 (SDSU portion)
Period Covered: 09/01/2012 – 07/31/2017
Location: San Diego State University
Role: Site PI (Project leader of Project 3 in the center grant)
 11. Proposal Title: Subcontract from the UCSD center grant “Superfund – Detection and Models of Toxicant Exposure
Source of Support: NIH/NIEHS
Award Amount: \$12,000 (SDSU portion)
Period Covered: 10/1/2012-3/31/2013

- Role: Site PI
12. Proposal Title: Subaward from the OSU center grant “PAHs: New Technologies and Emerging Health Risks”.
Source of Support: NIH/NIEHS
Award Amount: \$ 45,702 (SDSU portion)
Period Covered: 02/01/2013 – 01/31/2017
Location: San Diego State University
Role: Site PI
 13. Proposal Title: Toward Smoke-Free Casinos: The Win-River Experience
Source of Support: Tobacco Related Disease Research Program (TRDRP)
Award Amount: \$ 180,074
Period Covered: 08/01/2013 – 07/31/2015
Location: San Diego State University
Role: Co-I
 14. Proposal Title: Evaluation of Halogenated Organic Compounds in Treated Wastewater by Nontargeted Analysis.
Source of Support: Orange County Water District (OCWD)
Award Amount: \$ 9,990
Period Covered: 09/01/2013 – 06/30/2014
Location: San Diego State University
Role: PI
 15. Proposal Title: Thirdhand Smoke Analysis in Dust Collected in Smokers’ Homes in Minnesota.
Source of Support: University of Minnesota
Award Amount: \$ 13,200
Period Covered: 08/31/2013 – 09/30/2014
Location: San Diego State University
Role: PI
 16. Project Title: PAH Analysis in San Diego Bay Sediment
Source of Support: UCSD
Award Amount: \$20,000
Period Covered: 05/01/14-06/30/15
Location: San Diego State University
Role: PI
 17. Project Title: A Novel Approach to in situ Marine Contaminant Assessment: Linking Exposure to Effects
Source of Support: CSU COAST
Award Amount: \$15,000
Period Covered: 06/15/14-06/30/15
Location: San Diego State University
Role: Co-PI
 18. Project Title: Subaward from Southern California Coastal Water Research Project “Enhanced Cataloguing of Bioaccumulative Chemicals in Stranded Marine Mammals to Assess Health Impacts”
Source of Support: NOAA
Award Amount: \$30,000 (SDSU portion)
Period Covered: 08/01/14-07/31/16

- Location: San Diego State University
Role: PI
19. Proposal Title: Identification of Persistent Organic Compounds in Treated Wastewater by a Non-Targeted Chemical Analysis
Source of Support: Orange County Water District (OCWD)
Award Amount: \$ 9,990
Period Covered: 09/01/2014 – 06/30/2015
Location: San Diego State University
Role: PI
20. Proposal Title: Assessing Toxicity of Tobacco Product Waste to Humans
Source of Support: Tobacco Related Disease Research Program (TRDRP)
Award Amount: \$ 520,278
Period Covered: 12/01/2014 – 11/30/2018
Location: San Diego State University
Role: PI
21. Proposal Title: Persistent Thirdhand Smoke Toxicants in Indoor Environments: Subsidiary-CA Collaborative Consortium on Thirdhand Smoke Exposure & Health Effects
Source of Support: Tobacco Related Disease Research Program (TRDRP)
Award Amount: \$ 240,203
Period Covered: 12/01/2014 – 11/30/2017
Location: San Diego State University
Role: Co-I
22. Proposal Title: Nicotine Analysis: Wipes/Air Samples
Source of Support: US Department of Health and Human Services
Award Amount: \$ 19,410
Period Covered: 5/21/2015 – 5/20/2016
Location: San Diego State University
Role: PI
23. Proposal Title: NO-POPs Trial: A Pilot Investigation
Source of Support: Harvard University
Award Amount: \$ 54,000
Period Covered: 03/01/2015 – 02/28/2018
Location: San Diego State University
Role: PI
24. Proposal Title: Thirdhand Smoke Low Income Housing
Source of Support: US Department of Housing and Urban Development
Award Amount: \$ 699,866
Period Covered: 11/16/2015 – 11/15/2018
Location: San Diego State University
Role: Co-PI
25. Proposal Title: Silicone Wristbands as Personal Samplers for Exposure to Tobacco Toxicants
Source of Support: Tobacco Related Disease Research Program (TRDRP)
Award Amount: \$ 360,608
Period Covered: 07/01/2016 – 06/30/2018
Location: San Diego State University
Role: Co-PI
26. Project Title: PCB Analysis in San Diego Bay Sediment

- Source of Support: UCSD
Award Amount: \$16,000
Period Covered: 10/01/15-09/30/16
Location: San Diego State University
Role: PI
27. Project Title: Reduce Secondhand Smoke NICU Homes
Source of Support: University of Texas Medical Branch
Award Amount: \$50,342
Period Covered: 11/01/15-02/28/18
Location: San Diego State University
Role: PI
28. Project Title: Screening and Non-Targeted Analysis
Source of Support: Environmental Protection Agency
Award Amount: \$19,268
Period Covered: 06/20/16-06/19/17
Location: San Diego State University
Role: PI
29. Project Title: Subaward from UCSD's NIEHS funded grant, "Pesticides and Mental Health among Adolescents in Ecuadorian Agricultural Communities"
Award Amount: \$50,824
Period Covered: 09/01/15 – 8/31/17
Location: San Diego State University
Role: Site PI
30. Project Title: Identification of unknown chemicals in southern California inland waters by non-targeted chemical analysis
Source of Support: Southern California Coastal Water Research Project (SCCWRP)
Award Amount: \$60,000
Period Covered: 09/01/16-09/30/17
Location: San Diego State University
Role: PI
31. Project Title: Assessing Toxicity of Waterpipe Tobacco Smoking in Laboratory and Naturalistic Settings
Source of Support: NIH/NIDA
Award Amount: \$1,350,000
Period Covered: 07/01/16-06/30/19
Location: San Diego State University
Role: Co-I
32. Proposal Title: Non-Targeted Chemical Analysis for Identification of Persistent Organic Compounds in Treated Wastewater
Source of Support: Orange County Water District (OCWD)
Award Amount: \$ 9,990
Period Covered: 11/02/2015 – 06/30/2016
Location: San Diego State University
Role: PI
33. Proposal Title: Confirmation and Further Analysis of Non-Targeted Trace Organics Recovered from ROP and UVP Source Waters of the AWPf.
Source of Support: OCWD

- Award Amount: \$ 19,990
Period Covered: 10/01/16 – 6/30/17
Location: San Diego State University
Role: PI
34. Proposal Title: Effects of Thirdhand Smoke Exposure on the Microbiome of Young Children
Source of Support: TRDRP
Award Amount: \$ 361,161
Period Covered: 07/01/17 – 06/30/19
Location: San Diego State University
Role: Co-I
35. Proposal Title: WERF: Enhanced evaluation of the removal of contaminants of emerging concern in decentralized water reuse systems by non-targeted analysis
Source of Support: NSF
Award Amount: \$ 304,569
Period Covered: 08/01/17 – 07/31/20
Location: San Diego State University
Role: Co-PI
36. Proposal Title: Contribution of Thirdhand Smoke to Overall Tobacco Smoke Exposure in a Pediatric Population
Source of Support: NIH/NIEHS
Award Amount: \$ 1,643,738 (SDSU portion)
Period Covered: 01/01/18 – 12/31/22
Location: San Diego State University
Role: Co-I
37. Proposal Title: Remediation of tobacco toxicants polluting low-income multiunit housing
Source of Support: TRDRP
Award Amount: \$ 601,884
Period Covered: 04/01/18 – 03/31/20
Location: San Diego State University
Role: Co-PI
38. Proposal Title: Exposure to tobacco, e-cigarette, and marijuana in multiunit housing
Source of Support: TRDRP
Award Amount: \$1,126,942
Period Covered: 04/01/18 – 03/31/21
Location: San Diego State University
Role: Co-I
39. Proposal Title: Assessing Marine Endocrine Disrupting Chemicals in the Critically Endangered California Condor: Implications of Reintroduction to Coastal Environments
Source of Support: NOAA California SeaGrant
Award Amount: \$257,485
Period Covered: 04/01/18 – 01/31/21
Location: San Diego State University
Role: PI
40. Proposal Title: Understanding formation of a critical disinfection byproduct: NDMA and previously unidentified NDMA precursors in advanced potable reuse treatment plants
Source of Support: US Bureau of Reclamation Department of the Interior (USBR)
Award Amount: \$25,000 (SDSU portion)

- Period Covered 04/01/18-12/31/2019
Location: San Diego State University
Role: Site PI
41. Proposal Title: Non-Targeted contaminant analysis in advanced wastewater treatment
Source of Support: Kleinfelder
Award Amount: \$20,000
Period Covered: 08/20/2018 – 03/31/2019
Location: San Diego State University
Role: PI
42. Proposal Title: Testing Cellulose Filter Paper
Source of Support: University of Alaska (from EPA)
Award Amount: \$22,575
Period Covered: 02/01/2018 – 06/30/2019
Location: San Diego State University
Role: PI
43. Proposal Title: Reducing Exposure to Thirdhand Smoke in Multiunit Housing
Source of Support: TRDRP
Award Amount: \$1,119,720
Period Covered: 12/01/2018 – 11/30/2021
Location: San Diego State University
Role: Co-PI
44. Proposal Title: Thirdhand Smoke Dissemination, Outreach, and Resource Center
Source of Support: TRDRP
Award Amount: \$1,798,008
Period Covered: 12/01/2018 – 11/30/2021
Location: San Diego State University
Role: Co-I
45. Proposal Title: Pilot Investigation of Tobacco, E-Cigarette, and Cannabis Contaminants in an Urban Natural Reserve
Source of Support: TRDRP
Award Amount: \$602,000
Period Covered: 09/02/19–09/01/21
Location: San Diego State University
Role: PI
46. Proposal Title: Subaward from UCSB: A Pilot Study of Tobacco & Cannabis Contaminants in Protected Areas
Source of Support: TRDRP
Award Amount: \$195,650 (SDSU portion)
Period Covered: 07/01/19–12/31/20
Location: San Diego State University
Role: Site PI
47. Proposal Title: Subaward from CCHMC: Prevalence and Clinical Correlates of Thirdhand Smoke Exposure in a Pediatric Patient Population
Source of Support: NIEHS
Award Amount: \$1,002,154 (SDSU portion)
Period Covered: 07/01/19-06/30/24
Location: San Diego State University

Role: Site Co-PI

48. Proposal Title: Secondhand smoke, past smoking, diet, novel biomarkers and breast cancer metastasis.

Source of Support: TRDRP

Award Amount: \$602,000

Period Covered: 09/02/2019-09/1/2021

Location: San Diego State University

Role: Co-I

49. Proposal Title: Randomized Crossover Clinical Trial of Unfiltered Cigarettes

Source of Support: TRDRP

Award Amount: \$660,403

Period Covered: 07/01/2018-06/30/2021

Location: San Diego State University

Role: Co-I

50. Proposal Title: Assessing Fate and Toxicity of Microplastics under Coastal Environment Conditions

Source of Support: CSU COAST

Award Amount: \$399,406

Period Covered: 01/01/2021-12/31/2022

Location: San Diego State University

Role: PI

F. Unpublished Work

Synthesis of sorbent for cleanup of chlorophyll (selectively retention of chlorophyll) from plant samples, which is marketed as “QuEChERS ChloroFiltr” by UCT. Inc.

H. Participation in Professional Associations

American Chemical Society

American Society of Mass Spectrometry

International Society of Exposure Science

The Society of Environmental Toxicology and Chemistry

Korean-American Scientists and Engineers Association

Korean-American Women in Science and Engineering

V. TEACHING EFFECTIVENESS

A. Curriculum Development and Teaching Innovations

PH700: Research Methods

PH451: Public Health and Food Safety

PH634: Environmental Protection

PH499: Undergraduate Research/Special Study

PH784: Global Environmental Health

PH604: Environmental determinants of Human Health

PH296: Public Health Research

B. Teaching Awards

100 Inspiring Women in STEM Awards in 2015 by *Insight Into Diversity*

2017 Outstanding Faculty Award

C. Thesis Supervision

Chair, Thesis Chaired (Complete)

1. *Margaret Stack* (2020): Assessment of Marine Endocrine-Disrupting Compounds in the Critically Endangered California Condor and Their Marine Mammal Prey.
2. *Jade Wong* (2019): Cellulose Filter Papers for Measurement of Persistent Organic Pollutants in Marine Mammal Whole Blood.
3. *Dana Dautin* (2018): Body Burden of Persistent Organic Pollutants (POPs) in San Diego Population and Intervention Trials for the Elimination of POPs: Fecal POPs Concentrations as Indicators of Successful Intervention Results.
4. *Tigran Ghukasyan* (2018): Identification of Thirdhand Smoke Chemical Constituents in the Household Dust Using a Nontargeted Approach
5. *Edward Dominguez* (2018): A Non-Targeted Analysis of Organic Contaminants in Dietary Fish Oil Supplements in the U.S.
6. *Hung-Hsu Wei* (2018): Determination of Organic Compounds in Smoked Cigarette Leachate and Their Bioaccumulation Potentials in the Marine Mussel, *Mytilus Galloprovincialis*
7. *Lenard Yabes* (2018): Bioaccumulation of Organic Compounds from Smoked Cigarette Litter in the Freshwater Rainbow Trout, *Oncorhynchus Mykiss*.
8. *William Richardot* (2018: Plan B: Manuscript): Bioaccumulation of Tobacco Product Waste Feeding Experiment
9. *Jenna Krichling* (2017): Non-Targeted Analysis for Discovery of Chemicals of Emerging Concerns in Treated Water for Drinking and Source Investigation
10. *Rhonda Saleh* (2017): Risk Assessment of Persistent Organic Pollutants via Fish Oil Consumption
11. *Melissa Vales* (2017): Distribution of Polychlorinated Biphenyls in San Diego Marinas
12. *Allison McMullen* (2017: Plan B: Manuscript in Nutrition): Critical Review of Assessment of Benefits and Concerns of Dietary Fish Oil
13. *Claire O'Brien* (2016: Plan B: Manuscript): Relationship Between PBDEs and Methoxy-PBDEs in Human Breastmilk and Seafood Consumption
14. *Chelsea Basirico* (2016: Plan B: Manuscript): Relationship Between PCBs in Human Breastmilk and Seafood Consumption
15. *Jennifer Cossaboon* (2016): Enhanced Cataloguing of Halogenated organic Compounds in Marine Mammals of the Southern California Bight Using a Non-targeted Analytical Method (Under my supervision, but Dr. Gersberg chaired because of sabbatical)
16. *Raisa Luna* (2016): Non-Targeted Chemical Analysis for the Identification of Persistent Organic Compounds in Treated Wastewater
17. *Amanda Gee* (2015): Nicotine and Tobacco Specific Nitrosamines in House Dust Collected in Minnesota
18. *Cuong Tran* (2014): Plan B Manuscript Option, Comprehensive Analysis of Organic Contaminants in Human Breast Milk
19. *Nicolas Lopez-Galvez* (2014): Soil Analysis of Organic and Inorganic Contaminants in Goat Canyon at the US-Mexico Border

20. *Chester Huang* (2013): Screening Organic Contaminants in Desert Tortoise from the Mojave
21. *Anju Melkani* (2012): Assessment of the Potential Health Hazardous Chemicals in Household Dust
22. *Tina Davis* (2012): Polycyclic Aromatic Hydrocarbons Profiles in Polystyrene Foams in San Diego Bay
23. *Yang Jiao* (2012): Elemental Analysis in House Dust Using Handheld X-Ray Fluorescence
24. *Veronika Shevchenko* (2011): Characterization of Chemical Compounds in Cigarette Filter Leachates
25. *Almira Van* (2010): Persistent Organic Pollutant Content of Marine Debris Found on San Diego Beaches
26. *Beth Wittry* (2010): Evaluation of Thirdhand Smoke Exposure to Polycyclic Aromatic Hydrocarbons through Indoor Contamination of Settled House Dust
27. *Richard Hunt* (2009): Investigation of Polycyclic Aromatic Hydrocarbon Content in Settled House Dust of Homes Exposed to Environmental Tobacco Smoke

Dissertation Committee (Co-Advising Complete)

1. *Marisa Trego*, Ph.D. Ecology SDSU/UC Davis joint doctoral program (2018): A Novel Approach to Contaminant-Related Health Assessment in Free-ranging Cetaceans
2. *Leah Chibwe*, Ph.D. Chemistry, Oregon State University (2016): Use of Targeted and Non-Targeted Analysis to Study Complex PAH Environmental Mixtures
3. *Chelsea Rochman*, Ph.D. Ecology SDSU/UC Davis joint doctoral program (2013): Plastics and Priority Pollutants: A Multiple Stressor in Aquatic Habitats
4. *Carlos Manzano*, Ph.D. Chemistry, Oregon State University (2012): The Identification and Quantitation of Complex Polycyclic Aromatic Hydrocarbon Mixtures in Environmental Samples Using Comprehensive Two-Dimensional Gas Chromatography with Time-of-flight Mass Spectrometry

Supervision of Postdoctoral Researchers

1. Susan Mackintosh, Ph.D. (May 2013 – July 2015)
2. Mariana Alonso, Ph.D. (April 2014 – March 2016)

Thesis Supervision in Process (Chair)

1. *Vian Orah*: Persistent Organic Pollutants in Breast Cancer Survivors from WHEL study.
2. *Rabia Riaz*: Nontargeted Analysis for Halogenated Organic Compounds in California Pergrine Falcons
3. *Lilly Sabet*: Chemicals of Emerging Concerns in San Francisco Bay
4. *MaryAnn Zakaria*: Chemicals of Emerging Concerns in Southern San Francisco Bay
5. *Ryan Alexander*: Identification of Unknown Chemicals in Southern California Inland Waters by Non-Targeted Chemical Analysis
6. *Marcella Oei*: Exposure Assessment to Thirdhand Smoke in a Casino after Banning Tobacco Smoke
7. *Cher Vue*: Assessment of Tobacco Specific Nitrosamines in House Dust Collected in Smoker's Houses

8. *Jayson Arceo*: Organic Pillows as an Indicator of Residential Thirdhand Smoke Pollution
9. *Kathy Dautin*: Fate of Thirdhand Smoke in Ex-Smokers' Homes
10. *Victoria Flores*: Air nicotine after smoking ban in a casino

Dissertation Committee (Co-Advising In Process)

1. Corey Clatterbuck, Ph.D. Candidate, Ecology SDSU/UC Davis joint doctoral program: Biomonitoring of Legacy and Emerging Toxicants in North Pacific Waters.

Membership on Thesis Committee (2nd or 3rd member)

1. *Quinn Alkin* (2020): Fire Effects on Hydrologic and Soil mercury Processes in a Southern California Urban Creek.
2. *Jennifer Topps* (2020): Assessment of CYP1A Induction in Zebrafish Embryos and Adults Exposed to Tris(4-chlorophenyl)methanol.
3. *Mansi Vyas* (2019): Comparison Between Personal Air Nicotine Levels and Nicotine in Wristband Worn by Children Exposed to Secondhand Smoke and E-Cigarette Vapor.
4. *Billie A. Beckley* (2020): Understanding the Mechanisms Leading to Recruitment Inhibition of *Macrocystis Pyrifera* by Opportunistic Algae.
5. *Richa Bharat Bhushan Sharma* (2019): Automation of ChromaTOF and Software and Development for Non-targeted Analysis of Contaminants
6. *Julie Nguyen* (2019): Levels of Total Mercury in Pacific Oysters (*Crassostrea Gigas*) from San Diego Bay and a Human Health Risk Assessment for Their Consumption.
7. *Kristen Snyder* (2018): Photochemical Dissolution and Degradation of Industrial Crude Oil and Natural Seep Oil in Seawater.
8. *Christine Batikian* (2018): Chemical (Caffeine and Sucralose) and Biological (*E.coli*) Markers of Sewage Contamination in an Urban Stream (Forester Creek) in San Diego County, California, USA.
9. *Antonio DeMarcus Harper* (2018): Trends in the California Stream Condition Index (CSCI) and its relationship to Chemical Stressors in the San Diego Hydrologic Region.
10. *Catherin Ann Rice* (2018): Types and preparations of seafood in diet, and other demographic predictors of persistent organic pollutants of breast milk in San Diego women [Ms. Rice is in MPH program at Emory University]
11. *Mike Meyers* (2018): Metagenomic analysis of archaea and viruses in PCOS mouse model
12. *Evan Lemons* (2017): Sediment Accretion Rates and Metal Contamination of the Kendall-Frost March Reserve in Mission Bay, CA.
13. *Jake Munson-Decker* (2016): Toxicity of Copper and Zinc under Pulse Exposure Regimes to Purple Sea Urchins, *Strongylocentrotus Purpuratus*, and Mysid Shrimp, *Americamysis Bahia*.
14. *Giang Tran* (2016): Method Development for Analysis of Creatinine in Whole Urine Samples by Liquid Chromatography Tandem Mass Spectrometry
15. *Ebony Miller* (2016): The Effect of the El Niño Southern Oscillation on Levels of Fecal Indicator Bacteria at the Imperial Beach, CA Shoreline
16. *Renita Salas* (2016): Predictors of Food Facility Violations During Routine Inspections in San Diego County During 2013-2014

17. *Lyubov Razhavskly* (2016): The Association Between Season and Critical Food Safety Violations in San Diego County Retail Food Facilities
18. *Adrian Olivares* (2016): Accuracy of Three Screening-Level Vapor Intrusion Models for Indoor Air Comparison of Predicted Volatile Organic Compound (VOC) Concentrations with Measured Levels
19. *Teaba Theweny* (2015): Measurement of Thirdhand Smoke in a Casina: Surface Nicotine Wipes Pre and Post Smoking Ban
20. *Chris Millow* (2015): Contaminants and Reproductive Output in a Sentinel Seabird, The Black Skimmer (*Rynchopsniger*)
21. *Chelsea Oakes* (2014): Polycyclic Aromatic Hydrocarbon Concentrations in Rental Car Dust Samples as a Measure of Thirdhand Smoke
22. *Taylor Correll* (2014): Analysis of Complex Polycyclic Hydrocarbon Mixtures Found in Particulate Matter Air Samples from the San Diego-Tijuana Border Region Using GCxGC/TOF-MS
23. *Mike Checkai* (2014): Risk Assessment of Isoflurane Exposure
24. *Ryan Gray* (2014): *Insincerus*
25. *Haoli Wu* (2014): Sensitive Detection of Dioxin and Malachite Green by Degenerate Four-Wave Mixing Coupled with Electrolytic Cell and Capillary Electrophoresis
26. *Begoña Díaz Lopez* (2014): Evaluation of Halogenated Organic Compounds in Treated Wastewater by Non-targeted Analysis (Universidad de A Coruña ETS de Ingenieros de Caminos, Canales y Puertos)
27. *Bernado Rivera* (2013): An Assessment of Mobile Food Operators Food Handler Knowledge
28. *Nina Bahman* (2013): Bioassessment of The San Diego Hydrologic Region
29. *Sara Romero* (2013): Effect of Methyl-Tert-Butyl Ether (MTBE) on Aromatase Gene Expression in Female Sprague-Dawley Rats
30. *William Elyea* (2013): Effects of MTBE on Serum and Intratesticular Testosterone Levels in Male Sprague-Dawley Rats Following Fourteen Day Oral Exposure
31. *Roshan Ashoor* (2013): Pertubation of Autophagy by Lysosomotropic Drugs
32. *Rolla Yafawi* (2012): Perturbation of Autophagy by Basic Lipophilic Compounds: Correlation of LC3 and p62 Abundance Employing U2OS-GFP Cells.
33. *Tiffany Bucher* (2012): Removal of Dissolved Metals by The Imperial And Brawley Constructed Wetlands, Imperial Valley, CA
34. *Marbie Guillergan* (2012): Sansalvamide A and Heat Shock Protein 90 Binding and Biochemical Studies
35. *Grace Farinas* (2012): Analysis of Pyrethroid Pesticides in Sediments from San Diego County Streams Using Liquid Chromatography-Triple Quadrupole Mass Spectrometry
36. *Jose Velascosoltero* (2012): The Effects of Climate Variability in The Abundance of West Nile Virus Vectors in San Diego County
37. *Melissa Ta* (2012): Factors Affecting Regionwide Water Quality in San Diego County Watersheds
38. *Jacqueline Devera* (2012): Chemical Characterization of PM_{2.5} Air Pollution in Dhaka and Noakhali, Bangladesh
39. *Jacqueline Devera* (2012): Chemical Characterization of PM_{2.5} Air Pollution in Dhaka and Noakhali, Bangladesh

40. *Alethea Ramos* (2012): Risk Assessment of Methylmercury from Fish Consumption in Oahu, Hawaii Using Hair as a Biomarker of Exposure
41. *Sarah Meyer* (2012): Toxic Effects of Selected marine phytoplankton on purple urchin fertilization and larval development
42. *Mira Ko* (2011): Assessment of Potential Biomarkers For Detecting Immune-Mediated Drug-Induced Liver Injury in The Modified Lymphocyte Transformation Test
43. *Edgar Rodriguez* (2011): Roadside Air Pollution Measurements and Traffic Volume in a US-Mexico Border City: Tijuana, B.C
44. *Marcela Braga* (2010): The Role of Biological Volatilization in Selenium Removal by The Imperial Constructed Wetlands, Imperial, CA
45. *Craig Cameon* (2011): Hand-held Oxidation-Reduction Potential Meter for Use as an Indicator of Swimming Pool Water Quality
46. *Matthew James Nemeč* (2011): Effect of MTBE on CYP19 (Aromatase) Activity and Total P450 in Male Sprague-Dawley Rats Following Fourteen Day Gavage Exposure
47. *Ke Gong* (2011): Synthesis, Optical Properties, and Surface Modification of Magic-Size Semiconductor Nanocrystals, Nanowires and Nanoplatelets
48. *Rory James Klinger* (2011): Investigation of Resistance Development from Residual Contamination of Ciprofloxacin
49. *Koyuki Takenaka* (2010): Method Development for Analysis of Testosterone/Epitestosterone in Human Samples Using Liquid Chromatography Tandem Mass Spectrometry
50. *Renato F. Borrás Chavez* (2010): Ecological and Chemical Responses of Macroalgae (Phaeophyceae) Under Primitive Harvesting Methods. The Pursuit of Sustainable Harvesting in Northern Chile

Membership on Dissertation Committee

1. Jenny Van, Ph.D. Chemistry, San Diego State University (2015): Part 1: Method Development for the Analysis of Polyamines by Derivatives with Benzoyl Chloride by HPLC Tandem Mass Spectrometry; and Part 2: Detection of Volatile Organic Compound Tracers in Human Breath

Students Awards Under My Supervision

1. Jordan Alejo, Pamela Olguin, and Jade Johnson: SDSU Research Scholarship in 2020.
2. Nalima Josh: Cornelius Hopper Diversity Award Student Fellowship from the TRDRP in 2020.
3. Margaret Stack: Hanlon award in Graduation 2020 (Outstanding student in Public Health, SDSU, 2020)
4. Jade Johnson: Switzer Fellowship in 2020
5. Pamela Olguin: Cornelius Hopper Diversity Award Student Fellowship from the TRDRP in 2019.
6. Jade Johnson: Graduate Student Research Grant from SoCAL SETAC in 2019
7. Margaret Stack: Best Graduate Student Presentation Award at 2019 SoCAL SETAC
8. Margaret Stack: 1st place award at 2019 CSU Research Competition
9. Margaret Stack: President's Award at 2019 SDSU Student Research Symposium

10. Jennifer Cossaboon: Hanlon award in Graduation 2017 (Outstanding student in Public Health, SDSU, 2017)
11. Jenna Krichling: NWRI Graduate Fellowship in 2016
12. Chelsea Basirico: Outstanding Student Award of Environmental Health Division, 2016
13. Claire O'Brien: Outstanding Student Award of Environmental Health Division, 2015
14. Jennifer Cossaboon: CSU COAST Graduate Research Award in 2016/SOCAL SETAC Graduate Research Award in 2016/EPA STAR Fellowship Finalist in 2015
15. Chelsea Rochman: ARCS Scholarship 2011/AWIS San Diego Chapter Student Scholarship 2011/SoCal SETAC Best Student Presentation 2010/NSF Graduate Research Fellowship 2010/PADI Foundation Grant 2010/SoCal SETAC Research Grant Award 2010-11
16. Chris Millow: EPA STAR Fellowship in 2012
17. Carlos Manzano: Graduate Student Paper Awards of the Environmental Chemistry Division in 2012 ACS

Research Staff under My Supervision

1. Margaret Stack (2020-present)
2. Kaylen Wilson (2019-present)
3. Jade Wong (2019-present)
4. William Richardot (2018-present)
5. Daniel Chang (2018- 2020)
6. Linda Chu (2017- present)
7. Chelsea Basirico (2016-2017)
8. Jennifer Cossaboon (2017)
9. Claire O'Brian (2016-2017)

VI. SERVICE FOR THE UNIVERSITY AND THE COMMUNITY

Service for the Department

1. SPH Committee for Personnel Review (2018- 2020)
2. SPH Committee for Student Affairs (2018-present)
3. SPH Committee for Laboratory Resource (2009-present)
4. SPH International Health Committee (2009 – 2016)
5. SPH Committee for Performance Evaluation and Renewal for Accreditation (2012-2016); (2020-present)
6. SPH Committee for Student Affairs (2017-present)
7. Division Head of Environmental Health (Fall 2014-Spring 2016, Fall 2018 - present): advising EH students, scheduling courses, leading student recruitment, admission, orientation, social and student events, graduation event, and curriculum
8. Lead in updating the SPH Environmental Health Division and the Environmental Health Laboratory web pages

Service for the College

1. Faculty Search Committees (Chair for Environmental Health (Water Tox) Faculty: 2015, Members for Two Health Promotion Faculty: 2012-2014, One Global Health Faculty:

2015, One Blue Gold AOE Faculty: 2018, Global and Environmental Health Faculty: 2019, Health Promotion: 2019)

2. Search Committee for Instructional Support Technician: 2016
3. Research Committee (2017- 2019)

Service for the University

1. Dean Search Committee (2017-2018)
2. SDSU Environment and Safety Committee (2014-2016)
3. Area of Excellence: Core-Member of Blue Gold (Water Scarcity) Selected in 2015
4. Recipient of 2015 The President's Leadership Fund (PLB) Faculty and Staff Excellence Award
5. Internal Competition Committee (2017- 2018)

Service for the Profession

1. Invited Session Chair for 2018 Annual Conference of American Society for Mass Spectrometry (ASMS) at San Diego, CA.
2. Session Chair for Advanced Analytical Methods for Contaminant Discovery, in the Annual North America Meeting of Society of Environmental Toxicology and Chemistry 2013-2015: Sponsored by Chemistry Advisory Council
3. Editorial Activities:

Reviewer

Environmental Science & Technology (ES&T), 2003-present

ES&T excellence in review award (2014)

ES&T "Super Reviewer" Award (2015)

ES&T Letters Excellence in Review Award (2017)

Journal of Agricultural and Food Chemistry, 2008-present

Analytica Chimica Acta, 2008-present

International Journal of Environmental Analytical Chemistry, 2008-present

Journal of Food Composition and Analysis, 2009-present

Journal of Chromatography A, 2009-present

Environmental Pollution, 2009-present

Chemosphere, 2010-present

Environmental International, 2010-present

Marine Pollution, 2012-present

Journal of Hazardous Materials, 2018-present

Advisory Board Member, 2013-present for Environmental Science and Technology Letters

Service for the Community

Grant Proposal Review:

NIH RFA OD-09-003 Challenge Grants (2009)

NIEHS/EPA Children's Environmental Health and Disease Prevention Center Review P20 (July 2009)

AAAS invitation to review proposals on pollutants for Saudi National Science Agency (2015)

EPA STAR fellowship (2015)

CSU COAST graduate applications for review (2015 & 2018)

- NIH review: adjunct member of Community Influences on Health Behavior Study Section Scientific Review (2017)
Canada Mitacs Accelerate Research Proposal Review (2018)
Minnesota Stormwater Proposal review (2018)
NIH/NIEHS HHEAR Study Section (2019)
2. Co-Author of “Life Cycle Implications from Tobacco Consumption: Secondhand and Thirdhand Smoke” prepared for CBPP/WHO TFI project on “The Lifecycle of Tobacco Environmental Impacts and Recommendations for Policy Responses”.
 3. Panel Expert Attending “Ocean and Freshwater Plastic Pollution: Impacts and Opportunities” by the California Legislative Latino Caucus and Monterey Bay Aquarium for a science-policy briefing. January 7. 2016, State Capitol Building, Sacramento, CA.
 4. Interview for third hand smoke/ tobacco smoke residue's effect on human health for our Medical news program by KBS (Korean Broadcasting System(KBS) is South Korea's largest public television network and broadcasts both in the US and in Korea): Feb, 2016
 5. Invited as a panel member in Korean-American Women Scientist Symposium sponsored by the Korean Federation of Science and Technology Societies, Park City, Utah, August 13, 2011
 6. Invited talk, “Potential Benefits of an Untargeted Analytical Approach for Environmental Health Studies,” at the West Coast Symposium of Korean-American Women Scientists and Engineers in U.S. FDA, Irvine, CA, June 2010
 7. Vice president for Korean American Women in Science and Engineering (2010-2012)
 8. Member of Executive Committee of Korean-American Scientists and Engineers Association San Diego Chapter (2012-present)
 9. Invited phone interview with the Committee on Energy and Commerce of the U.S. House of Representatives on the subject of toxic substance control in March 2010.
 10. A person to person interview with Associate Producer, Felicia Kit, from KGTV ABC 10News about PBDEs (flame retardant and environmental contaminant) for her investigation of potential PBDE contamination in San Diego Bay. Oct, 2009
 11. Member of Steering Committee: Chair of the Poster Session for 2009 Symposium on Food Systems & Public Health, November 4-6, 2009, San Diego, CA.
 12. Member of Asian Pacific American Network in Agriculture-Greater Philadelphia Chapter: planning and organizing the commemoration of the Asian Pacific American Heritage Month (2006-2008)

VII. Honors

1. Delta Omega (Honorary Society for Graduate Studies in Public Health)
2. Pi Alpha Alpha (Honorary Society for Public Affairs and Administration)
3. Environmental Science and Technology excellence in review 2014
4. 2015 SDSU President’s Leadership Fund Faculty and Staff Excellence Award
5. 2015 “100 Inspiring Women in STEM Award” from INSIGHT Into Diversity magazine
6. 2015 Environmental Science and Technology “Super Reviewer” Award
7. 2017 Outstanding Faculty Award