

## CURRICULUM VITAE

Eunha Hoh, PhD, MSES

Environmental Health Division

School of Public Health

San Diego State University

5500 Campanile Drive, San Diego, CA 92182-4162

Tel: 619-594-4671, Fax: 619-594-6112, E-mail: ehoh@sdsu.edu

---

### I. PROFESSIONAL APPOINTMENTS

- 8/2017- Professor, Environmental Health Division, School of Public Health, San Diego State University, San Diego, CA
- 8/2018-2023 Division Head of Environmental Health, 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.
- 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
- 9/2018-2023 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
- 8/2023-present Ocean Research Advisory Panel (that advises the Ocean Policy Committee (OPC) and provides independent recommendations to the Federal Government on matters of ocean policy).

### 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. Quintana, P.J.E.; Lopez-Galvez, N.; Matt, G.E.; Merianos, A.L.; Dodder, N.G.; Hoh, E.; Stone, L.; Wullenweber, C.A.; Mahabee-Gittens, E. “Cottone pillow samplers for assessment of thirdhand smoke in homes of smokers and nonsmokers with children”. *Journal of Environmental Exposure Assessment*. 2024;3:1. [10.20517/jeea.2023.28](https://doi.org/10.20517/jeea.2023.28)
2. Duttagupta, S.; Nynas, K.; Richardot, W.; Salam, S.B.; Pennington, M.; Wong, J.; Van De Werfhorst, L.C.V.; Dodder, N.G.; Novotny, T.; Sant, K.; Holden, P.A.; Hoh, E. “Influence of tobacco product wastes in a protected coastal reserve adjacent to urbanization”. *Marine Pollution Bulletin*, 2024, 199,115929.
3. Richardot, W.H.; Hamzai, L.; Ghukasyan, T.; Dodder, N.G.; Quintana, P.J.E.; Matt, G.E.; Sant, K.E.; Lopez-Galvez, N.; Hoh, E. “Novel chemical contaminants associated with thirdhand smoke in settled house dust”. *Chemosphere*. 2024, 141138.
4. Merianos, A.L.; Matt, G.E.; Stone, T.M.; Jandarov, R.A.; Hoh, E.; Dodder, N.G.; Quintana, P.J.E.; Lopez-Galvez, N.; Stone, L.; Mahabee-Gittens, E.M. “Contamination of surfaces in children’s homes with nicotine and the potent carcinogenic tobacco-specific nitrosamine NNK”. *Journal Exposure Science & Environmental Epidemiology*. 2023, 12, 1-8.
5. Matt, G.E.; Merianos, A.L.; Stone, L.; Wullenweber, C.; Quintana, P.J.E.; Hoh, E.; Dodder, N.G.; Lopez-Galvez, N.; Mahabee-Gittens, E.M. “Changes and stability of hand nicotine levels in children of smokers: associations with urinary biomarkers, reported child tobacco smoke exposure, and home smoking bans”. *Environmental International*. 2023, 181, 108239.
6. Richardot, W.H.; Yabes, L.; Wei, H-H.; Dodder, N.G.; Watanabe, K.; Cibor, A.; Schick, S.F.; Novotny, T.E.; Gersberg, R.; Hoh, E. “Leached compounds from smoked cigarettes and their potential for bioaccumulation in rainbow trout (*Oncorhynchus mykiss*)”. *Chemical Research in Toxicology*. 2023, 36, 1703-1710.
7. Stack, M.E.; Hollman, K. Mladenov, N.; Harper, B.; Pinongcos, F.; Sant, K.E.; Rochman, C.M.; Richardot, W.; Dodder, N.G.; Hoh, E. “Micron-size tire tread particles leach organic compounds at higher rates than centimeter-size particles: compound identification and profile comparison. *Environmental Pollution*. 2023, 334, 122116.
8. Tang, X.; Gambier, C.; Lopez-Galvez, N.; Padilla, S.; Rapp, V.H.; Russell, M.L.; Klivansky, L.M.; Mayorga, R.; Perrino, C.; Gundel, L.A.; Hoh, E.; Dodder, N.G.; Hammond, S.K.; Zhang, H.; Matt, G.E.; Quintana, P.J.E.; Destailats, H. “Remediation of thirdhand tobacco smoke with ozone: probing deep reservoirs in carpets”. *Environmental Science & Technology*. 2023, 57, 9943-9953.
9. Parada Jr, H.; Wu, T.; Yang, M.; Hoh, E.; Rock, C.L.; Martinez, M.E. “Red blood cell

- polyunsaturated fatty acid composition and mortality following breast cancer: results from the women's healthy eating and living (WHEL) study. *Cancer Epidemiology, Biomarkers & Prevention*. 2023, 32, 864.
10. Matt, G.E.; Greiner, L.; Record, R.A.; Wipfli, H.; Long, J.; Dodder, N.G.; Hoh, E.; Lopez-Galvez, N.; Novotny, T.E.; Quintana, P.J.E.; Destailats, H.; Tang, X.; Snijders, A.M.; Mao, J-H.; Hang, B.; Schick, S.; Jacob, P.; Talbot, P. Mahabee-Gittens, E.M.; Merianos, A.L.; Northrup, T.F.; Gundel, L.; Benowitz, N.L. "Policy-relevant differences between secondhand and thirdhand smoke: strengthening protections from involuntary exposure to tobacco smoke pollutants". *Tobacco Control* Published Online First: 01 June 2023. doi: 10.1136/tc-2023-057971
  11. Mahabee-Gittens, E.M.; Merianos, A.L.; Stone, L.; Wullenweber, C.A.; Quintana, P.J.E.; Hoh, E.; Dodder, N.G.; Lopez-Galvez, N.; Matt, G.E. "Hand nicotine as an independent marker of thirdhand smoke pollution in children's environments". *Science of the Total Environment*. 2022, 849, 157914.
  12. Tang, X.; Benowitz, N.; Gundel, L.; Hang, B.; Havel, C.M.; Hoh, E.; Jacob Iii, P.; Mao, J-H.; Martins-Green, M.; Matt, G.E.; Quintana, P.J.E.; Russell, M.L.; Sarker, A.; Schick, S.F.; Snijders, A.M.; Destailats, H. "Thirdhand Exposures to Tobacco-Specific Nitrosamines through Inhalation, Dust Ingestion, Dermal Uptake, and Epidermal Chemistry". *Environmental Science and Technology*. 2022, 56, 12506-12516.
  13. Stack, M.E.\*; Cossaboon, J.M.; Tubbs, C.W.; Vilchis, I.; Felton, R.G.; Johnson, J.L.; Danil, K.; Heckel, G.; Hoh, E.; Dodder, N.G. "Assessing Marine Endocrine-Disrupting Chemicals in the Critically Endangered California Condor: Implications for Reintroduction to Coastal Environments". *Environmental Science and Technology*. 2022, 56, 7800–7809.
  14. Wade, N.E.; McCabe, C.J.; Wallace, A.L.; Gonzalez, M.R.; Hoh, E.; Infante, M.A.; Hernandez Mejia, M.; Haist, F. "Clouding up cognition?: Secondhand cannabis and tobacco exposure related to cognitive functioning in youth". *Biological Psychiatry: Global Open Science*. 2022, *In Press*.
  15. Matt, G.E.; Merianos, A.L.; Quintana, P.J.E.; Hoh, E.; Dodder, N.G.; Mahabee-Gittens, E.M. "Prevalence and Income-Related Disparities in Thirdhand Smoke Exposure to Children". *JAMA Network Open*. 2022, 5, e2147184-e2127184.
  16. Mladenov, N.; Dodder, N.; Steinberg, L.\*; Richardot, W.; Johnson, J.; Martincigh, B.; Buckley, C.; Lawrence, T.; Hoh, E. "Persistence and removal of trace organic compounds in centralized and decentralized wastewater treatment systems". *Chemosphere*. 2022, 286, 13621. doi.org/10.1016/j.chemosphere.2021.131621
  17. Ishida, K.P.; Raisa, F.L.\*; Richardot, W.H.; Lopez-Galvez, N.; Plumlee, M.H.; Dodder, N.G.; Hoh, E. "Nontargeted analysis of trace organic constituents in reverse osmosis and UV-AOP product waters of a potable reuse facility". *Environmental Science and Technology Water*. 2022, 2, 96-105.
  18. De Werfhorst, L.C.V.; Jerde, C.L.; Beutel, M.W.; Brooks, A.; Butsic, A.; Duttagupta, S. Gilmore, M.E.; Harmon, T.C.; Hart, S.; Hoh, E.; Lancu, L.; Kefela, T.; Novotny, T.E.; Nynas, K.; Reynolds, B.; Wartenberg, A.C.; Holden, P.A. "Tobacco and Cannabis Debris Survey Protocol". Research Square, 10 Jan 2022.
  19. Hamzai, L.; Lopez-Galvez, N.; Hoh, E.; Dodder, N.G.; Matt, G.E.; Quintana, P.J. "A systematic review of the use of silicone wristbands for environmental exposure assessment, with a focus on polycyclic aromatic hydrocarbons (PAHs)". *Journal of*

- Exposure Science & Environmental Epidemiology*. 2022, 32, 244-258.
20. Mahabee-Gittens, E.M.; Quintana, P.J.E.; Hoh, E.; Merianos, A.L.; Stone, L.; Lopez-Galvez, N.; Matt, G.E. "Collecting hand wipe samples to assess thirdhand smoke exposure". *Frontiers in Public Health*. 2021, 9, 770505.
  21. Bendik, J.\*; Kalia, R.\*; Sukumaran, J.; Richardot, W.H.; Hoh, E.; Kelley, S.T. "Automated high confidence compound identification of electron ionization mass spectra for nontargeted analysis". *Journal of Chromatography A*. 2021, 462656. doi.org/10.1016/j.chroma.2021.462656
  22. Northrup, T.F.; Stotts, A.L.; Suchting, R.; Khan, A.M.; Klawans, M.R.; Green, C.; Hoh, E.; Hovell, M.F.; Matt, G.E.; Quintana, P.J.E. (In Press). "Handwashing results in incomplete removal of nicotine from the fingers of individuals who smoke tobacco: A randomized controlled experiment with family members visiting hospitalized infants". *American Journal of Perinatology*. 2021, DOI: 10.1055/s-0041-1736287
  23. Mahabee-Gittens, E.M.; Merianos, A.L.; Jandarov, R.A.; Quintana, P.J.E.; Hoh, E., Matt, G.E. "Differential Association of Hand Nicotine and Urinary Cotinine with Children's exposure to Tobacco Smoke and Clinical Outcomes". *Environmental Research*. 2021, 202, 111722. doi: 10.1016/j.envres.2021.111722.
  24. Beutel, M.W.; Harmon, T.C.; Novotny, T.E.; Mock, J.; Gilmore, M.E.; Hart, S.C.; Traina, S.; Duttagupta, S.; Brooks, A.; Jerde, C.L.; Hoh, E.; De Werfhorst, L.C.V.; Busic, V.; Wartenberg, A.C.; Holden, P.A. "A Review of Environmental Pollution from the Use and Disposal of Cigarettes and Electronic Cigarettes: Contaminants, Sources, and Impacts". *Sustainability*. 2021, 13, 12994.
  25. Hamzai, L.\*; Galvez, N.L.; Hoh, E.; Dodder, E.; Matt, G.E.; Quintana, P.J.E. A systematic review of the use of silicone wristbands for environmental exposure assessment, with a focus on polycyclic aromatic hydrocarbons (PAHs). *Journal of Exposure Science & Environmental Epidemiology*. 2021. doi.org/10.1038/s41370-021-00359-9
  26. Northrup, T.F.; Stotts, A.L.; Suchting, R.; Matt, G.E.; Quintana, P.J.E.; Khan, A.M.; Green, C.; Klawans, M.R.; Johnson, M.; Benowitz, N.; Jacob, P.; Hoh, E.; Hovell, M.F.; Stewart, C.J. "Thirdhand smoke associations with the gut microbiomes of infants admitted to a neonatal intensive care unit: An observational study". *Environmental Research*. 2021, 197, 111180-
  27. Chang, D.\*; Richardot, W.H.; Miller, E.L.; Dodder, N.G.; Sedlak, M.D.; Hoh, E.; Sutton, R. "Framework for Non-targeted Investigation of Contaminants Released by Wildfires into Stormwater Runoff: Case Study in the Northern San Francisco Bay Area." *Integrated Environmental Assessment and Management*. 2021, 00, 1-15. https://doi.org/10.1002/ieam.4461
  28. Snyder, K.\*; Mladenov, N.; Richardot, W.; Dodder, N. Nour, A.; Campbell, C.; Hoh, E. "Persistence and Photochemical Transformation of Water Soluble Constituents from Industrial Crude Oil and Natural Seep Oil in Seawater". *Marine Pollution Bulletin*. 2021, 165, 112049.
  29. Kelley, S.T.; Liu, W.; Quintana, P.J.E.; Hoh, E.; Dodder, N.G.; Mahabee-Gittens, E.M.; Padilla, S.; Ogden, S.; Frenzel, S.; Sisk-Hackworth, L.; Matt, G.D. "Altered Microbiomes in Thirdhand Smoke-Exposed Children and their Home Environments". *Pediatric Research*. 2021. https://doi.org/10.1038/s41390-021-01400-1
  30. 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*. 2021, 364-372, <https://doi.org/10.1093/ntr/ntaa151>
31. 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*. 2021, 23, 364-372. <https://doi.org/10.1093/ntr/ntaa167>
  32. 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*. 2021. 23, 592-599. <https://doi.org/10.1093/ntr/ntaa140>
  33. Wartenberg, A.C.; Holden, P.A.; Bodwitch, H.; Parker-Shames, P.; Novotny, T.; Harmon, T.C.; Hart, S.C.; Beutel, M.; Gilmore, M.; Hoh, E.; Butsic, V. “Cannabis and the Environment: What Science Tells Us and What We Still Need to Know”. *Environmental Science & Technology Letters*. 2021, 8, 98-107.
  34. 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.
  35. 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.
  36. 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.
  37. Parada Jr, H.; Sun, X.; Tse, C.; Engel, L.S.; Hoh, E.; Olshan, A.F.; Troester, M.A.; “Plasma levels of polychlorinated biphenyls (PCBs) and breast cancer mortality: The Carolina Breast Cancer Study”. *International Journal of Hygiene and Environmental Health*. 2020, 227, 113522.
  38. 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.
  39. 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. [ACS Editor’s Choice]
  40. 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>
41. 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
  42. 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.
  43. 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.
  44. 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.
  45. Northrup, T.F.; Stotts, A.L.; Suchting, R.; Khan, A.; Green, C.; Quintana, P.J.E.; Hoh, E.; Hovell, M.F.; Matt, G.E. "Medical staff contributions to thirdhand smoke contamination in a neonatal intensive care unit". *Tobacco Induced Diseases*. 2019, 17, 37. doi:10.18332/tid/106116.
  46. 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.
  47. 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.
  48. 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.
  49. 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.
  50. 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.
  51. 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
  52. 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 *Delphinus delphis* from the southern California Bight", *Environmental Science and Technology*. 2018, 52, 3101-3109.
  53. 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
54. Neira C.; Vales M.\*; Mendoza G.; Hoh E.; Levin L.A. “Polychlorinated Biophenyls (PCBs) in Recreational Marina Sediments of San Diego Bay, Southern California”. *Marine Pollution* 2018, 126, 204-214.
55. 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
56. Hong M.Y.; Hoh, E.; Kang, B.; Dehamer, R.; Kim, J.Y.; Lumibao, J. “Effects of Contaminated Fish Oil on Abberant 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
57. 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
58. 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
59. 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
60. 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
61. 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
62. 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
63. 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.
64. Northrup, T.F.; Jacob, P 3<sup>rd</sup>.; 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
65. 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
66. 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
67. 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
68. 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.
69. 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
70. 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
71. 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
72. 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
73. 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
74. 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
75. 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
76. 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.
77. 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: 10.1016/j.chroma.2013.07.093.
  78. 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
  79. 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.
  80. 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.
  81. 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.
  82. 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.
  83. 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
  84. 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.
  85. 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.
  86. 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.
  87. 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.
  88. 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.

89. Hoh, E.; Mastovska, K. "Large Volume Injection Techniques in Capillary Gas Chromatography" *Journal of Chromatography A*, 2008, 1186, 2-15.
  90. 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.
  91. 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.
  92. Hoh, E.; Hites, R.A. "Brominated Flame Retardants in the Atmosphere of the Eastern United States" *Environmental Science and Technology*, 2005, 39, 7794-7802.
  93. 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.
  94. 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.
- B. Other articles published
1. Brander, S.M.\*, Hoh, E.\*, Unice, K.M.\*, Bibby, K.R., Cook, A.M., Holleman, R.C., Kone, D.V., Rochman, C.M., Thayer, J.A.. Microplastic Pollution in California: A Precautionary Framework and Scientific Guidance to Assess and Address Risk to the Marine Environment. 2021. California Ocean Science Trust, Sacramento, California, USA. (Working Group Co-Chairs)
- C. Presentations in Professional Conferences As 1<sup>st</sup> Author/Presenter (Refereed)
1. May 2023 – "New perspectives on DDT pollution in the Southern California Bight 50 years after its ban" at 20th International GC×GC Symposium, Canmore, Alberta, Canada [invited]
  2. June 2022 – "Revisiting DDT pollution in California wildlife 50 years after its ban" at IEA 38<sup>th</sup> Annual Environmental Training Symposium and Conference, San Diego, CA [invited]
  3. March 2022 – "DDT Accumulation in Regional Marine Mammals and Their Health Impacts" at 2022 Society of Toxicology Annual Meeting, San Diego, CA. [invited]
  4. September 2021 – "Non-targeted Screening of Marine Sentinel Species: Newly Identified Persistent Pollutants" at International Conference on Environmental Specimen Banks 2021, Incheon, South Korea (virtual). [invited]
  5. September 2021 – "Non-targeted Analysis of Stormwater Runoff Following the 2017 Northern San Francisco Bay Area Wildfires" at EMCON: International Conference on Emerging Contaminants (virtual conference). [invited]
  6. May 2019 – "Comprehensive Organic Contaminant Assessment: Nontargeted Analysis" at SoCAL annual meeting of Society of Environmental Toxicology and Chemistry, San Diego, CA.
  7. 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.
  8. November 2018 – "Dietary Histroy and Persistent Organic Pollutants in San Diego Mothers' Breast Milk" at American Public Health Association, San Diego, CA.
  9. 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.
10. April 2017 – “Persistent Organic Pollutants in Breastmilk and Dietary History” at Children’s Environmental Health Network, Arlington, Virginia
  11. 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
  12. August 2015 – “Non-targeted Biomonitoring of Halogenated Organic Compounds in Marine Species” at EPA Non-Targeted Analysis Workshop (Invited Keynote Speaker)
  13. October, 2015 – “PAHs and related toxic compounds in THS contaminated house dust”, Henderson, Nevada
  14. 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 34<sup>th</sup> International Symposium on Halogenated Persistent Organic Pollutants, Madrid, Spain.
  15. 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
  16. 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 33<sup>rd</sup> Annual Meeting, Long Beach, CA
  17. November 2012 – Oral “A Non-Targetd GC×GC/TOF-MS method, data analysis tools, and data reporting system for the advancement of environmental monitoring” Presented at the SETAC North America 33<sup>rd</sup> Annual Meeting, Long Beach, CA
  18. 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 52<sup>nd</sup> Annual Meeting in Baltimore, Maryland
  19. 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
  20. Nov 2010 – Oral. “Occurrence of Small Plastic Debris in San Diego Beaches and Their POP Content” Presented at 31<sup>st</sup> SETAC Annual Meeting at Portland, OR.
  21. 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
  22. November 2009 – Poster. “Untargeted analysis of marine mammal exposure to multiple classes of man-made and naturally occurring halogenated organic chemicals” Presented at 30<sup>th</sup> SETAC Annual Meeting at New Orleans, LA.
  23. 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.
  24. 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 29<sup>th</sup> Annual Meeting, Tampa, FL.
  25. August 2007 – Oral. “Non-regulated Flame Retardants in Environment and their Sources” Presented at UKC2007, Reston, VA.

26. 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.
27. November 2006 – Poster. “Optimization of GC×GC-TOF MS and DSI approach for Dioxin Analysis.” Presented at the Eastern Analytical Symposium & Exposition, Somerset, NJ.
28. October 2005 – Oral. “Dechlorane Plus in Great Lakes” Presented at the 28<sup>th</sup> Midwest Environmental Chemistry Workshop, Evanston, IL.
29. May 2005 – Oral. “Atmospheric Brominated Flame Retardants in Lake Michigan.” Presented at the 48<sup>th</sup> Annual Conference on Great Lakes Research (IAGLR) Meeting, Ann Arbor, MI.
30. 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. March 2024 – “Revisiting DDT pollution in California ocean and wildlife 50 years after its ban” at Bren School of Environmental Science & Management, UC Santa Barbara
2. June 2023 – “New perspectives on DDT pollution in the Southern California Bight 50 years after its ban” at Scripps Institution of Oceanography, UC San Diego
3. March 2023 – “Revisiting DDT pollution in California wildlife 50 years after its ban” at American Cetacean Society at San Diego Chapter [webinar]
4. Oct 2022 – “Revisiting DDT pollution in California wildlife 50 years after its ban” at Department of Chemistry in San Diego State University
5. July 2022 – “DDX Accumulation in Regional Marine Mammals and Wildlife” at California Stakeholder DDT+ Research Needs Workshop [hosted by NOAA Sea Grant/USC and California]
6. May 2022 – “DDX Accumulation in Regional Marine Mammals and Wildlife and Their Health Impacts” at California Coastal Chloro Contamination Conference, UC Santa Barbara. [invited keynote]
7. March 2022 – “Assessing Fate and Toxicity of Microplastics under Coastal Environment Conditions” at California Ocean Day [online]
8. September 2021 – “Microplastic pollution in the ocean and how it affects human health” at Howell Foundation (webinar).
9. November 2019 – “Non-targeted Screening of Marine Sentinel Species: Newly Identified Persistent Pollutants” at Western University One Health Symposium, Ramona, CA.
10. 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.
11. March 2018 – “Plastic Debris in Marine Environment” at Meeting of the Board on Chemical Science and Technology: Marine Plastic Debris Scoping Session Chemical Aspects, Washington, DC.
12. Oct 2018 – “Comprehensive Organic Contaminant Assessment: Nontargeted Analysis” at Division of Environmental Health, Keck School of Medicine, University of Southern California.

13. November 2017 – “State of Science: Environmental Tobacco” at UC NRS and 2018 TRDRP Workshop at UCSB.
14. 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
15. January, 2016 – “Ocean and Freshwater Plastic Pollution” at the California Legislative Latino Caucus and Monterey Bay Aquarium for a Science-Policy Briefing, Sacramento, California.
16. August 2015 – “Non-targeted Biomonitoring of Halogenated Organic Compounds in Marine Species” at EPA Non-Targeted Analysis Workshop (Invited Keynote Speaker), Raleigh, North Carolina
17. November 2014 – “Growing Concern in Chemical Contaminants & Human Health” at San Diego WIC Program
18. October 2014 – “Chemical Contaminants & Human Health” at 2014 Clinical Research Workshop by US Navy Marine Mammal Program and National Marine Mammal Foundation.
19. March 2014 – “Diversity of Persistent Bioaccumulative Halogenated Organic Compounds in Southern California Bight” at Ocean and Human Health (OHH) Grantee Conference SIO Forum
20. 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
21. 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
22. November 2012 – “GC×GC/TOF-MS Nontargeted Analysis and its Application Towards Challenging Environmental Problems” University of California at Davis
23. Oct 2011 – “Application of Non-Targeted Analysis in Chemical Food Safety” Presented at Wiley Award Symposium, 125<sup>th</sup> AOAC Annual Meeting & Exposition at New Orleans, LA.
24. 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.
25. June 2010 – “Potential benefits of an untargeted analytical approach for environmental health studies” at Korean-American Women in Science and Engineering 4<sup>th</sup> West Coast Symposium at U.S. FDA, Irvine, CA.
26. 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.
27. March 2010 – “Potential benefits of an untargeted analytical approach for environmental health studies” at California Department of Public Health, Richmond, CA.
28. December 2007 – “Flame retardants in environment and their sources” at Korea Advanced Institute of Science and Technology”, Daejeon, Korea.
29. December 2007 – “Flame retardants in environment and their sources” at Pohang University of Science and Technology, Pohang, Korea.

30. 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
31. 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: California Tobacco-Related Disease Research Program (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: California 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: California 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: California 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: California 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: California 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: California 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: California Tobacco-Related Disease Research Program (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 (Site Co-PI)
37. Proposal Title: Remediation of tobacco toxicants polluting low-income multiunit housing  
Source of Support: California Tobacco-Related Disease Research Program (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: California Tobacco-Related Disease Research Program (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: California Tobacco-Related Disease Research Program (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: California Tobacco-Related Disease Research Program (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: California Tobacco-Related Disease Research Program (TRDRP)  
Award Amount: \$872,018  
Period Covered: 09/02/19–09/01/22  
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: California Tobacco-Related Disease Research Program (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: NIH/NIEHS  
Award Amount: \$1,002,154 (SDSU portion)  
Period Covered: 07/01/19-06/30/24  
Location: San Diego State University  
Role: Co-I (Site Co-PI)
48. Proposal Title: Secondhand smoke, past smoking, diet, novel biomarkers and breast cancer metastasis.  
Source of Support: California Tobacco-Related Disease Research Program (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: California Tobacco-Related Disease Research Program (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
51. Proposal Title: Assessment of water contamination in the Tijuana River watershed: water quality and environmental inequity in the South Bay  
Source of Support: SDSU HealthLINK Center (U54) [U54 MD012397]  
Award Amount: \$49,886  
Period Covered: 2020-2022  
Role: Co-I
52. Proposal Title: Subaward from UCSB: Surface water emissions from cannabis cultivation sites: quantity, quality, toxicity, and relationships to farmers' practices  
Source of Support: California Department of Cannabis Control  
Award Amount: \$800,000 (SDSU portion)  
Period Covered: 07/01/2021-07/31/2023  
Role: Site PI
53. Proposal Title: Subaward from UCSD: The 2021 ESPINA study follow-up Exam: Fungicides, Insecticides, Inflammation and Child Development  
Source of Support: NIH/NIEHS  
Award Amount: \$248,325 (SDSU portion)  
Period Covered: 07/01/2021—06/30/2025  
Role: Site PI
54. Proposal Title: Silicone wristbands to measure secondhand exposure to tobacco, e-cigarettes, and cannabis  
Source of Support: California Tobacco-Related Disease Research Program (TRDRP)  
Award Amount: \$1,349,342  
Period Covered: 07/01/2022—06/30/2025  
Role: Co-I (Co-PI internally)
55. Proposal Title: Environmental Toxicity of Electronic Cigarette and Heated Tobacco Product Components and Waste  
Source of Support: California Tobacco-Related Disease Research Program (TRDRP)  
Award Amount: \$382,787 (SDSU portion)  
Period Covered: 07/01/2022—06/30/2024  
Role: Co-I
56. Proposal Title: TRDRP Collaborative Consortium on Thirdhand Smoke (subsidiary project): THS in Homes: Fate, Characterization, and Remediation.  
Source of Support: California Tobacco-Related Disease Research Program (TRDRP)  
Award Amount: \$767,550  
Period Covered: 12/01/2022—11/30/2025  
Role: Co-I
57. Proposal Title: Collaborative Consortium on Thirdhand Smoke [THS Environmental Analytical Core]

- Source of Support: California Tobacco-Related Disease Research Program (TRDRP)  
Award Amount: \$654,409 (Hoh portion for the Analytical Core)  
Period Covered: 12/01/2022—11/30/2025  
Role: PI of the core (Co-I of the THS Consortium Core)
58. Proposal Title: TRDRP Collaborative Consortium on Thirdhand Smoke (subsidiary project):  
Disparities in Thirdhand Smoke Exposure and Risk in Children  
Source of Support: California Tobacco-Related Disease Research Program (TRDRP)  
Award Amount: \$642,079  
Period Covered: 12/01/2022—11/30/2025  
Role: Co-I
59. Proposal Title: Southern California DDT ocean dumpsite characterization, monitoring, and  
research project  
Source of Support: Subcontract of UCSD Scripps Institution of Oceanography (parent funding  
source: NOAA)  
Award Amount: \$210,700  
Period Covered: 07/01/2022-06/30/2023  
Role: Site Co-PI/Co-I of the parent project
60. Proposal Title: San Francisco Bay Contaminant Monitoring  
Source of Support: San Francisco Estuary Institute  
Award Amount: \$25,000  
Period Covered: 02/01/2023-02/28/2025  
Role: PI
61. Proposal Title: Non-Targeted Analysis (NTA) of NPDES Discharges  
Source of Support: Naval Information Warfare Center (DOD)  
Award Amount: \$64,706  
Period Covered: 02/01/2023-09/30/2023  
Role: PI
62. Proposal Title: Microplastic pollution from cigarette filters: Assessment of fate, transport, and  
toxicity  
Source of Support: California Tobacco-Related Disease Research Program (TRDRP)  
Award Amount: \$1,326,396  
Period Covered: 07/01/2023-06/30/2026  
Role: PI
63. Proposal Title: Hazard assessment of deep ocean DDT disposal: Defining biomagnified DDT+  
chemical profiles and investigating the health impacts on sentinel wildlife species and humans  
Source of Support: California Sea Grant College Program  
Award Amount: \$1,999,494  
Period Covered: 06/01/2023-11/30/2024  
Role: PI
64. Proposal Title: Foundational Research for Deep Ocean Dumping of DDT+ Wastes: How much  
is out there, where is it, and what is it doing today?  
Source of Support: UC Santa Barbara (through California Sea Grant College Program)  
Award Amount: \$519,990  
Period Covered: 06/01/2023-11/30/2024  
Role: PI
65. Proposal Title: Sunlight and tire wear particles - a toxic combination? Evaluating mechanisms  
for mobilization and degradation of tire particle compounds

Source of Support: National Science Foundation

Award Amount: \$419,889

Period Covered: 09/01/2023-08/31/2026

Role: Co-PI

66. Proposal Title: The health of marine ecosystem of the Southern California Bight associated with offshore DDT+ dumping

Source of Support: Scripps Institution of Oceanography

Award Amount: \$128,497

Period Covered: 09/01/2023-08/31/2024

Role: Co-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

Society of Environmental Toxicology and Chemistry

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

PH630: Risk Assessment

B. Teaching Awards

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

C. Thesis Supervision

Chair, Thesis Chaired (Complete)

1. Christine Stewart (2023): Environmental Fate and Transport of Cigarette Butt Leachate Chemicals in a Marine Environment.

2. Stephanie Laughery (2023): Hazard Identification of Chemical Contaminants at U.S.-Mexico Border Sites in the Tijuana River Watershed.

3. Joshua Espinoza (2023): Identification and Assessment of Constituents of Emerging Concern in the Tijuana River Stormwater.
4. Pamela Olguin (2022): Nontargeted Chemical Analysis of Silicone Wristbands from Children Exposed to Secondhand Tobacco Smoke and Electronic Cigarette Vapor.
5. Melissa Pennington (2022): Assessment of Contamination Associated with Tobacco Product Waste within the Kendall Frost Reserve
6. Jade Johnson (2022): A Non-Targeted Analysis of Aerobic and Anaerobic Membrane Bioreactors for Removing Trace Organic Chemicals from Municipal Wastewater
7. Jordan Alejo (2022): Cigarettes and Marine System: Exploring the Bioaccumulative Effects of Tobacco Waste on the Marine Bioindicator Species, *Macoma Nasuta*.
8. Katelyn Nynas (2021): Evaluation of Tobacco Product Waste in Kendall-Frost March Reserve.
9. Nalima Joshi (2021): Detection of Surface Nicotine Using Commercially Available Wipes in Indoor Environments.
10. MaryAnn (2021): Identification of Chemicals of Emerging Concern in the Upper South San Francisco Bay Using Non-Targeted Analysis.
11. Lilly Sabet (2021): Non-targeted Analysis for the Identification of Chemicals of Emerging Concern in Lower South San Francisco Bay Sediment.
12. Margaret Stack (2020): Assessment of Marine Endocrine-Disrupting Compounds in the Critically Endangered California Condor and Their Marine Mammal Prey.
13. Jade Wong (2019): Cellulose Filter Papers for Measurement of Persistent Organic Pollutants in Marine Mammal Whole Blood.
14. 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.
15. Tigran Ghukasyan (2018): Identification of Thirdhand Smoke Chemical Constituents in the Household Dust Using a Nontargeted Approach
16. Edward Dominguez (2018): A Non-Targeted Analysis of Organic Contaminants in Dietary Fish Oil Supplements in the U.S.
17. Hung-Hsu Wei (2018): Determination of Organic Compounds in Smoked Cigarette Leachate and Their Bioaccumulation Potentials in the Marine Mussel, *Mytilus Galloprovincialis*
18. Lenard Yabes (2018): Bioaccumulation of Organic Compounds from Smoked Cigarette Litter in the Freshwater Rainbow Trout, *Oncorhynchus Mykiss*.
19. William Richardot (2018: Plan B: Manuscript): Bioaccumulation of Tobacco Product Waste Feeding Experiment
20. Jenna Krichling (2017): Non-Targeted Analysis for Discovery of Chemicals of Emerging Concerns in Treated Water for Drinking and Source Investigation
21. Rhonda Saleh (2017): Risk Assessment of Persistent Organic Pollutants via Fish Oil Consumption
22. Melissa Vales (2017): Distribution of Polychlorinated Biphenyls in San Diego Marinas
23. Allison McMullen (2017: Plan B: Manuscript in Nutrition): Critical Review of Assessment of Benefits and Concerns of Dietary Fish Oil
24. Claire O'Brien (2016: Plan B: Manuscript): Relationship Between PBDEs and Methoxy-PBDEs in Human Breastmilk and Seafood Consumption



25. *Chelsea Basirico* (2016: Plan B: Manuscript): Relationship Between PCBs in Human Breastmilk and Seafood Consumption
26. *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)
27. *Raisa Luna* (2016): Non-Targeted Chemical Analysis for the Identification of Persistent Organic Compounds in Treated Wastewater
28. *Amanda Gee* (2015): Nicotine and Tobacco Specific Nitrosamines in House Dust Collected in Minnesota
29. *Cuong Tran* (2014): Plan B Manuscript Option, Comprehensive Analysis of Organic Contaminants in Human Breast Milk
30. *Nicolas Lopez-Galvez* (2014): Soil Analysis of Organic and Inorganic Contaminants in Goat Canyon at the US-Mexico Border
31. *Chester Huang* (2013): Screening Organic Contaminants in Desert Tortoise from the Mojave
32. *Anju Melkani* (2012): Assessment of the Potential Health Hazardous Chemicals in Household Dust
33. *Tina Davis* (2012): Polycyclic Aromatic Hydrocarbons Profiles in Polystyrene Foams in San Diego Bay
34. *Yang Jiao* (2012): Elemental Analysis in House Dust Using Handheld X-Ray Fluorescence
35. *Veronika Shevchenko* (2011): Characterization of Chemical Compounds in Cigarette Filter Leachates
36. *Almira Van* (2010): Persistent Organic Pollutant Content of Marine Debris Found on San Diego Beaches
37. *Beth Wittry* (2010): Evaluation of Thirdhand Smoke Exposure to Polycyclic Aromatic Hydrocarbons through Indoor Contamination of Settled House Dust
38. *Richard Hunt* (2009): Investigation of Polycyclic Aromatic Hydrocarbon Content in Settled House Dust of Homes Exposed to Environmental Tobacco Smoke

Dissertation Committee (Chair/Co-Advising)

1. *Samantha Shinder* (Ph.D student in SDSU/UCSD Global Health: in progress)
2. *Corey Clatterbuck*, Ph.D. Ecology SDSU/UC Davis joint doctoral program (2021): Biomonitoring of Legacy and Emerging Toxicants in North Pacific Waters.
3. *Marisa Trego*, Ph.D. Ecology SDSU/UC Davis joint doctoral program (2018): A Novel Approach to Contaminant-Related Health Assessment in Free-ranging Cetaceans
4. *Leah Chibwe*, Ph.D. Chemistry, Oregon State University (2016): Use of Targeted and Non-Targeted Analysis to Study Complex PAH Environmental Mixtures
5. *Chelsea Rochman*, Ph.D. Ecology SDSU/UC Davis joint doctoral program (2013): Plastics and Priority Pollutants: A Multiple Stressor in Aquatic Habitats
6. *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)
3. Srimanti Duttagupta, Ph.D. (September 2019-present)

Membership on Thesis Committee (2<sup>nd</sup> or 3<sup>rd</sup> member)

1. *Kelly Hollman* (2023): Simulated Leaching and Photodegradation of Tire Tread Particle-derived Compounds in Natural Water
2. *Christine Cho* (2023): Pharmacological Suppression of the Sweet Taste Receptor TIR3 Impacts Pancreatic Islet Development And Gene Expression in the Zebrafish, *Danio Rerio*.
3. *Kaylen Wilson* (2022): Persistence of Thirdhand Smoke-Related Compounds in House Dust After Commercial Cleaning
4. *Anissa Renee Busch* (2022): Assessing Acute Developmental Toxicity of *Artemia Salina* when Exposed to the Coastal Contaminants TCPM and TCPMOH
5. *Daniel Ryback* (2021): Gut Metabolites: A Time Dependent Predictor of Polycystic Ovary Syndrome in Letrozole Treated Mice.
6. *Marissa Ann Stoskopf Venn* (2021): Mitigation of Contaminated Transboundary Flows in the Tijuana River: Public Health Considerations for Remediation Strategies.
7. *Venessa Lynn Capestany* (2021): United State Greenhouse Gas Reduction Strategy: Edible Insects as an Alternative Protein Source to Conventional Livestock.
8. *Princess Dheimee Lagana* (2021): The Association Between Ambient Temperature Changes and Proper Food Holding Temperature Violations in San Diego County During 2017-2019.
9. *Joseph Charles Bendik* (2020): Classifying Mass Spectra Using Computational Models.
10. *Patricia Jane Avalos* (2020): The Association between Season and Cold-Holding Violations during Routine Food Safety Inspections in Orange County, CA, 2017-2019.
11. *Quinn Alkin* (2020): Fire Effects on Hydrologic and Soil mercury Processes in a Southern California Urban Creek.
12. *Jennifer Topps* (2020): Assessment of CYP1A Induction in Zebrafish Embryos and Adults Exposed to Tris(4-chlorophenyl)methanol.
13. *Mansi Vyas* (2019): Comparison Between Personal Air Nicotine Levels and Nicotine in Wristband Worn by Children Exposed to Secondhand Smoke and E-Cigarette Vapor.
14. *Billie A. Beckley* (2020): Understanding the Mechanisms Leading to Recruitment Inhibition of *Macrocystis Pyrifera* by Opportunistic Algae.
15. *Richa Bharat Bhushan Sharma* (2019): Automation of ChromaTOF and Software and Development for Non-targeted Analysis of Contaminants
16. *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.
17. *Kristen Snyder* (2018): Photochemical Dissolution and Degradation of Industrial Crude Oil and Natural Seep Oil in Seawater.
18. *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.

19. *Antonio DeMarcus Harper* (2018): Trends in the California Stream Condition Index (CSCI) and its relationship to Chemical Stressors in the San Diego Hydrologic Region.
20. *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]
21. *Mike Meyers* (2018): Metagenomic analysis of archaea and viruses in PCOS mouse model
22. *Evan Lemons* (2017): Sediment Accretion Rates and Metal Contamination of the Kendall-Frost March Reserve in Mission Bay, CA.
23. *Jake Munson-Decker* (2016): Toxicity of Copper and Zinc under Pulse Exposure Regimes to Purple Sea Urchins, *Strongylocentrotus Purpuratus*, and Mysid Shrimp, *Americamysis Bahia*.
24. *Giang Tran* (2016): Method Development for Analysis of Creatinine in Whole Urine Samples by Liquid Chromatography Tandem Mass Spectrometry
25. *Ebony Miller* (2016): The Effect of the El Niño Southern Oscillation on Levels of Fecal Indicator Bacteria at the Imperial Beach, CA Shoreline
26. *Renita Salas* (2016): Predictors of Food Facility Violations During Routine Inspections in San Diego County During 2013-2014
27. *Lyubov Razhavskly* (2016): The Association Between Season and Critical Food Safety Violations in San Diego County Retail Food Facilities
28. *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
29. *Teaba Theweny* (2015): Measurement of Thirdhand Smoke in a Casina: Surface Nicotine Wipes Pre and Post Smoking Ban
30. *Chris Millow* (2015): Contaminants and Reproductive Output in a Sentinel Seabird, The Black Skimmer (*Rynchopsniger*)
31. *Chelsea Oakes* (2014): Polycyclic Aromatic Hydrocarbon Concentrations in Rental Car Dust Samples as a Measure of Thirdhand Smoke
32. *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
33. *Mike Checkai* (2014): Risk Assessment of Isoflurane Exposure
34. *Ryan Gray* (2014): Insincerus
35. *Haoli Wu* (2014): Sensitive Detection of Dioxin and Malachite Green by Degenerate Four-Wave Mixing Coupled with Electrolytic Cell and Capillary Electrophoresis
36. *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)
37. *Bernardo Rivera* (2013): An Assessment of Mobile Food Operators Food Handler Knowledge
38. *Nina Bahman* (2013): Bioassessment of The San Diego Hydrologic Region
39. *Sara Romero* (2013): Effect of Methyl-Tert-Butyl Ether (MTBE) on Aromatase Gene Expression in Female Sprague-Dawley Rats
40. *William Elyea* (2013): Effects of MTBE on Serum and Intratesticular Testosterone Levels in Male Sprague-Dawley Rats Following Fourteen Day Oral Exposure

41. *Roshan Ashoor* (2013): Perturbation of Autophagy by Lysosomotropic Drugs
42. *Rolla Yafawi* (2012): Perturbation of Autophagy by Basic Lipophilic Compounds: Correlation of LC3 and p62 Abundance Employing U2OS-GFP Cells.
43. *Tiffany Bucher* (2012): Removal of Dissolved Metals by The Imperial And Brawley Constructed Wetlands, Imperial Valley, CA
44. *Marbie Guillergan* (2012): Sansalvamide A and Heat Shock Protein 90 Binding and Biochemical Studies
45. *Grace Farinas* (2012): Analysis of Pyrethroid Pesticides in Sediments from San Diego County Streams Using Liquid Chromatography-Triple Quadrupole Mass Spectrometry
46. *Jose Velascosoltero* (2012): The Effects of Climate Variability in The Abundance of West Nile Virus Vectors in San Diego County
47. *Melissa Ta* (2012): Factors Affecting Regionwide Water Quality in San Diego County Watersheds
48. *Jacqueline Devera* (2012): Chemical Characterization of PM2.5 Air Pollution in Dhaka and Noakhali, Bangladesh
49. *Jacqueline Devera* (2012): Chemical Characterization of PM2.5 Air Pollution in Dhaka and Noakhali, Bangladesh
50. *Alethea Ramos* (2012): Risk Assessment of Methylmercury from Fish Consumption in Oahu, Hawaii Using Hair as a Biomarker of Exposure
51. *Sarah Meyer* (2012): Toxic Effects of Selected marine phytoplankton on purple urchin fertilization and larval development
52. *Mira Ko* (2011): Assessment of Potential Biomarkers For Detecting Immune-Mediated Drug-Induced Liver Injury in The Modified Lymphocyte Transformation Test
53. *Edgar Rodriguez* (2011): Roadside Air Pollution Measurements and Traffic Volume in a US-Mexico Border City: Tijuana, B.C
54. *Marcela Braga* (2010): The Role of Biological Volatilization in Selenium Removal by The Imperial Constructed Wetlands, Imperial, CA
55. *Craig Cameon* (2011): Hand-held Oxidation-Reduction Potential Meter for Use as an Indicator of Swimming Pool Water Quality
56. *Matthew James Nemeč* (2011): Effect of MTBE on CYP19 (Aromatase) Activity and Total P450 in Male Sprague-Dawley Rats Following Fourteen Day Gavage Exposure
57. *Ke Gong* (2011): Synthesis, Optical Properties, and Surface Modification of Magic-Size Semiconductor Nanocrystals, Nanowires and Nanoplatelets
58. *Rory James Klinger* (2011): Investigation of Resistance Development from Residual Contamination of Ciprofloxacin
59. *Koyuki Takenaka* (2010): Method Development for Analysis of Testosterone/Epitestosterone in Human Samples Using Liquid Chromatography Tandem Mass Spectrometry
60. *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. Srimanjeet Singh (2021): Chemical studies Toward the Total Synthesis of Lagunamide A Incorporating the Application of Diastereoselective Vinologous Mukaiyama Aldol Reactions via Kinetic Resolution Methodology
2. 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. Tina Tran: SOCAL SETAC undergraduate research fellowship in 2023 (\$1K)
2. Tina Tran: CSU COAST undergraduate research fellowship in 2022 (\$1K)
3. Thomas Morales: NWRI fellowship in 2022 (\$5K)
4. Melissa Pennington: Cornelius Hopper Diversity Award Student Fellowships from the TRDRP in 2021 (\$20K).
5. Christine Stewart: Student Supplement Fellowship from the TRDRP in 2021 (\$20K).
6. Jade Johnson: Hanlon award in Graduation 2021 (Outstanding student in Public Health, SDSU, 2021)
7. Thomas Morales: Switzer Fellowship in 2021 (\$15K)
8. Thomas Morales: SDSU Mater's Research Scholarship in 2021 (\$10K)
9. Claudine Manabat: SDSU Master's Research Scholarship in 2021 (\$10K)
10. Jordan Alejo: Cornelius Hopper Diversity Award Student Fellowships from the TRDRP in 2020 (\$20K)
11. Jordan Alejo, Pamela Olguin, and Jade Johnson: SDSU Master's Research Scholarship in 2020 (\$10K each).
12. Katelyn Nynas: Student Supplement Fellowship from the TRDRP in 2020 (\$20K).
13. Christine Cho: Cornelius Hopper Diversity Award Student Fellowships from the TRDRP in 2020-2022 (\$40K).
14. Nalima Josh: Cornelius Hopper Diversity Award Student Fellowships from the TRDRP in 2020 (\$20K).
15. Margaret Stack: Hanlon award in Graduation 2020 (Outstanding student in Public Health, SDSU, 2020)
16. Jade Johnson: Switzer Fellowship in 2020 (\$15K)
17. Pamela Olguin: Cornelius Hopper Diversity Award Student Fellowship from the TRDRP in 2019 (\$40K).
18. Jade Johnson: Graduate Student Research Grant from SoCAL SETAC in 2019
19. Margaret Stack: Best Graduate Student Presentation Award at 2019 SoCAL SETAC
20. Margaret Stack: 1<sup>st</sup> place award at 2019 CSU Research Competition
21. Margaret Stack: President's Award at 2019 SDSU Student Research Symposium
22. Jennifer Cossaboon: Hanlon award in Graduation 2017 (Outstanding student in Public Health, SDSU, 2017)
23. Jenna Krichling: NWRI Graduate Fellowship in 2016 (\$5K)
24. Chelsea Basirico: Outstanding Student Award of Environmental Health Division, 2016
25. Claire O'Brien: Outstanding Student Award of Environmental Health Division, 2015
26. Jennifer Cossaboon: CSU COAST Graduate Research Award in 2016/SOCAL SETAC Graduate Research Award in 2016/EPA STAR Fellowship Finalist in 2015

27. 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
28. Chris Millow: EPA STAR Fellowship in 2012 (\$20K)
29. Carlos Manzano: Graduate Student Paper Awards of the Environmental Chemistry Division in 2012 ACS

Research Staff under My Supervision

1. Claudine Manabat (2023-present)
2. Jade Johnson (2022-present)
3. Margaret Stack (2020-present)
4. Kaylen Wilson (2019-present)
5. William Richardot (2018-present )
6. Katelyn Nynas (2022)
7. Jade Wong (2019-2021)
8. Daniel Chang (2018- 2020)
9. Linda Chu (2017- 2022)
10. Chelsea Basirico (2016-2017)
11. Jennifer Cossaboon (2017)
12. Claire O'Brian (2016-2017)

**VI. SERVICE FOR THE UNIVERSITY AND THE COMMUNITY**

**Service for the Department**

1. SPH Committee for Evaluation (2020-2021)
2. SPH Committee for Personnel Review (2018- 2020)
3. SPH Committee for Student Affairs (2018-present)
4. SPH Committee for Laboratory Resource (2009-present)
5. SPH International Health Committee (2009 – 2016)
6. SPH Committee for Performance Evaluation and Renewal for Accreditation (2012-2016); (2020-present)
7. SPH Committee for Student Affairs (2017-present)
8. 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
9. Lead in updating the SPH Environmental Health Division and the Environmental Health Laboratory web pages
10. Mentoring faculty: Tianying Wu, Karilyn Sant [SPH mentoring program]  
Humberto Parada [Mentor in his K01], Nicolas Lopez [SPH mentoring program]

**Service for the College**

1. College Representation on Senate Committee: Resource & Planning (2021-present)
2. College RTP committee (2021-present)
3. 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 and 2020, Health Promotion: 2019, Tox faculty: 2021),

4. Search Committee for Instructional Support Technician: 2016
5. Research Committee (2017- 2019)

### **Service for the University**

1. Faculty Search Committee (Analytical Chemistry, 2023)
2. Academic Review of the SDSU Chemistry & Biochemistry (2022)
3. SDSU's Chemical and Physical Safety Committee (2020-present)
4. "Reimagining Transboundary Water" selected as a Big Idea by Office of the President (2021-present)
5. Search Committee for the SDSU FUERTE Environmental Health Faculty on IVC (2021-2022; 2022-2023),
6. Search Committee for the Chemistry Faculty (2022-2023)
7. Mentoring the SDSU FUERTE faculty: Nicolas Lopez, Linda Lara Jacobo
8. Faculty Recruitment Committee for the SDSU FUERTE recruitment committee (2021)
9. Review of the SDSU-UCSD Joint Doctoral Program in Chemistry (2019)
10. Dean Search Committee (2017-2018)
11. SDSU Environment and Safety Committee (2014-2016)
12. Area of Excellence: Core-Member of Blue Gold (Water Scarcity) Selected in 2015
13. Recipient of 2015 The President's Leadership Fund (PLF) Faculty and Staff Excellence Award
14. 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  
Tobacco Control, 2023-present

### **Service for the Community**

1. Ocean Research Advisory Panel (that advises the Ocean Policy Committee (OPC) and provides independent recommendations to the Federal Government on matters of ocean policy) [2023-present]
2. California Environmental Contaminant Biomonitoring Program Scientific Guidance Panel (appointed by Speaker of the Assembly) [2018-2023]
3. California Ocean Protection Council's Science Advisory Team [2019-present]
4. Co-chairing Microplastic working group (Co-Chair): Microplastic Pollution in California: A Precautionary Framework and Scientific Guidance to Assess and Address Risk to the Marine Environment. 2021. California Ocean Science Trust, Sacramento, California, USA.
5. 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)
  - USC SeaGrant review (2019)
  - ESF (EU Science Foundation) Grant review (2021/2022)
  - CSU COAST research proposal review (2022)
6. External Reviewer for the RTP
7. Judge for SDSU S3 (2023)
8. Judge for Crescenta Valley High School Science Fair (2021, 2022, 2023)
9. Briefing sponsored by Senator Feinstein: Results from Seafloor Survey of DDT Dump Site off Southern California and Ecological Impacts. April 26, 2021.
10. Congressional hearing to Subcommittee on Water, Oceans, and Wildlife (Committee on Natural Resources): DDT Dumping Off the Southern California Coast: Ecological Impacts, Scientific Needs, and Next Steps. June 8, 2021.
11. 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".
12. 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.
13. 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



14. 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
15. 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
16. Vice president for Korean American Women in Science and Engineering (2010-2012)
17. Member of Executive Committee of Korean-American Scientists and Engineers Association San Diego Chapter (2012-present)
18. 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.
19. 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
20. Member of Steering Committee: Chair of the Poster Session for 2009 Symposium on Food Systems & Public Health, November 4-6, 2009, San Diego, CA.
21. 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 (Jenn Cossaboon)
  8. 2020 Outstanding Faculty Award (Margaret Stack)
  9. 2021 Outstanding Faculty Award (Jade Johnson)
  10. 2023 SDSU Alumni Distinguished Faculty Award
-