

Curriculum Vitae

NAME Inkyu Han, PhD, MPH
TITLE Associate Professor
OFFICE Department of Epidemiology and Biostatistics
 Temple University College of Public Health
 1301 Cecile B. Moore Avenue, Ritter Annex #907
 Philadelphia, PA 19122
 (215) 204-4766
EMAIL Inkyu.Han@temple.edu

EDUCATION

1997 **BS, Environmental Sciences**, Hankuk University of Foreign Studies, Korea
 1999 **MPH, Environmental Health** (Environmental Chemistry),
 Seoul National University School of Public Health, Korea
 2008 **PhD, Environmental and Occupational Health**
 Rutgers, The State University of New Jersey School of Public Health,
 Piscataway, NJ

POSTDOCTORAL TRAINING

2008-2011 **Environmental Health Sciences**, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

ACADEMIC APPOINTMENTS

2021- **Associate Professor**
 Temple University College of Public Health, Philadelphia, Pennsylvania
2012- 2021 **Assistant Professor**
 UTHHealth School of Public Health, Houston, Texas
2012- 2013 **Deputy Program Director of the Industrial Hygiene Program**
 Southwest Center for Occupational and Environmental Health (SWCOEH)
2014- 2020 **Director of Interdisciplinary Coordination, SWCOEH**
2000- 2002 **Lecturer**
 Department of Environmental Health, Wonju National College, Korea
2000- 2001 **Lecturer**
 Department of Environmental Sciences, Hankuk University of Foreign Studies,
 Korea
1998- 2000 **Special Researcher**
 Seoul National University School of Public Health Institute, Korea

MEMBERSHIP IN ADVISORY COMMITTEES

2013 – 2020 SWCOEH T42 Pilot Program
 2015/02 NIH Study Section, P42 ZES1 LWJ-D
 2019/03 University of Michigan P30 Pilot Program
 2021/06 NIH Study Section, ZES1 ARL-S (TS) Time Sensitive Mechanism
 2021- BCM Maternal and Infant Environmental Health Riskscape P50 Pilot Program

2022/02 NIH Study Section, NAME (Temporary member)
 2022 - International Society of Exposure Science General Meeting Committee
 2022 - ISES 2023 Annual Conference Technical Organizing Committee
 2023 NIH Study Section, CIHB (Temporary member)

GRANTS**Active**

NIH/NIEHS R21 ES031795 Han/Su (PI) 4/15/2020-3/31/2023

Total Cost: \$429,000

Development and Application of a Mobile Apparatus for Ultrafine Particle Inhalation Estimation in Urban Communities

NIH/NIEHS R01 ES031063 Han/Whitworth (PI) 3/5/2021 – 12/31/2024

Total Cost: \$2,253,150

Study of Cleaners in San Antonio: Immunologic and Inflammatory Responses to Total Volatile Organic Compound (VOC) Exposure

Pending

NIH/NIEHS R21 ES034438A Han (PI) 4/1/2023-3/31/2025

Total Cost: \$424,634

Identifying Spatial and Environmental Correlates of Airborne Microplastics and Nanoplastics across Philadelphia

Score: 17, 2nd percentile

NIH/NIEHS R21 ES035188 Han (PI) 4/1/2023-3/31/2025

Total Cost: \$424,538

Adaptation to nighttime indoor heat exposure: the role of the built environment and behavioral factors

Score: 39, 37th percentile

CDC/NIOSH R21 OH012595 Han (PI) 7/1/2023 – 6/30/2025

Total Cost: \$404,816

Inhalation exposure assessment to microplastics for workers in the laundry and dry-cleaning industry

Score: 39, 28th percentile

NCI R01 Wheeler (PI) 7/1/2023 – 6/30/2028

Total Cost: \$1,907,543

Assessing residential neighborhood exposome exposures and the associations with cancer incidence

Score: 11th percentile

NIH/NIA R21 Kulick (PI) 7/1/2023 – 6/30/2025

Total Cost: \$437,640

Impact of Perceived and Objective Neighborhood Environment on Mid-Life Cognitive Function in a Diverse, Under-Resourced Community

Submitted (Review in March 2023)

Completed

NIEHS P30 ES030285 Walker (PI) 4/1/2019- 6/30/2021

Total Cost: \$8,056,100

Gulf Coast Center for Precision Environmental Health

Role: Co-Investigator and Leader-In-Training

CDC/NIOSH T42 OH008421 Gimeno (PI) 7/1/2020-6/30/2021

Total Cost: \$7,640,535

Southwest Center for Occupational and Environmental Health

Role: Co-Investigator and Director of Interdisciplinary Coordination

GC-CPEH P30 ES030285 Pilot Han (PI) 4/1/2020- 3/31/2021

Total Cost: \$40,000

Characterization of organic and inorganic compounds in flavored electronic cigarette aerosols and vapor

Role: Principal Investigator

NIH/NIEHS R01ES023563 Symanski (PI) 8/1/2014 - 4/30/2020

Total Cost: \$2,721,283

Sustainable Solutions to Metal Air Pollution in Disadvantaged Neighborhoods

Role: Co-Investigator

Air Alliance Houston Han (PI) 4/1/2016 – 4/30/2019

Total Cost: \$49,842

Characterization of Particulate Air Pollution in a Community near the Port of Houston

Role: Principal Investigator

CDC/NIOSH R01OH010648 Delclos (PI) 8/1/2014 – 6/30/2018

Total Cost: \$1,250,990

Asthma in Texas Healthcare Professionals II

Role: Co-Investigator

UTHealth PRIME Whitworth (PI) 6/1/2015 – 5/31/2016

Total Cost: \$25,000

Feasibility of exposure assessment of metal exposure among African American pregnant women

Role: Co-Investigator

CDC/NIOSH T42OH008421 Symanski (PI) 7/1/2010 – 6/30/2015

Total Cost: \$6,492,575

Southwest Center for Occupational and Environmental Health

Role: Co-Investigator

SWCOEH Pilot Grant Han (PI) 7/1/2012-6/30/2013

Total Cost: \$10,000

Development of Analytical Method and Validation of Personal Samplers for Alkylanilines

Role: Principal Investigator**NIH/NIEHS 5P30ES007784-15****Johnson (PI)****4/30/2012-3/31/2013**

Total Cost: \$25,000

*Effects of Heat and Air Pollutants on Childhood Asthma in an Urban Community***Role: Co-Investigator****EPA STAR RD 83241701****Breyse/ Geyh (PI) 10/1/2005-9/30/2011**

Total Cost: \$7,993,275

*Johns Hopkins PM Research Center: Project 2- PM Characterization and Exposure Assessment***Role: Investigator****PUBLICATIONS****Published/ Accepted**

1. Yang WH, Kho YL, **Han IK**, Lee CM, Zong MS, Chung MH. 2000. Use of Nitrogen Dioxide as Exposure Marker of Passive Smoking for Non-smoking Service Workers at Restaurants. *Journal of Environmental and Sanitary Engineering*. 15.
2. Jung DH, Cho I, **Han IK**, Chung MH. 2002. Effects of TiO₂ on treatment of organic compounds in wastewater. *Korean Society of Environmental Sanitation*. 13(4). 455-461.
3. Fan Z, Wescheler C, **Han IK**, Zhang J. 2005. Co-formation of second aerosol particles. *Atmospheric Environment*. 39(28). 5171-5182.
4. McCreanor J, Cullinan P, Nieuwenhuijsen M, Stewart-Evans J, Malliarou E, Jarup L, Harrington R, **Han IK**, Ohman-Strickland P, Chung KF, Zhang J. 2007. Respiratory Effects of Real-Life Diesel Traffic in Persons with Asthma. *New England Journal of Medicine*. 357(23):2348-2358. PMID: 18057337 [PubMed - indexed for MEDLINE]
5. Zhang J, **Han IK**, Zhang L, Crain W. 2008. Hazardous Chemicals in Synthetic Turf Materials and Their Bio-accessibility in Digestive Fluids. *Journal of Exposure Science and Environmental Epidemiology*. 18:600-607.
6. **Han IK**, Duan X, Zhang L, Yang H, Rhoads G, Wei F, Zhang J. 2008. 1-Hydroxypyrene concentrations in first morning voids and 24-hour composite urine: Intra- and inter-person comparisons. *Journal of Exposure Science and Environmental Epidemiology*. 18: 477-485. PMID: 18059422 [PubMed - indexed for MEDLINE]
7. Zhang J, McCreanor JE, Cullinan P, Chung KF, Ohman-Strickland P, **Han IK**, Jarup L, Nieuwenhuijsen M. 2009. Health effect of real-world exposure to diesel exhaust in persons with asthma. *Research Report Health Effects Institute*. 138: 5-109.
8. Wei Y, **Han IK**, Shao M, Hu M, Zhang J, Tang X. 2009. PM_{2.5} Constituents and oxidative DNA damage in humans. *Environmental Science and Technology*. 43(13): 4757-4762. PMID: 19673262 [PubMed - indexed for MEDLINE]
9. Wei Y, **Han IK**, Shao M, Hu M, Zhang J, Tang X. 2010. Personal exposure to particulate PAHs and anthraquinone and oxidative DNA damages in human. *Chemosphere*. 65(81): 1280-1285. PMID: 2086974 [PubMed - indexed for MEDLINE]

10. **Han I**, Ramos-Bonilla JP, Rule AM, Mihalic JN, Breysse PN, Geyh AS. 2011. Comparison of spatial and temporal variations in p-PAH, BC, and p-PAH/BC ratio in six US counties, *Atmospheric Environment*. 45(12): 7644-7652.
11. **Han I**, Mihalic JN, Rule AM, Ramos-Bonilla JP, Peng RD, Geyh AS, Breysse PN. 2012. Assessment of Heterogeneity of Metal Composition of Fine Particulate Matter Collected From Eight US Counties using Principal Component. *Journal of Air & Waste Management Association*. 62(7): 773-782. PMID: 22866579 [PubMed - indexed for MEDLINE]
12. Datta S, Rule AM, Mihalic JN, Chillrud SN, Bostick BC, Ramos-Bonilla JP, **Han I**, Polyak LM, Geyh AS, Breysse PN. 2012. Use of X-ray Absorption Spectroscopy to Speciate Manganese in Airborne Particulate Matter from Five Counties Across the United States. *Environmental Science and Technology*. 46(6): 3101-3109. PMID: 22309075 [PubMed - indexed for MEDLINE]
13. Shim J, Rao R, Beebe K, Neckers L, **Han I**, Nahta R, Liu J. 2012. Selective inhibition of Her2-positive breast cancer cells by the HIV protease inhibitor nelfinavir through Hsp90. *Journal of National Cancer Institute*. 104(20): 1576-1590. PMID: 23042933
14. **Han I**, Lee JS, Eo SM. 2014. Measurement of monocyclic aromatic amines in an urban air. *Environment and Pollution*. 3(3): 14-20.
15. Dickerson A, Rahbar MH, **Han I**, Bakian AV, Bilder DA, Harrington RA, Pettygrove S, Durkin M, Kirby RS, Wingate MS, Tian LH, Zahorodny WM, Pearson DA, Moye LA, Baio J. 2015. Autism Spectrum Disorder Prevalence and Proximity to Industrial Facilities. *Science of the Total Environment*. 536: 245-251. PMID: 26218563.
16. Hardos J, Whitehead LW, **Han I**, Ott DK, Waller DK. 2016. Depression prevalence and exposure to organophosphate esters in aircraft maintenance workers. *Aerospace Medicine and Human Performance*, 87(7): 712-717.
17. Dickerson A, Rahbar MH, Bakian A, Bilder D, Harrington R, Pettygrove B, Durkin M, Kirby R, **Han I**, Moye L, Pearson D, Wingate M, Zahorodny W. 2016. Autism Spectrum Disorder prevalence and associations with air concentrations of lead, mercury, and arsenic. *Environmental Monitoring and Assessment*. 188(7): 407. doi: 10.1007/s10661-016-5405-1
18. **Han I**, Symanski E, Stock TH. 2017. Feasibility of Low-cost Portable Particle Monitors for Measurement of Fine and Coarse Particulate Matter in Urban Ambient Air. *Journal of Air & Waste Management Association*. 67(3):330-340. doi: 1080/10962247.2016.1241195.
19. **Han I**, Guo Y*, Afshar M, Stock TH, Symanski E. 2017. Comparison of trace elements in size-fractionated particles in a low socioeconomic status (SES) community and a high SES community in Houston, TX. *Environmental Monitoring and Assessment*. 189(2): 67. doi:10.1007/s10661-017-5780-2
20. Whitworth KW, **Han I**, Afshar M, Mei Y, Berens PD, Sharma SV, Symanski E. 2017. Accessing Disadvantaged Pregnant Women in Houston, Texas, and Characterizing Biomarkers of Metal Exposure: A Feasibility Study. *International Journal of Environmental Research and Public Health*. 145(5). 474. doi:10.3390/ijerph14050474.
21. **Han I**, Samarneh L*, Symanski E, Stock TH. 2018. Impact of Transient Noise and Air Pollution Affected by Truck and Train Traffic in Underserved Communities. *Transportation and Research D*. 63:706-717.

22. Rammah A, Whitworth KW, **Han I**, Chan W, Jimenez M, Symanski E. 2019. A Mixed-Methods Study to Examine the Role of Psychosocial Stress and Air Pollution on Hypertension in Mexican-origin Hispanics. *Journal of Racial and Ethnic Health Disparities*. 6(1):12-21. doi: 10.1007/s40615-018-0490-1. PubMed PMID: 29679333; PubMed Central PMCID: PMC6347581.
23. Rammah A, Whitworth KW, **Han I**, Chan W, Symanski E. 2019. PM_{2.5} Metal constituent exposure and stillbirth risk in Harris County, Texas. *Environmental Research*. 2019 May 31;176:108516. doi: 10.1016/j.envres.2019.05.047. PubMed PMID: 31195296.
24. Rammah A, Whitworth KW, **Han I**, Chan W, Wendt-Hess J, Symanski E. 2019. Time-Varying Exposure to Ozone and Risk of Stillbirth in a Nonattainment Urban Region. *American Journal of Epidemiology*. 188(7):1288-1295. doi: 10.1093/aje/kwz095. PubMed PMID: 31111863.
25. Rammah A, Whitworth KW, **Han I**, Chan W, Hess JW, Symanski E. 2019. Temperature, placental abruption and stillbirth. *Environmental International*. doi:0.1016/j.envint.2019.105067. PubMed PMID: 31376592.
26. An-Han H, **Han I**, McCurdy S, Whitworth K, Delclos G, Christensen B, Wu S, Rammah A, Memo, Afshar M, Symanski E. 2020. The Intercontinental Chemical Fire Study: A Rapid Response to an Industrial Disaster to Address Resident Concerns in Deer Park, Texas. *International Journal of Environmental Research and Public Health*. 17(3): 986; <https://doi.org/10.3390/ijerph17030986>.
27. **Han I**, Whitworth KW, Zhang X, Afshar M, Berens PD, Symanski E. 2020. Characterization of urinary concentrations of heavy metals among socioeconomically disadvantaged black pregnant women. *Environmental Monitoring Assessment*. 192(3):200. doi: 10.1007/s10661-020-8163-z. PMID: 32107644.
28. Symanski E, An-Han H, Hopkins L, Smith MA, McCurdy S, **Han I**, Jimenez M, Markham C, Richner D, James D, Flores J. 2020. Metal Air Pollution Partnership Solutions: Building an Academic-Government-Community-Industry- Collaboration to Improve Air Quality and Health in Environmental Justice Communities in Houston. *Environmental Health*. 19(1):39. doi: 10.1186/s12940-020-00590-1. PMID: 32248802.
29. **Han I**, Richner D, An-Han H, Raun L, James D, Symanski E. 2020. Evaluation of metal aerosols in four communities adjacent to metal recycling facilities in Houston, Texas. *Journal of Air and Waste Management Association*. 70(5):568-579. doi: 10.1080/10962247.2020.1755385.
30. Symanski E, An-Han H, **Han I**, McDaniel M, Whitworth KW, McCurdy S, Perkison WB, Rammah A, Tee Lewis PG, Delclos GL, Craft E, Bondy M, Walker CL, Hopkins L, Cedeno Laurent JD, James D. 2021. Responding to Natural and Industrial Disasters: Partnerships and Lessons Learned. *Disaster Medicine and Public Health Preparedness*. 1-4. Doi:10.1017/dmp.2020.467.
31. Oyer-Peterson K, Gimeno D, **Han I**, Delclos G, Brooks E, Afshar M, Whitworth K. 2021. A pilot study of total personal exposure to volatile organic compounds among Hispanic female

domestic cleaners. Journal of Occupational and Environmental Hygiene.
<https://doi.org/10.1080/15459624.2021.2000615>.

32. **Han I**, Whitworth KW, Christensen B, Afshar M, An Han H, Rammah A, Oluwadairo T*, Symanski E. 2022. Heavy Metal Pollution of Soils and Risk Assessment in Houston, Texas following Hurricane Harvey. Environmental Pollution. 296: 118717.
<https://doi.org/10.1016/j.envpol.2021.118717>

33. Oluwadairo T*, Whitehead L, Symanski E, Bauer C, Carson A, **Han I**. 2022. Effects of Aerosol Particle Size on the Measurement of Ambient PM_{2.5} with a Low-Cost Particulate Matter Sensor Monitor. Environmental Monitoring and Assessment. 194:56.
<https://doi.org/10.1007/s10661-021-09715-6>

34. Oluwadairo T*, Whitehead L, Symanski E, Bauer C, Carson A, **Han I**. 2022. Effects of traffic on the accuracy and bias of Low-Cost Particulate Matter Sensor measurements. International Journal of Environmental Research and Public Health. [https://doi: 10.3390/ijerph19031086](https://doi.org/10.3390/ijerph19031086).

35. **Han I**, Seo J, Barr DB, An Han H, Afshar M. Chao Y. 2022. Evaluating Indoor Air Phthalates and Volatile Organic Compounds in Nail Salons in the Greater New York City Area: A Pilot Study. International Journal of Environmental Research and Public Health. 19(19), 12411;
<https://doi.org/10.3390/ijerph191912411>.

36. Symanski E, Whitworth KW, An-Han H, **Han I**, Rammah A, Alvarez J, Moussa I. 2023. A pilot study of children's metal exposures living in environmental justice communities near metal recycling facilities in Houston, Texas. Environmental Justice. In Press.

* *Student author*

AWARDS AND HONORS

1997-1999	Fellowship by Seoul National University Foundation
1999	The Best Master Thesis Award by Seoul National University
2001	Travel Award by the International Society of Exposure Science 2001 Conference
2005	Emily and Leon Goldstein Award for Excellence in Research by UMDNJ
2005	The Best Ph.D. Student Research Award by UMDNJ
2006	The Best Ph.D. Student Research Award by UMDNJ
2012	Career Development Award by MD Anderson Cancer Center for Research on Environmental Disease

SERVICE ON UNIVERSITY COMMITTEES AND COMMUNITIES

2012- 2021	Chemical Safety Committee, UTHealth at Houston
2013- 2021	Environmental and Occupational Health Admission Committee
2014- 2015	SWCOEH Faculty Search Committee
2014- 2015	Chair, EOHS Doctoral Preliminary Exam Committee
2014- 2021	Chemistry Coach for Houston High School Teachers
2016- 2021	Scientific Advisory Committee for Air Alliance Houston

2021- Present	Scientific Advisory Committee for Houston Air Research Center
2021- Present	Temple Giveback Committee, Temple University
2021- Present	Epidemiology Faculty Search Committee, Temple University
2021- Present	Paley LEED/WELL Committee, Temple University
2021- Present	Epidemiology PhD Preliminary Exam Committee, Temple University
2022	Chair, Environmental Health MPH Curriculum Committee, Temple University

PROFESSIONAL SOCIETIES

International Society of Exposure Science
 Air and Waste Management Association
 American Association for Aerosol Research
 American Chemical Society
 Citizen Science Association

EDITORIAL ACTIVITIES

2022 – 2023	Guest Editor for International Journal of Environmental Research and Public Health
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Reviewer for:

Atmospheric Environment
 Atmospheric Research
 Environmental Health and Perspectives
 Environmental Science and Technology
 Indoor Air
 Journal of Air and Waste Management Association
 Journal of Environmental Monitoring
 Journal of Occupational and Environmental Hygiene
 Science of the Total Environment
 Biomarkers
 Cancer Epidemiology Biomarkers and Prevention
 Environmental Pollution
 Environmental Research

INVITED LECTURES/ TALK

February 24, 2005	International Topical Meeting on Environmental Reliability and Risk Studies, Seoul National University, Korea, Sponsored by US National Science Foundation and co-sponsored by Rutgers University, Seoul National University and UMDNJ, presented a lecture entitled “Characterization of Diesel Exhaust Particles in an Urban Street Canyons.”
October 5, 2010	Seoul National University Environmental Health Seminar, Seoul, Korea, presented an invited lecture entitled “Physical and Chemical Characterization of Ambient Particles across the United States”

October 21, 2011	University of Texas School of Public Health Environmental Health Seminar, Houston, TX, presented an invited lecture entitled "Estimation of Combustion Source Contribution in Six US Counties using a PAH/BC Ratio"
November 4, 2013	Texas A&M University Environmental Toxicology Seminar, College Station, TX, presented an invited lecture entitled "Air Quality and Health: Location, Location, Location."
May 25, 2014	Seoul National University Graduate School of Public Health, Seoul, Korea, presented an invited lecture entitled with "Air quality in Houston with newly implemented National Ambient Air Quality Standards."
May 27, 2014	Hankuk University of Foreign Studies Environmental Science Seminar, Korea, presented an invited lecture entitled with "Exposure to traffic related air pollutants and oxidative stress response"
December 1, 2016	University of Texas Arlington, Arlington, TX, presented an invited lecture entitled with "Characterization of airborne trace elements in a vulnerable community in Houston."
April 10, 2018	University of Utah, Salt Lake City, UT, presented an invited seminar entitled with "Biomarkers of exposure, dose, and oxidative stress in urban vulnerable populations."
April 18, 2019	University of Illinois, Chicago, IL, presented an invited seminar entitled with "Disparities in environmental exposures to metals in Houston, Texas."
February 19, 2020	University of California, Los Angeles, CA, presented an invited seminar, "Exposure Sciences in a Community-Based Participatory Research."
March 10, 2020	City University of New York, New York, NY, presented an invited seminar, "Metal exposure assessment and inhalation risk assessment in environmental justice communities in Houston, TX."
October 21, 2021	Philadelphia Department of Public Health Air Pollution Control Board Meeting (Virtual), "Assessing Inhalation Exposure to Airborne Microplastics and Nanoplastics in Philadelphia."
November 19, 2021	Seoul National University, Seoul, Korea (Virtual), "Community Engaged Metal Air Exposure Assessment and Public Health Action Plan."

TEACHINGHankuk University of Foreign Studies, Korea

2000	Instructor, Introduction to Environmental Sciences
2001	Instructor, Environmental Organic Chemistry

Wonju National College, Korea

2000-2002	Instructor, Environmental Sanitation
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Rutgers, The State University of New Jersey School of Public Health

2003 Guest Lecturer, Principles of Environmental Health (1 lecture)

Johns Hopkins Bloomberg School of Public Health

2009-2010 Guest Lecturer, Industrial Hygiene (4 lectures)

UTHealth School of Public Health

2012 - 2021 Guest Lecturer, Air and Environment (1 lecture)

2012 - 2021 Guest Lecturer, Environmental Microbiology (1 lecture)

2013 Guest Lecturer, Environmental Sampling and Analysis (3 lectures)

2013 - 2018 Instructor, Overview of Environmental Health (3 credits)

2013 - 2017 Instructor, Contemporary Issues in Environmental and Occupational Health (3 credits- Hybrid course)

2014 - 2021 Instructor, Environmental Sampling and Analysis (4 credits)

2015 - 2021 Guest Lecturer, Global Environmental Health (1 lecture)

2016 - 2021 Guest Lecturer, Environmental Epidemiology (1 lecture)

2019 – 2021 Instructor, Human Ecology and Public Health (3 credits- online)

Temple University College of Public Health

2022 - Instructor, ENVH5004 Environmental Health (1.5 credits- online)

STUDENT MENTORINGGraduates

Temitope Oluwadairo	PhD	2016- 2021	Role: Advisor/ Dissertation Committee Chair
Tsai-Shu Chu	PhD	2016- 2019	Role: Advisor/ Dissertation Committee Chair
Aisha Dickerson	PhD	2012- 2014	Role: Dissertation Committee
Jennifer Hardos	PhD	2013- 2015	Role: Dissertation Committee
Jenil Patel	PhD	2015-2018	Role: Dissertation Committee
Amal Rammah	PhD	2015-2018	Role: Dissertation Committee
Payel Acharya	MPH	2014- 2015	Role: Thesis advisor
Angela Sung	MPH	2014- 2016	Role: Advisor
Justin Lopez	MPH	2014- 2016	Role: Thesis advisor
Parinta Sah	MPH	2015- 2016	Role: Thesis committee
Bradon Blair	MPH	2013- 2016	Role: Advisor
Joshua Lew	MPH	2015- 2017	Role: Advisor
Jordan Gowen	MPH	2016- 2018	Role: Advisor
Shelby Bohannon	MPH	2016- 2018	Role: Advisor
Haoming Jian	MPH	2016- 2018	Role: Advisor
Brittany Carol	MPH	2019- 2021	Role: Advisor

Undergraduate

Lara Samarneh BS 2018 Role: Summer internship advisor

Winsome Potter	BS	2022	Role: Internship advisor
Anna Mussina	BS	2023	Role: Internship advisor
Pheoby Kenschaft	BS	2023	Role: Internship advisor

PRESENTATIONS

1. Han IK, Park CK, Chung M, Zhang J. Measurement of PM₁₀ and Particle-Phase PAHs from Anthropogenic Sources in Korea. International Society and Exposure Analysis and Environmental Epidemiology, Vancouver, BC, Canada, August 11-15, 2002.
2. Han IK, Park CK, Chung M, Zhang J. Emissions of Particle Phase PAHs from Anthropogenic Sources in Korea. American Public Health Association 130th APHA Annual Conference, November 9-14, 2002.
3. Fan Z, Han IK, Weschler C, Zhang C, Zhang J. Hydrogen Peroxides and Ultra-fine Particles Resulting from the Reactions of O₃ with Mixtures of Volatile Organic Compounds (VOC) under Simulated Indoor Conditions. International Society of Exposure Analysis- 13th Annual ISEA conference, Piemonte, Italy, September 21-25, 2003.
4. Zhang J, Wei F, Zhang L, Yang H, Duan X, Liu W, Han, IK, Rhoads G. Can Urinary Metabolites Predict Exposures to Pyrene, B[a]P, and other PAHs? International Society of Exposure Analysis- 13th Annual ISEA conference, Piemonte, Italy, September 21-25, 2003.
5. Han IK, Zhang J, Wei F, Zhang L, Yang H, Duan X, Liu W, Rhoads G. Relationships between hydroxylated metabolites in urine and pyrene/benzo[a]pyrene exposure. International Society of Exposure Analysis- 14th Annual ISEA conference, Philadelphia, PA, October 17-21, 2004.
6. Han IK, Zhang J, Zhang L, Harrington R. Impact of Diesel Powered Vehicles on Ambient Air in a London Street, International Topical Meeting on Environmental Reliability and Risk Studies. Seoul, Korea, February 20-22, 2005.
7. McCreanor J, Stewart-Evans J, Han IK, Harrington R, Malliarou E, Zhang J, Nieuwenhuijsen M, Cullinan P, Chung F, Ohman-Strickland P, Jarup L, Svartengren M. Health Effects of Diesel Exhaust in Asthmatic Patients: A Real-World Study in a London Street. Health Effects Institute 2005 Annual Conference, Baltimore, MD, April 17-19, 2005.
8. Han IK, Zhang J, Zhang L, McCreanor JE, Cullinan P, Ohman-Strickland P, Harrington R, Nieuwenhuijsen M. Diesel exhaust and biomarkers in London, U.K., UMDNJ-SPH Research Day, Piscataway, NJ, April 15, 2005.
9. Han, IK, Zhang J, Zhang L, McCreanor JE, Nieuwenhuijsen M, Cullinan P, Chung F, Ohman-Strickland P, Stewart-Evans J, Harrington R, Malliarou E. Can 1-hydroxypyrene be an Indicator of Short-term Exposure to Vehicular Diesel Exhaust? International Society of Exposure Analysis-15th Annual ISEA conference, Tucson, AZ, October 30-November 3, 2005.
10. McCreanor J, Zhang J, Cullinan P, Nieuwenhuijsen MJ, Chung F, Ohman-Strickland P, Stewart-Evans J, Malliarou E, Han IK, Svartengren M, Jarup L. Short-term Exposure to Diesel Exhaust Worsens Asthma: Evidence from A Real-World Study. Health Effects Institute 2006 Annual Conference, San Francisco, CA, April 9-11, 2006.
11. Han IK, Stewart-Evans J, Malliarou E, McCreanor J, Svartengren M, Ohman-Strickland P, Jarup L, Cullinan P, Chung F, Zhang J, Nieuwenhuijsen M. J. Short-term Exposure to Diesel Exhaust Worsens Asthma. UMDNJ-SPH Research Day, Piscataway, NJ, April 11, 2006.

12. Han IK, Duan X, Yang H, Zhang L, Ohman-Strickland P, Wei F, Rhoads G, Zhang J. Seasonal and Inter-Personal Variability of 1-Hydroxypyrene in Urine. ISEE-ISEA 2008 Joint Conference, Pasadena, CA, October 12-16, 2008.
13. Han IK, Groopman JD, Kensler T, Geyh AS. Development and validation of GC/MS method for simultaneous quantification of alkylanilines in air. International Society of Exposure Sciences. Minneapolis, MN, November 2 -5, 2009.
14. Geyh AS, Mihalic JN, Han IK, Ramos-Bonilla JP, Rule AM, Polyak LM, Breyse PN. Difference In Characteristics of Fine Ambient Particles Collected From Cities Across the United States. International Society of Exposure Sciences. Minneapolis, MN, November 2 -5, 2009.
15. Polyak LM, Rule AM, Kesavan JS, Geyh AS, Mihalic JN, Han IK, Ramos-Bonilla JP, Breyse PN. Side-by-Side Comparison of Two Ultrafine Particle Counters Measuring Ambient Particulate Matter. International Society of Exposure Sciences. Minneapolis, MN, November 2 - 5, 2009.
16. Mihalic JN, Han IK, Ramos-Bonilla JP, Rule AM, Polyak LM, Breyse PN, Geyh AS. Differences in Characteristics of Fine Ambient PM Collected from Cities Across the U.S. Winter Conference on Plasma Spectrochemistry, Fort Myers, FL, January 3-9 2010.
17. Rule AM, Geyh AS, Mihalic JN, Ramos-Bonilla JP, Han IK, Polyak LM, Breyse PN. Using a Scanning Mobility Particle Sizer (SMPS) to evaluate Seasonal and Regional Differences in Ultrafine PM in Four Counties Across the continental USA. American Association for Aerosol Research Specialty Conference. San Diego, CA. March 22-26, 2010.
18. Han IK, Ramos-Bonilla JP, Rule AM, Mihalic JN, Polyak LM, Breyse PN, Geyh AS. The spatial and temporal relationship between ambient black carbon and PAH in four U.S. counties. American Association for Aerosol Research Specialty Conference. San Diego, CA. March 22-26, 2010.
19. Ross J, Rule AM, Geyh AS, Mihalic JN, Ramos-Bonilla JP, Han IK, Polyak LM, Breyse, PN, Chillrud SN. Platinum group elements in size-segregated samples of ambient airborne particulate matter from U.S. cities. American Association for Aerosol Research Specialty Conference. San Diego, CA. March 22-26, 2010.
20. Datta S, Rule AM, Chillrud SN, Mihalic JN, Ramos-Bonilla JP, Han IK, Polyak LM, Breyse PN, Geyh AS. Use of near-edge- X-ray Absorption Spectroscopy to Speciate Manganese in Airborne Particulate Matter from Six Cities in Continental USA. American Association for Aerosol Research Specialty Conference. San Diego, CA. March 22-26, 2010.
21. Han I, Mihalic JN, Ramos-Bonilla JP, Rule AM, Polyak LM, Peng RD, Breyse PN, Geyh AS. Defining heterogeneity of ambient fine particles collected from eight US counties using principal component analysis. American Association for Aerosol Research Annual Conference. Portland, OR. October 25-29, 2010.
22. Han I, Park CG, Lee JS, Eo SM, Chae YZ, Geyh AS., Seasonal variations of volatile organic compounds and gas phase PAHs in Seoul, Korea. American Association for Aerosol Research Annual Conference, Orlando, FL. October 3-7, 2011.
23. Pollack L, Mihalic JN, Prabhu R, Agarwala A, McGlothlan J, Stansfield K, Han I, Guilarte T, Geyh A, Impact of Mn exposure on cognitive function in a Murine model. International Society of Exposure Science, Baltimore, MD. October 23-27, 2011.
24. Han I, Mihalic JN, Rule AM, Lee J, Eo S, Groopman JD, Geyh AS, Breyse PN, Validation of analytical and field sampling methods for personal air exposure to monocyclic

aromatic amines. International Society of Exposure Science, Baltimore, MD. October 23-27, 2011.

25. Rule AM, Geyh AS, Mihalic JN, Ramos-Bonilla JP, Han I, Polyak LM, Breysse PN. Using a Scanning Mobility Particle Sizer (SMPS) to evaluate temporal and regional differences in ultrafine PM in four counties across the continental US. International Society of Exposure Science, Baltimore, MD. October 23-27, 2011.

26. Han I, Rule AM, Mihalic JN, Ramos-Bonilla JP, Polyak LM, Geyh AS, Breysse PN. Use of Aerodynamic Particle Sizer to compare spatial and temporal variations in coarse PM mass in four US counties. International Society of Exposure Science, Baltimore, MD. October 23-27, 2011.

27. Rule AM, Polyak LM, Geyh AS, Mihalic JN, Ramos-Bonilla JP, Han I, Breysse PN. Side by side comparison of two ultrafine particle counter used to estimate the effective density of an urban aerosol. International Society of Exposure Science, Baltimore, MD. October 23-27, 2011.

28. Han I, Stock TH, De Los Reyes JM, Delclos GL. Associations between personal exposure to temperature and ambient temperature in middle-school children with asthma. International Society of Exposure Science, Seattle, WA. October 28- November 1, 2012.

29. Han I, Guo Y, Characterization of Size-Segregated Particulate Matter in Houston TX. American Association for Aerosol Research, Portland, OR, September 30 – October 4, 2013.

30. Han I, Guo Y, Afshar M. Land Use Patterns and Size-Resolved Polycyclic Aromatic Hydrocarbons in an Urban Air. The Geological Society of America, Denver, CO, October 27-30, 2014

31. Han I. Measurement of Monocyclic Aromatic Amines in an Urban Air. American Chemical Society National Meeting, Dallas, TX, March 16-20, 2014.

32. Guo Y, Afshar M, Han I. Intra-urban Spatial and Temporal Comparison of Fine and Quasi-Ultrafine Particles in Houston, TX. International Conference on Environmental Science and Technology, Houston, TX, June 9 -13, 2014.

33. Han I, Guo Y, Afshar M. Particle size distributions of trace elements in a community near industrial and traffic sources. American Chemical Society National Meeting, Boston, MA, August 16-20, 2015.

34. Han I, Samarneh L, Symanski E. Effects of train and truck traffic on noise levels in urban communities. Acoustical Society of America. Boston, MA, June 25- 29, 2017.

35. Han I, Afshar M, Symanski E. Characterization of Particulate Air Pollution in a Community near the Port of Houston. National Environmental Monitoring Conference, Washington DC, August 7-11, 2017.

36. An-Han H, Han I, Hopkins L, Richner D, Smith MA, Jimenez M, Markham C, McCurdy S, Flores J, James D, Symanski E. Metal Air Pollution Partnership Solutions (MAPPS): Community-driven Initiatives to Improve Environmental Health Equity in Houston Neighborhoods. NIEHS Partnerships for Environmental Public Health Annual Meeting. Durham, NC, February 11-13, 2020.

37. Han I, An-Han H, Afshar M. Air Pollution Sensors and Rapid Disaster Response: Air Quality Monitoring in Residential Areas During Chemical Plant Fire. National Environmental Health Association, New York, NY, July 13-16, 2020.

38. Han I, Lee JH, Su W. Characterization of size-fractionated aerosols from electronic cigarette with pod cartridge and modifiable (Pod-Mods) system. International Society of Exposure Science. Virtual Conference, August 30- September 2, 2021.
39. Han I, Seo JY, Barr DB, An-Han H, Afshar M, Chao Y. Feasibility of using a community engaged approach to measure volatile organic compounds in nail salons in New Jersey and New York. American Industrial Hygiene Association Conference. Nashville, TN, May 23 – 25, 2022.
40. Han I, Lee JH, Su W, Afshar M. Community exposure assessment of heavy metals in ultrafine particulate matter near an industrial complex. International Society of Exposure Science. Lisbon, Portugal. September 24 – 30. 2022.
41. Lee JH, Su W, Han I. Effects of atomization power and flavors on size-resolved e-cigarette aerosol mass and respiratory deposition. International Society of Exposure Science. Lisbon, Portugal. September 24 – 30. 2022.