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1. Education

- 2007 Ph.D. in Environmental Health Sciences, University of Michigan, Ann Arbor, Michigan, USA
- 2001 M.S. in Environmental Engineering, Nankai University, Tianjin, China
- 1998 B.S. in Environmental Sciences, Nankai University, Tianjin, China

2. Professional Appointments

- 2015- Associate Professor, School of Public Health, University of Memphis, Memphis, TN
- 2009- Graduate Faculty, University of Memphis, Memphis, TN
- 2009-2015 Assistant Professor, School of Public Health, University of Memphis, Memphis, TN
- 2007-2009 Postdoc, School of Public Health, University of Michigan, Ann Arbor, MI
- 2002-2007 Research Assistant, School of Public Health, University of Michigan, Ann Arbor, MI
- 2001-2002 Research Associate, College of Environmental Sciences & Engineering,
Nankai University, Tianjin, China
Engineer, Institute of Environmental Planning and Assessment,
Nankai University, Tianjin, China

3. Research Interests

Air pollution; Exposure assessment; Risk assessment; Sampling and analytical techniques for air pollutants; Indoor air quality (IAQ); Healthy homes; Environmental disparity; Environmental Tobacco Smoke (ETS).

4. Research Projects

4.1 Extramural Research Support

- (1) EPA/Shelby County Chunrong Jia (PI) 04/01/21-03/31/24
Field validation of miniature thermal desorption samplers for sampling and analysis of volatile and semi-volatile organic compounds in the ambient air
Total budget: \$340,516
- (2) JPB Foundation/Harvard University Chunrong Jia (PI) 07/01/21-06/30/23
Establishing a "Birth Cohort" of homes: Investigating changes in VOC composition of indoor air in new housing as it becomes occupied
Budget: \$24,142
- (3) Harvard University Chunrong Jia (PI) 09/01/20-09/30/21
GC/MS Analysis of Samples from the Controlled Human Infection Model
Budget: \$7,000

- (4) Northeastern University Chunrong Jia (PI) 03/01/20-12/31/21
 Volatile Organic Compound Monitoring for Collective Efficacy with Karnes Area Residents for the Environment (KARE)
 The objective of this study is measure volatile organic compound in the ambient air in Karnes, TX and address the environmental justice issues relating to oil production.
 Budget: \$3,600
- (5) Urban Child Institute Debra Bartelli (PI) 07/01/19-06/30/21
 Promoting Safe and Healthy Environments in Early Childhood Learning Center
 The objective of this program is to evaluate early childhood exposure to environmental toxins in ECLCs, identify the key hazards, and implement source remediation and removal strategies to promote healthy indoor environments.
 Budget: \$150,000 Role: Co-investigator
- (6) Harvard University Chunrong Jia (PI) 07/01/17-06/30/18
 Dusty Dorm Study
 The goal of this study is to evaluate the efficacy of filters in reducing particulate matter and volatile organic compounds in dorms
 Budget: \$5,500
- (7) HUD Diana Hernandez (PI) 11/01/16-12/31/20
 Evaluating Compliance and Refining Enforcement of Smoke-free Housing Policy in Low-Income Multiple Unit Housing
 Total budget: \$700,000; UofM contract: \$30,000
 Role: Co-investigator
- (8) EPA XA-00D42616/Shelby County Chunrong Jia (PI) 05/12/16-12/31/19
 Characterizing Community Exposure to Polycyclic Aromatic Hydrocarbons (PAHs) in a Tri-State Area
 The overall objective of this study is to delineate the concentrations and distributions of PAHs in ambient air in Memphis Tri-state Area, identify major sources and characterize near-source PAH profiles, and assess non-carcinogenic and carcinogenic risks.
 Total budget: \$545,407
- (9) City of Memphis Chunrong Jia (PI) 12/01/16-08/31/17
 Linking Home Energy Insecurity to the Built Environment and Population Health in Memphis
 This study aims to collect home energy insecurity (HEI) data in Memphis and assess the linkage of HEI with the built environment and health.
 Budget: \$10,000
- (10) City of Memphis Pratik Banerjee (PI) 12/01/16-08/31/17
 Integrated Healthy Homes Assessment and Intervention for Children in Memphis
 Budget: \$2,000 Role: Co-investigator
- (11) JPB Foundation-Harvard University Chunrong Jia (PI) 10/01/14-06/30/19
 Fellow of JPB Environmental Health Fellowship Program
 Budget: \$350,000

(12) EPA XA-95490112/Shelby County Chunrong Jia (PI) 04/01/12-03/31/16
Reducing Exposure to Airborne Chemical Toxics (REACT) via Community-Scale Air Monitoring in Memphis

The overall objective of this project is to characterize the distribution and concentrations of ambient air toxics in Memphis, identify major sources, and estimate non-carcinogenic and carcinogenic risks.
Total budget: \$310,968

(13) Gemvax &Kael, Inc. Chunrong Jia (PI) 04/01/12-09/30/12
Monitoring Airborne Siloxanes in Semiconductor Fabrication Plants

The goal of this project is to establish an adsorbent sampling, thermal desorption and gas chromatography/ mass spectrometry method for monitoring trace-level trimethylsilanol in indoor air in semiconductor fabs.
Budget: \$1,400

(14) Health Effects Institute/EPA Batterman (PI) 09/01/10-12/31/12
Modeling and Analysis of Personal Exposure to Pollutant Mixtures: Further Analysis of the RIOPA Data

This project aims to identify and characterize exposure distributions, exposures to pollutant mixtures, inter-pollutant dependencies, and exposure determinants.
Role: Proposal developer and subcontract PI
Total budget: \$158,640; Sub-award budget: \$5,000

4.2 Internal Research Support

(15) FedEx Institute of Technology Chunrong Jia (PI) 05/01/19-12/31/20
Profiles of Chemical Contaminants and Antibiotic Resistance in Surface Soil of Urban Community Gardens

The overall objective of this study is to characterize chemical contamination and antibiotic resistance genes (ARGs) in surface soil of community gardens in urban areas through a partnership among university researchers, community stakeholders, and government agencies.
Budget: \$10,000

(16) University of Memphis Chunrong Jia (PI) 11/01/18-12/31/19
Memphis Environmental Health Research Community (MEHRC)

The goal of MEHRC is to understand how exposures to chemicals and their interactions with non-chemical stressors and socioeconomic status cause environmental health disparities in vulnerable and/or disadvantaged populations at varying life stages.
Budget: \$2,500

(17) FedEx Institute of Technology Chunrong Jia (PI) 04/01/17-12/31/18
Developing a Modular Unmanned Aerial Vehicle (UAV) Platform for Air Pollution Profiling and Emergency Monitoring

The overall objective of this study is to develop a modular unmanned aerial vehicle (UAV) platform and demonstrate its applications in air pollution profiling and emergency monitoring.
Budget: \$20,000

(18) Memphis Research Consortium Jia & Banerjee (PI) 01/01/15-12/31/16
Interaction of Weight Status and Environmental Exposure on Effectiveness of In-Home Asthma Intervention

The overall objective of this proposed project is to explore the roles of weight status, indoor environmental exposure, and in-home asthma intervention in determining asthma status and their interactions.

Budget: \$75,000

(19) Center for Health Equity Research and Promotion Chunrong Jia (PI) 04/01/11-09/30/12
Environmental Inequity and Skewed Risks: Differential Distributions of Ambient Air Toxics in Memphis.

This study is designed to characterize the differential distribution of air toxics by collecting field air toxics samples in 50 sites in Memphis.

Budget: \$9,000

(20) Benjamin L. Hooks Institute for Social Change Chunrong Jia (PI) 05/01/11-04/30/12
Socioeconomic and Racial Disparities in Cancer Risk from Air Toxic Exposure in Memphis.

The objective of the proposed study is to characterize the socioeconomic and racial disparities in air toxic exposure and the associated excess lifetime cancer risk in Memphis.

Budget: \$5,000

(21) FedEx Institute of Technology Chunrong Jia (PI) 09/01/11-10/31/11
Equipment Acquisition for Memphis Research and Innovation Expo

The goal of this project is to obtain a high-resolution real-time photoionization detector for environmental health teaching and research.

Budget: \$5,300

(22) University of Memphis Faculty Research Grant Chunrong Jia (PI) 05/01/10-04/30/11
Indoor Environmental Quality in University Buildings and Indoor Air Symptoms

The primary objective of the proposed research is to determine indoor environmental quality in various types of university buildings, and to study indoor air symptoms among university students, faculty, and staff.

Budget: \$6,500

5. Publications

5.1 Journal Articles (*: Corresponding author; **: Senior author)

Full list: <https://scholar.google.com/citations?user=XIVIZagAAAAJ&hl=en>

- (1) Cao S, Xie M, **Jia C**, Zhang Y, Gong J, Wang B, Qin N, Zhao L, Yu D, Duan X. 2022. Household second-hand smoke exposure and stunted growth among chinese school-age children. *Environmental Technology & Innovation*, 102521 (IF=5.263).
- (2) Gao F, Guo Q, Wang B, Cao S, Qin N, Zhao L, **Jia C***, Duan X*. 2022. Distributions and determinants of time spent outdoors among school-age children in China. *Journal of Exposure Science and Environmental Epidemiology*: 32(2): 223-31 (IF= 5.563).

- (3) **Jia C***, Fu X, Chauhan B, Xue Z, Kedia RJ, Mishra CS. 2022. Exposure to volatile organic compounds (VOCs) at gas stations: a probabilistic analysis. *Air Quality, Atmosphere & Health* 15:465–477 (IF= 3.763).
- (4) Jones DH*, Yu X, Guo Q, Duan X, **Jia C***. 2022. Racial disparities in the heavy metal contamination of urban soil in the Southeastern United States. *International Journal of Environmental Research and Public Health* 19:1105. (IF= 3.390)
- (5) **Jia C***, Holt J, Nicholson H, Browder JE, Fu X, Yu X, Adkins R. 2021. Identification of origins and influencing factors of environmental odor episodes using trajectory and proximity analyses. *Journal of Environmental Management*. 295:113084. (IF= 6.789)
- (6) Hernández D, Harned E, Yomogida M, Atkinson D, Giovenco DP, **Jia C**, Martinez P, Camerata S, Howard JM, Aidala A. 2021. A new lease on life in public housing: Assessing the impact of the rental assistance demonstration (RAD) program on smoking in buildings and resident satisfaction. *Cityscape*. 23(2):67-94.
- (7) Fu X, Hernández D, Atkinson DN, Kponee K, Bartelli D, Gretz A, Smith J, **Jia C***. 2021. Airborne 2,5-dimethylfuran as a marker to indicate exposure to indoor tobacco and biomass burning smoke. *Atmospheric Environment*. 259:118509. (IF= 4.798)
- (8) Xu J, **Jia C***, Yu H, Xu H, Ji D, Wang C, Xiao H, He J. 2021. Characteristics, sources, and health risks of PM_{2.5}-bound trace elements in representative areas of Northern Zhejiang Province, China. *Chemosphere* 272, 129632. (IF= 7.086)
- (9) **Jia C***, Xue Z, Fu X, Sultana F, Smith L, Zhang Y, Li Y, Liu B. 2020. Impacts of Independence Day fireworks on pollution levels of atmospheric polycyclic aromatic hydrocarbons (PAHs) in the U.S. *Science of the Total Environment* 743:140774. (IF= 7.963)
- (10) **Jia C***, Fu X, Bartelli D, Smith L. 2020. Insignificant impact of the “Stay-At-Home” order on ambient air quality in the Memphis Metropolitan Area, U.S.A. *Atmosphere* 11(6):630. (IF= 2.686)
- (11) Xie M, **Jia C***, Zhang Y, Wang B, Qin N, Cao S, Zhao L, Yu D, Duan X. 2020. Household exposure to secondhand smoke among Chinese children: Status, determinants, and co-exposures. *International Journal of Environmental Research and Public Health* 17:5524. (IF= 3.390)
- (12) Guo Q, Xue T, **Jia C**, Wang B, Cao S, Zhao X, Zhang Q, Zhao L, Zhang J, Duan X. 2020. Association between exposure to fine particulate matter and obesity in children: A national representative cross-sectional study in China. *Environment International* 143:105950. (IF=9.621)
- (13) Guo Q, Wang B, Cao S, **Jia C**, Yu X, Zhao L, Dellarco M, Duan X. 2020. Association between milk intake and childhood growth: results from a nationwide cross-sectional survey. *International Journal of Obesity*, 44(11):2194-2202. (IF= 5.095)
- (14) Guo Q, Wang B, Cao S, **Jia C**, Zhao L, Zhang Q, Yu D, Zhao X, El-Maleh CA, Ma G, Duan X. 2020. Patterns and sociodemographic determinants of water intake by children in China: Results from the first national population-based survey. *European Journal of Nutrition*. 59:529–538. (IF= 5.614)
- (15) **Jia C***, Cao K, Valaulikar R, Fu X, Sorin AB. 2019. Variability of total volatile organic compounds (TVOC) in the indoor air of retail stores. *International Journal of Environmental Research and Public Health* 16:4622. (IF=3.390)
- (16) Li Y, Akkus C, Yu X, Joyner A, Kmet J, Sweat D, **Jia C***. 2019. Heatwave events and mortality outcomes in Memphis, Tennessee: Testing effect modification by socioeconomic status and

urbanicity. *International Journal of Environmental Research and Public Health* 16:4568. (IF=3.390)

- (17) Ceballos DM, Craig J, Fu X, **Jia C**, Chambers D, Chu MT, Fernandez AT, Fruh V, Petropoulos ZE, Allen JG, Vallarino J, Thornburg L, Webster TF. 2019. Biological and environmental exposure monitoring of volatile organic compounds among nail technicians in the greater Boston area. *Indoor Air* 29:539-550. (IF=5.770)
 - (18) Xu J, **Jia C**, He J, Xu H, Tang Y-T, Ji D, Yu H, Xiao H, Wang C. 2019. Biomass burning and fungal spores as sources of fine aerosols in Yangtze River Delta, China – Using multiple organic tracers to understand variability, correlations and origins. *Environmental Pollution* 251:155-165. (IF=8.071)
 - (19) Xue Z, **Jia C***. 2019. A model-to-monitor evaluation of 2011 National-scale Air Toxics Assessment (NATA). *Toxics*. 7(1):13. (IF=4.146)
 - (20) Fu X, Zhu X, Jiang Y, Zhang J, Wang T, **Jia C***. 2019. Centralized outdoor measurements of fine particulate matter as a surrogate of personal exposure for homogeneous populations. *Atmospheric Environment*. 204:110-117. (IF=4.798)
 - (21) Gu Q, Michanowicz RD, **Jia C***, 2018. Developing a modular unmanned aerial vehicle (UAV) platform for air pollution profiling. *Sensors*, 18(12), 4363. (IF= 3.576)
 - (22) Xu J., He J., Xu H., Ji D., Snape C., Yu H., **Jia C**, Wang C., Gao J., 2018. Simultaneous measurement of multiple organic tracers in fine aerosols from biomass burning and fungal spores by HPLC-MS/MS. *RSC Advances* 8, 34136-34150. (IF= 3.361)
 - (23) Kponee KZ, Nwanaji-Enwerem JC, Fu XQ, Kakulu II, Weisskopf MG, **Jia CR****. 2018. Elevated indoor volatile organic compound exposure in the Niger Delta Region of Nigeria. *International Journal of Environmental Research and Public Health*. 15(9):1939. (IF=3.390)
 - (24) Higgins D, Pal C, Sulaiman IM, **Jia CR**, Zerwekh T, Dowd SE, Banerjee P. 2018. Application of high-throughput pyrosequencing in the analysis of microbiota of food commodities procured from small and large retail outlets in a U.S. metropolitan area – A pilot study, *Food Research International*. 105: 29-40. (IF=6.475)
 - (25) **Jia CR***, Fu XQ. 2017. Diffusive uptake rates of volatile organic compounds on standard ATD tubes for environmental and workplace applications. *Environments*. 4(4): 87.
 - (26) Liu B, Xue ZQ, Zhu XL, **Jia CR***. 2017. Long-term trends (1990-2014), health risks, and sources of atmospheric polycyclic aromatic hydrocarbons (PAHs) in the U.S. *Environmental Pollution*. 220: 1171-1179. (IF= 8.071)
- As of July/August 2018, this highly cited paper received enough citations to place it in the top 1% of the academic field of Environment/Ecology based on a highly cited threshold for the field and publication year.
- (27) Liu B, **Jia CR****. 2016. Effects of profession on urinary PAH metabolite levels in the US population. *International Archives of Occupational and Environmental Health*. 89(1): 123-135. (IF=3.015)
 - (28) Liu B, **Jia CR****. 2015. Effects of exposure to mixed volatile organic compounds on the neurobehavioral test performance in a cross-sectional study of US adults. *International Journal of Environmental Health Research*. 25(4): 349-363. (IF=3.411)
 - (29) **Jia CR***, James W, Kedia S. 2014. Relationship of racial composition and cancer risks from air toxics exposure in Memphis, Tennessee, U.S.A. *International Journal of Environmental Research and Public Health*. 11(8): 7713-7724. (IF=3.390)

- (30) **Jia CR***, Ward KD, Mzayek F, Relyea F. 2014. Blood 2,5-dimethylfuran as a sensitive and specific biomarker for cigarette smoking. *Biomarkers*. 19(6): 457-462. (IF= 2.658)
- (31) Batterman S, Su F-C, Li S, Mukherjee B, **Jia C**. 2014. Personal Exposure to Mixtures of Volatile Organic Compounds: Modeling and Further Analysis of the RIOPA Data. Research Report 181. Boston, MA: Health Effects Institute.
- (32) **Jia CR***, Foran JA. 2013. Air toxics concentrations, source identification, and health risks: An air pollution hot spot in Southwest Memphis, TN. *Atmospheric Environment*. 81: 112-116. (IF=4.798)
- (33) Foran JA, **Jia CR**. 2013. Decisional inconsistencies in the management of contaminated, sport-caught fish. *Journal of Health and Human Services Administration*. 36(2): 208-227.
- (34) Chin J-Y, Godwin C, **Jia CR**, Robins T, Lewis T, Parker E, Max P, Batterman S. 2013. Concentrations and risks of p-dichlorobenzene in indoor and outdoor air. *Indoor Air*. 23(1): 40-49. (IF=5.770)
- (35) **Jia CR***, Batterman S, Relyea GE. 2012. Variability of indoor and outdoor VOC measurements: An analysis using variance components. *Environmental Pollution*. 169: 152-159. (IF=8.071)
- (36) James W, **Jia CR***, Kedia S. 2012. Uneven magnitude of disparities in cancer risks from air toxics. *International Journal of Environmental Research and Public Health*. 9(12): 4365-4385. (IF=3.390)
- (37) Su F-C, **Jia CR**, Batterman S. 2012. Extreme value analyses of VOC exposures and risks: A comparison of RIOPA and NHANES datasets. *Atmospheric Environment*. 62: 97-106. (IF=4.798)
- (38) **Jia CR***, Yu XH, Maziak W. 2012. Blood/air distribution of volatile organic compounds (VOCs) in a nationally representative sample. *Science of the Total Environment*. 419: 225-232. (IF=7.963)
- (39) Zhu XL, **Jia CR***. 2012. Apportioning variability of polycyclic aromatic hydrocarbons (PAHs) and chlordanes in indoor and outdoor environments. *Journal of Environmental Monitoring*. 14: 1926-1934. (IF=4.238)
- (40) Batterman S, Chin J-Y, **Jia CR**, Godwin C, Parker E, Robins T, Max P, Lewis T. 2012. Sources, concentrations and risks of naphthalene in indoor and outdoor Air. *Indoor Air*. 22(4): 266-278. (IF=5.770)
- (41) Lee J-H, **Jia CR***, Kim Y-D, Kim H-H, Pham T-T, Choi Y-S, Seo Y-Y, Lee I-W. 2012. An optimized adsorbent sampling combined to thermal desorption GC-MS method for trimethylsilanol in industrial environments. *International Journal of Analytical Chemistry*. Vol 2012, Article ID 690356: 1-10. (IF=1.885)
- (42) Batterman S, Su F-C, **Jia CR**, Naidoo RN, Robins T, Naik I. 2011. Manganese and lead in children's blood and airborne particulate matter in Durban, South Africa. *Science of the Total Environment*. 409: 1058-1068. (IF=7.963)
- (43) **Jia CR**, Batterman S, Godwin C, Charles S, Chin J-Y. 2010. Sources and migration of VOCs in mixed-use buildings. *Indoor Air*. 20(5): 357-369. (IF=5.770)
- (44) **Jia CR**, Batterman S, D'Souza J. 2010. Copulas and other multivariate models of personal exposures to VOC mixtures. *Human and Ecological Risk Assessment* 16(4): 873-900. (IF= 5.190)

- (45) **Jia CR**, Batterman S. 2010. A critical review of sources and exposures of naphthalene relevant to indoor and outdoor air. *International Journal of Environmental Research and Public Health*. 7(7): 2903-2939. (IF=3.390)
- (46) Batterman S, Godwin C, Chernyak S, **Jia CR**, Charles S. 2010. Brominated flame retardants in offices in Michigan, U.S.A. *Environment International*. 36: 548-556. (IF=9.621)
- (47) Batterman S, Chernyak S, **Jia CR**, Godwin C, Charles S. 2009. Concentrations and emissions of polybrominated diphenyl ethers from U.S. houses and garages. *Environmental Science & Technology*, 43 (8): 2693-2700. (IF=9.028)
- (48) D'Souza JC, **Jia CR**, Mukherjee B, Batterman S. 2009. Ethnicity, Housing and personal factors as determinants of VOC exposures. *Atmospheric Environment*, 43(18): 2884-2892. (IF=4.798)
- (49) Batterman S, Chernyak S, **Jia CR**, Charles S, Godwin C. 2008. Trends and mass balance of flame retardant chemicals in a new building. *Organohalogen Compounds*, 70: 693-696.
- (50) Chernyak S, Konoplev A, Batterman S, Kochetkov A, Pasyukova E, Samsonov D, **Jia CR**. 2008. PBDES in ambient and indoor air in four locations in the Russian Federation. *Organohalogen Compounds*, 70: 2163-2166.
- (51) **Jia CR**, D'Souza J, Batterman S. 2008. Distributions of personal VOC exposures: A population-based analysis. *Environment International*.34: 922-931.
- (52) **Jia CR**, Batterman S, Godwin C. 2008. VOCs in industrial, urban and suburban neighborhoods: Part 1: indoor and outdoor concentrations, variation, and risk drivers. *Atmospheric Environment*. 42(9): 2083-2100.
- (53) **Jia CR**, Batterman S, Godwin C. 2008. VOCs in industrial, urban and suburban neighborhoods: Part 2: factors affecting indoor and outdoor concentrations. *Atmospheric Environment*. 42(9): 2101-2116.
- (54) Charles SM, **Jia CR**, Batterman S, Godwin C. 2008. VOC and particulate emissions from commercial cigarettes: Analysis of 2,5-DMF as an ETS tracer. *Environmental Science & Technology*, 42: 1324-1331.
- (55) **Jia CR**, Batterman S, Godwin C. 2007. Continuous, intermittent and passive sampling of airborne VOCs. *Journal of Environmental Monitoring*, 9: 1220-1230.
- (56) Chernyak SM, Batterman SA, Godwin CC, **Jia CR**, Charles S. 2007. Evolution of flame retardant chemicals in a newly constructed building. *Organohalogen Compounds*, 69: 994-997.
- (57) Batterman S, Chernyak S, Gwynn E, Cantonwine D, **Jia CR**, Begnoche L, Hickey JP. 2007. Trends of brominated diphenyl ethers in fresh and archived Great Lakes fish (1979-2005). *Chemosphere*, 69: 444-457.
- (58) Charles S, Batterman S, **Jia CR**. 2007. Composition and emissions of VOCs in main- and side-stream smoke of research cigarettes. *Atmospheric Environment*, 41: 5371-5384.
- (59) Zhong Q, Veeneman RA, Steinecker WH, **Jia CR**, Batterman SA, Zellers ET. 2007. Rapid determination of ETS markers with a prototype field-portable GC employing a microsensor array detector. *Journal of Environmental Monitoring*, 9: 440-448.
- (60) Batterman S, **Jia CR**, Hatzivailis G. 2007. Migration of volatile organic compounds from attached garages to residences: A major exposure source. *Environmental Research*, 104: 224-240.

- (61) Chernyak S, Batterman S, Gwynn E, **Jia CR**, Begnoche L. 2006. Temporal (1983-2005) and spatial trends of polybrominated diphenyl ethers in Great Lakes rainbow smelt and lake trout. *Organohalogen Compounds*, 68: 716-719.
- (62) Lee JH, Batterman S, **Jia CR**, Chernyak S. 2006. Ozone artifacts and carbonyl measurements using Tenax GR, Tenax TA, Carbopack B and Carbopack X Adsorbents. *Journal of The Air & Waste Management Association*, 56 (11): 1503-1517.
- (63) **Jia CR**, Batterman S, Chernyak S. 2006. Development and comparison of methods using MS scan and selective ion monitoring modes for a wide range of airborne VOCs. *Journal of Environmental Monitoring*, 8 (10): 1029-1042.
- (64) Batterman S, **Jia CR**, Hatzivasilis G, Godwin C. 2006. Simultaneous measurement of ventilation using tracer gas techniques and VOC concentrations in homes, garages and vehicles. *Journal of Environmental Monitoring*, 8 (2): 249-256.
- (65) Batterman S, Hatzivasilis G, **Jia CR**. 2006. Concentrations and emissions of gasoline and other vapors from residential vehicle garages. *Atmospheric Environment*, 40 (10): 1828-1844.
- (66) Batterman S, Godwin C, **Jia CR**. 2005. Long duration tests of room air filters in cigarette smokers' homes. *Environmental Science & Technology*, 39 (18): 7260-7268.
- (67) Batterman S, Yu Y, **Jia CR**, Godwin C. 2005. Non-methane hydrocarbon emissions from vehicle fuel caps. *Atmospheric Environment*, 39 (10): 1855-1867.
- (68) Zhao J, **Jia CR**, Zhu T. 2006. Toxicity and indoor air limits of tolylene diisocyanate. *Journal of Environment and Health*, 23 (1): 91-93. (In Chinese)
- (69) Wu J, **Jia CR**. 2002. Total control of water pollutant discharge in Tianjin Port. *Transportation Environmental Protection*, (6). (In Chinese)
- (70) Bai Z, Wang Z, **Jia CR**, Zhang L, Zhu T. 2002. Modeling emissions of ammonia from indoor concrete walls using an environmental chamber. *China Environmental Science*, 23 (2): 117-121. (In Chinese)
- (71) Bai Z, **Jia CR**, Wang Z, Zhu T. 2000. Human exposures and doses to indoor/outdoor air pollutants. *Journal of Environment and Health*, 19 (6): 425-428. (In Chinese)
- (72) Zhu T, **Jia CR**, Yan Y, Lin L. 2000. Proposals on compiling the section of total control in EIA. *Environmental Protection*, (3): 23-25. (In Chinese)
- (73) Xu H, Zhu T, **Jia CR**. 2000. Development of strategic environmental assessment in China - regional environmental assessment. *Urban Environment & Urban Ecology*, 13 (3): 4-7. (In Chinese)
- (74) Zhu T, Yan Y, Shan CY, Xu H, **Jia CR**. 2000. The technology of landscape impact assessment. *China Environmental Science*, 20(1): 86-90. (In Chinese)
- (75) **Jia CR**. 1999. Building Environmental Assessment in Hong Kong. *Environmental Protection*, (6): 34-36. (In Chinese)
- (76) Xu H, **Jia CR**, Zhu T, Dai S. 1999. Habitat-based Methods in Ecological Impact Assessment. *Urban Environment & Urban Ecology*, 12 (6): 50-53. (In Chinese)
- (77) Xu H, **Jia CR**, Zhu T, Dai S. 1999. Research on Building Environmental Assessment. *Development of Environmental Technology*. China Environmental Science Press, Beijing, China, October 1999. (In Chinese)

5.2 Peer-reviewed Monographs and Research Reports

- (1) **Jia CR**, Fu XQ, Smith L, Rogers B, Sultana F, Akkus C. 2020. Characterizing Community Exposure to Polycyclic Aromatic Hydrocarbons (PAHs) in a Tri-State Area – Final Report. Report for US EPA.
- (2) **Jia CR**, Fu XQ, Smith L, Rogers B. 2017. Quality Assurance Project Plan (QAPP) for Characterizing Community Exposure to Polycyclic Aromatic Hydrocarbons (PAHs) in a Tri-State Area. Report for US EPA.
- (3) Villa P, Vera L, Wylie S, Wilson S, Septoff A, **Jia CR**, Chong NS, Luong C. 2017. Hazards in the Air: Relating Reported Illnesses to Air Pollutants Detected near Oil and Gas Operations in and around Karnes County, Texas. EARTHWORKS Library, <https://www.earthworksaction.org/library>.
- (4) **Jia CR**, Chong N-S, Holt J, Rogers R, Smith L. 2016. Reducing Exposure to Airborne Chemical Toxics (REACT) via Community-Scale Air Monitoring in Memphis – Final Report. Report for US EPA.
- (5) **Jia CR**, Chong N-S, Holt J, Rogers R, Smith L. 2013. Quality Assurance Project Plan (QAPP): Reducing Exposure to Airborne Chemical Toxics (REACT) via Community-Scale Air Monitoring in Memphis. Report for US EPA.
- (6) **Jia CR**, Batterman S, 2009. Critical review of the sources and exposure levels of benzene, toluene, xylene and naphthalene relevant to Canadian residential indoor environments. Report for Health Canada.
- (7) Batterman S, Chernyak S, **Jia CR**, Godwin C, Charles S, Chen TC. 2008. Emissions of PBDEs from Urban Sources in the Great Lakes Region. Final Report for US EPA Project GL9659730.
- (8) **Jia CR**. 2007. Volatile organic compounds in industrial, urban, and suburban areas: Sources and exposures. Ph. D. Dissertation, University of Michigan, Ann Arbor, Michigan. ISBN: 9780549174936.
- (9) Batterman S, Gounden Y, Chernyak S, **Jia CR**, Le H, Matooane M, Jafta N, Merwe MVD. 2006. Air Pollutants in Durban, South Africa: Exposure Assessment and Health Risk Assessment.
- (10) Godwin C, Batterman S, **Jia CR**, Franzblau A, Gruszczynski T, Ellendula S. 2003. Exposure assessment and occupant health and comfort among teachers in schools and at home.
- (11) Zhang YF, Li XW, Liu HL, Bai ZP, Xi ZG, Zhang B, Ning SY, Chen GS, Wu SW, Liu HY, Ma YM, **Jia CR**. 2011. Indoor Decorating and Refurbishing Materials - Limits of Harmful Substances Emitted From Carpets, Carpet Cushions, and Adhesives. China National Standard, GB 18587-2001. General Administration of Quality Supervision, Inspection and Quarantine of the People Republic of China.
- (12) Xu H, Zhang L, **Jia CR**, Xu F, Xu W, Liao, H, Wang D. 1998. Environmental impact statements of improving international container multi-model transportation system. The World Bank Project.

5.3 Peer-Reviewed Conference Papers and Abstracts

- (1) Nicholson H, Holt J, **Jia C**. 2021. The Collierville Odor Project. 2021 Tennessee Environmental Conference. Kingsport, Tennessee, October 26-27, 2021.
- (2) Jones DH, Guo Q, Duan X, Yu X, **Jia C**. 2021. Racial disparities in heavy metal contamination of urban soil in the Southern US. International Society of Exposure Science 2021 Annual Meeting. Virtual, August 30- September 02, 2021.

- (3) Fu XQ, Zhao A, Bartelli D, **Jia C**. 2021. Organic chemical contamination of the indoor air in clinics and the removal efficiency of carbon filters. The 3rd International Electronic Conference on Environmental Research and Public Health - Public Health Issues in the Context of the COVID-19 Pandemic. Virtual. Jan 11-25, 2021.
- (4) **Jia C**, Bartelli D, Fu X, Higgins D, Turchi J, Robinson A, Randall SN, Rudd L, Banerjee P. 2020. Identification and mediation of indoor environmental risks in early childhood learning centers. 2020 APHA Annual Meeting. San Diego, CA. Oct. 24-28, 2020.
- (5) Bartelli D, **Jia C**, Fu X, Higgins D, Turchi J, Robinson A. 2020. Reducing environmental risks in childcare centers. TPHA 2020 Annual Conference. Virtual. September 11, 2020.
- (6) Gu Q, **Jia C**. 2019. A consumer UAV-based air quality monitoring system for smart cities. In: Proceedings of the 2019 IEEE International Conference on Consumer Electronics (ICCE), Las Vegas, NV. Jan 11-13, 2019.
- (7) Ceballos D, Craig J, Fu XQ, **Jia CR**, Webster TF, Fruh V, Petropoulos Z, Vallarino J, MyDzung C, Allen J. 2018. Environmental and biological monitoring of volatile organic chemicals among nail technicians. The Joint Annual Meeting of the International Society of Exposure Science and the International Society for Environmental Epidemiology (ISEA-ISEE 2018). Ottawa, Canada. August 26-30, 2018.
- (8) **Jia CR**, Smith L. 2017. Monitoring for combustion-related air toxics in the Memphis Area. The 15th Annual National Environmental Justice Conference, Memphis, TN, October 14, 2017.
- (9) **Jia CR**, Chauhan B, Fu X, Xue Z, Mishra K, Kedia R, Banerjee P. 2017. Gas stations represent a nontrivial source of exposure to outdoor VOCs. 2017 Tennessee Environmental Conference. Kingsport, Tennessee, March 13-15, 2017.
- (10) **Jia CR**, Larry Smith. 2017. Reducing exposure to airborne chemical toxics. 2017 Tennessee Environmental Conference. Kingsport, Tennessee, March 13-15, 2017.
- (11) **Jia CR**, Ngee-Sing Chong, Jim Holt, Larry Smith. 2016. The Memphis Air Toxics Study. 2016 National Ambient Air Monitoring Conference. St. Louis, Missouri, August 8-11, 2016.
- (12) **Jia CR**, Larry Smith. 2016. Air Pollution and Your Health: Focus on Polycyclic Aromatic Hydrocarbons (PAHs). 2016 EPA Day. Memphis, TN. April 14, 2016.
- (13) **Jia CR**, Ngee-Sing Chong, Jim Holt, Larry Smith. 2015. Reducing Exposure to Airborne Chemical Toxics (REACT): Community-Scale Air Monitoring in Memphis. 2015 National Air Toxics Monitoring and Data Analysis Workshop. Research Triangle Park, NC. October 26-28, 2015.
- (14) Xue ZQ, Chong N-S, Yu XT, Holt J, **Jia CR**. 2015. Air toxics in Memphis: Levels, sources, and health risks. The 9th ISHVAC and 3rd COBEE joint conference. Tianjin, China, July 12-15, 2015.
- (15) **Jia CR**, Ward KD, Mzayek F, Relyea G. 2014. Blood 2,5-dimethylfuran as a sensitive and specific biomarker for cigarette smoking. International Society of Exposure Science 24th Annual Meeting. Cincinnati, OH, USA, October 12-16, 2014.
- (16) Liu B, **Jia CR**. 2014. Subtle neurocognitive effects associated with blood concentrations of common volatile organic compounds in US adults. New York City Epidemiology Forum First Annual Conference. New York City, NY, USA. February 28, 2014.
- (17) Tirumala A, Yu XT, Nguyen D, Seteh E, Ooi BG, Chong, N-S, **Jia CR**, Xue, ZQ, Holt J. 2014. Ambient air monitoring in Memphis and surrounding areas. The 66th Southeast Regional

Meeting of the American Chemical Society, Nashville, TN, United States, October 16-19 (2014), SERMACS-698.

- (18) **Jia CR**, Foran JA. 2013. Air Toxics Concentrations, Source Identification, and Health risks: An air pollution hot spot in Southwest Memphis, TN. SETAC North America 34th Annual Meeting, Nashville, TN, USA, November 17-21, 2013.
- (19) Tirumala A, Chong NS, Ooi BG, **Jia CR**, Xue ZQ, Holt J. 2013. Development of a GC-MS method for the analysis of ambient air toxics from industries and biogenic terpenes. The Southeast Regional Meeting of the American Chemical Society 2013, Atlanta, GA, USA, November 13-16, 2013.
- (20) **Jia CR**, Doherty R, Low J, Holt J, Rogers R. 2013. Risk assessment of ambient air toxics at a potential “hot spot” in Memphis, Tennessee. Environmental Health 2013, Boston, MA, USA, March 3-6, 2013.
- (21) Su F-C, **Jia CR**, Batterman S. 2012. Extreme value analysis of personal VOC exposures. The Air & Waste Management Association's Annual Conference & Exhibition, San Antonio, TX, June 19-22, 2012.
- (22) James W, **Jia CR**, Kedia S. 2012. Socioeconomic status, race, and cancer risks due to inhalation of air toxics in Cancer Alley, LA. 75th Annual Meeting of the Southern Sociological Society. New Orleans, LA, March 21-24, 2012.
- (23) James W, **Jia CR**. 2011. Socioeconomic and racial disparities in cancer risk from air toxics exposures in the Delta Region. Southern Demographic Association 2011 Annual Meeting. Tallahassee, FL, October 19-21.
- (24) **Jia CR**. 2011. Socioeconomic and racial disparities in cancer risk from air toxics exposure in Memphis. CHEER Conference: Empowering Communities to Create a Healthy Village. University of Tennessee Health Science Center, Memphis, TN, June 20-22.
- (25) **Jia CR**, Batterman S, Su FC. 2011. Modeling exposures to indoor air pollutant mixtures: Application of copula methods to the RIOPA data. Indoor Air 2011. Austin, TX, June 5-10. Paper #354.
- (26) **Jia CR**, Batterman S, Relyea GE. 2011. Variance components of indoor and outdoor VOC concentrations. Indoor Air 2011. Austin, TX, June 5-10. Paper #286.
- (27) Batterman S, Chin J-Y, **Jia CR**, Godwin C, Parker E, Robins T, Max P, Lewis T. 2011. A review and update of naphthalene exposures, including recent data from Michigan homes. Indoor Air 2011. Austin, TX, June 5-10. Paper #453.
- (28) Batterman SA, Su F-C, Mukherjee B, **Jia CR**. 2011. Modeling and analysis of personal exposure to pollutant mixtures: further analysis of the RIOPA data including extreme value distributions and factor analyses of pollutant data. Health Effects Institute 2011 Annual Conference, Boston, MA, May 1 - 3, 2011.
- (29) Denning P, **Jia CR**. 2010. Ventilation Conditions in University Offices and Classrooms - a Pilot Study. Tennessee Public Health Association Annual Meeting. Franklin, TN. September 15-17, 2010.
- (30) Batterman SA, Mukherjee B, Su F-C, **Jia CR**, D'Souza J. 2010. Modeling and analysis of personal exposure to pollutant mixtures: Further analysis of the RIOPA data. Health Effects Institute 2010 Annual Conference, Alexandria, Virginia, April 25 - 27, 2010.

- (31) Chin J-Y, Godwin C, **Jia CR**, Batterman SA. 2009. Migration of vehicle-related emissions to offices using tracers: Case study at a bus repair facility. Healthy Buildings 2009. Syracuse, NY, USA. September 13-17, 2009, Paper #540.
- (32) **Jia CR**, Batterman S, Godwin C, Charles S, Chin J-Y. 2009. Air exchanges rates and VOC sources in offices, industrial and commercial settings. The Air & Waste Management Association's Annual Conference & Exhibition, Detroit, Michigan, June 16-19, 2009, Paper #176.
- (33) **Jia CR**, Batterman S, Godwin C. 2008. Indoor and outdoor concentrations of VOCs and their determinants in industrial, urban and suburban neighborhoods. Proceedings of Indoor Air 2008, Copenhagen, Denmark, August 17-22, Paper #887.
- (34) Batterman S, Chernyak S, Charles S, Godwin C, **Jia CR**. 2008. Evolution of brominated flame retardant chemicals in dust, air and HVAC filters in a newly constructed multi-use building. Proceedings of Indoor Air 2008, Copenhagen, Denmark, August 17-22, Paper #885.
- (35) **Jia CR**. Volatile organic compound mixtures in human breath: Monitoring and data interpretation. Workshop on New Directions and Advances in Biological and Chemical Exposure Assessment for Epidemiologic and Risk Characterization. University of California, Los Angeles. July 10-11, 2008.
- (36) Batterman S, Chernyak S, Charles S, Godwin C, **Jia CR**. 2008. Evolution of brominated flame retardant chemicals in dust, air and HVAC filters in a newly constructed multi-use building. Proceedings of Indoor Air 2008, Copenhagen, Denmark, August 17-22, Paper #885.
- (37) Batterman S, **Jia CR**, Godwin C. 2007. Determinants of VOC exposures and mixtures: Review of distributions of VOCs in indoor and outdoor air, factors affecting concentrations, and statistical analysis of high-end mixtures and their sources (Invited Presentation). The 17th Annual Meeting of the International Society of Exposure Analysis (ISEA), Durham, NC, USA, October 14-18, 2007.
- (38) **Jia CR**, Batterman S, Godwin C. 2007. Exposures to VOC mixtures in residences: A field study and probabilistic analysis. The 17th Annual Meeting of the International Society of Exposure Analysis (ISEA), Durham, NC, USA, October 14-18, 2007.
- (39) You Y, Bai Z, **Jia CR**, Wan Z; Ran W, Zhang J. 2007. Measuring air exchanges rates using continuous CO₂ sensors. Proceedings CLIMA 2007 - Wellbeing Indoors, Helsinki, Finland, June 10-14, 2007.
- (40) You Y, Bai Z, **Jia CR**, Ran W, Zhang J, Hu X, Yang J. 2007. Ventilation conditions of different indoor environments in a university. Proceedings CLIMA 2007 - Wellbeing Indoors, Helsinki, Finland, June 10-14, 2007.
- (41) Batterman S, Godwin C, **Jia CR**. 2006. Design and evaluation of a new breath monitoring system for volatile organic compounds. International Council of Chemical Association (ICCA) Biomonitoring Workshop, Minneapolis, MN, USA, July 26-27, 2006.
- (42) Batterman S, **Jia CR**, Godwin C, Hatzivasilis G. 2006. A dominant source of VOC exposure: attached garages. International Conference on Environmental Epidemiology & Exposure, Paris, France, September 2-6, 2006.
- (43) Batterman S, **Jia CR**, Hatzivasilis G. 2006. Simultaneous measurement of air exchange and VOC concentrations: application in vehicles, houses and garages. Air & Waste Management Association 99th Annual Conference & Exhibition, New Orleans, LA, USA, June 20-23, 2006: paper #206.

- (44) Batterman S, **Jia CR**, Chernyak S, Gounden Y. 2005. Exposure assessment for toxic air pollutants in Durban, South Africa. *Epidemiology*. 16 (5): S129-S130.
- (45) Jafta N, Gqaleni N, Batterman S, Naidoo R, Robins T, **Jia CR**. 2005. Indoor air quality of selected residences in South Durban compared to north Durban. *Epidemiology*. 16 (5): S129-S129.
- (46) **Jia CR**, Batterman S, Godwin C, Hatzivasillis G. 2005. Distributions of volatile organic compounds (VOCs) in indoor and outdoor air among industrial, urban and suburban neighborhoods. Proceedings of Indoor Air 2005, Beijing, China, September 4-9, 2005: 2194-2199.
- (47) **Jia CR**, Batterman S, Chernyak S. 2005. Development of a sensitive thermal desorption GC-MS method using selective ion monitoring for a wide range of VOCs. Proceedings of Indoor Air 2005, Beijing, China, September 4-9, 2005: 2630-2634.
- (48) **Jia CR**, Batterman S, Godwin C. 2004. Levels and sources of VOC exposures in microenvironments: a Monte Carlo analysis. The 14th Annual Conference of the International Society of Exposure Analysis (ISEA), Philadelphia, PA, USA, October 17-21, 2004: pp37.
- (49) Bai Z, Dong Y, Wang Z, Zhu T, **Jia CR**. 2004. Emission of ammonia from indoor concrete wall and its human exposure assessment. The 14th Annual Conference of the International Society of Exposure Analysis (ISEA), Philadelphia, PA, USA, October 17-21, 2004: pp163.
- (50) Batterman S, **Jia CR**, Godwin C. 2004. Sources and significance of VOC exposures in microenvironments: schools, offices, residences, outdoors, and vehicles. Air & Waste Management Association 97th Annual Conference & Exhibition, Indianapolis, IN, USA, June 2004, paper #457.
- (51) Batterman S, Yu Y, **Jia CR**, Godwin C. 2004. Evaporative Emissions from Vehicle Fuel Caps, Air & Waste Management Association 97th Annual Conference & Exhibition, Indianapolis, IN, USA, June 2004, paper #264.
- (52) Batterman S, Godwin C, Franzblau A, **Jia CR**, Ellendula S, Corsi R, Torres V, Sanders M. 2003. IAQ and ventilation in Michigan and Texas schools. 13th Annual Conference of the International Society of Exposure Analysis (ISEA), Stresa, Italy, September 21-25, 2003.
- (53) Bai Z, **Jia CR**, Tan C, Zhang J. 2002. Developing national standards to reduce exposures to harmful substances contained in indoor decorating and construction materials in China. *Epidemiology*, 13 (4): 923.
- (54) Zhu T, Bai Z, **Jia CR**. Role of environmental risk assessment (ERA) in environmental impact assessment (EIA) and its application in China. The Second Asian Symposium on Risk Assessment and Management (SASRAM), Kobe, Japan, November 23 - 25, 2001.
- (55) Bai Z, **Jia CR**, Zhang J. Indoor air quality related standards in China. Proceedings of Indoor Air 2002, Monterey, CA, USA, June 30-July 05, 2002.
- (56) Zhu T, Lin L, **Jia CR**. 2000. Application of information technology in environmental impact assessment. International Symposium of Environmental Impact Assessment Textbook, Asian Development Bank and National Environmental Protection Agency of China, Shanghai, China, October 2000.
- (57) Zhu Tan, Bao J, **Jia CR**. Towards sustainable development: regional environmental impact assessment, International Symposium of Environmental Impact Assessment Textbook, Asian

Development Bank and National Environmental Protection Agency of China, Shanghai, China, October 1999.

6. International, National, and Regional Committees

- 2020-2024 Air Pollution Control Board. Tennessee Department of Environment and Conservation.
2022 Technical Program Committee, The 3rd International Conference on Green Energy, Environment and Sustainable Development (GEESD2022). Beijing, China. June 29-30, 2022.
- 2021 Reviewer for NIOSH NMAM Method 5528, National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention (NIOSH/CDC)
- 2021-2021 Honorary Member, Asian Council of Science Editors
2021 Technical Committee. 2021 Asia Environment Pollution and Prevention Conference (AEPP 2021). Chengdu, China. May 21-24, 2021.
- 2020 Technical Program Committee. The 3rd International Workshop on Environment and Geoscience. Virtual. July 18-20, 2020.
- 2016-2017 HAMP Advisory Committee. Healthy Building Network. New York, NY, USA.
2016 Advisory Committee for *Chinese Children's Exposure Factors Handbook*. Chinese Research Academy of Environmental Sciences.
- 2015 Section chair. The 9th ISHVAC and 3rd COBEE Joint Conference, Tianjin, China.

7. Review for Journals

Editorial board:

International Journal of Environmental Research and Public Health
Journal of Environmental and Public Health

Ad-hoc reviewer for:

- (1) *Air Quality, Atmosphere and Health*
- (2) *Analytical Chemistry Letters*
- (3) *Applied Artificial Intelligence*
- (4) *Applied Sciences*
- (5) *Atmosphere*
- (6) *Atmospheric Environment*
- (7) *Atmospheric Pollution Research*
- (8) *Atmospheric Research*
- (9) *Biological Trace Element Research*
- (10) *Biomass & Bioenergy*
- (11) *Building and Environment*
- (12) *Bulletin of Environmental Contamination and Toxicology*
- (13) *Cancer Epidemiology, Biomarkers & Prevention*
- (14) *Chemosphere*
- (15) *Cities*
- (16) *City and Environment Interactions*
- (17) *Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy*
- (18) *Environmental Engineering and Management Journal*

- (19) *Environmental Geochemistry and Health*
- (20) *Environmental Health Insights*
- (21) *Environment International*
- (22) *Environmental Pollution*
- (23) *Environmental Science: Processes & Impacts*
- (24) *Environmental Science & Technology*
- (25) *Environmental Research*
- (26) *Heritage Science*
- (27) *Indoor Air*
- (28) *International Journal of Environmental Research and Public Health*
- (29) *International Journal of Environmental Analytical Chemistry*
- (30) *Journal of Air & Waste Management Association*
- (31) *Journal of Exposure Science and Environmental Epidemiology*
- (32) *Journal of Hazardous Materials Advances*
- (33) *Journal of Inflammation Research*
- (34) *Journal of Maps*
- (35) *Pollution*
- (36) *Population Medicine*
- (37) *Risk Analysis*
- (38) *Risk Management and Healthcare Policy*
- (39) *Science of the Total Environment*
- (40) *Scientific Reports*
- (41) *Sensors*
- (42) *Separations*
- (43) *Toxics*
- (44) *Tobacco Induced Diseases*
- (45) *Tropical Medicine & International Health*

8. Honors and Awards

- 2018 PI Millionaire, University of Memphis
- 2016 Smart City Research Fellow, FedEx Institute of Technology, University of Memphis
- 2016 Certificate of Excellence in Reviewing, *Chemosphere*
- 2014 Harvard University JPB Environmental Health Fellow
- 2014 Second Place, University of Memphis Tiger Blue Goes Green 2014 Faculty Research Competition
- 2013 First-time Principal Investigator, University of Memphis
- 2012 2012 Increasing Diversity in Nicotine and Tobacco Research Travel Scholarship, Society for Research on Nicotine and Tobacco.
- 2009 Nominee, Young Professional (YP) Best Paper Award, The Air & Waste Management Association's 2009 Annual Conference & Exhibition, Detroit, Michigan, June 16-19, 2009.
- 2006 "High impact" article with cover photo in *Journal of Environmental Monitoring*
- 2005 University of Michigan Rackham International Conference Grant
- 2004 Best Paper of *China Environmental Science* in 2003
- 2001 Excellent Master's Thesis of Nankai University

9. Invited presentations

- 03/16/2022 Tips for writing grant proposals for funding agencies other than NIH or NSF. University of Memphis School of Public Health Colloquium. Memphis, Tennessee.
- 12/08/2020 Volatile Organic Chemicals in the Indoor Air of Childcare Centers and the Associated Health Risks. Environmental Health Salon. Nankai University, Tianjin, China.
- 09/18/2020 Exposure of the general population to volatile organic compounds (VOCs) at gas stations: a probabilistic analysis. Webinar. Science and Technology University in Beijing, Beijing, China.
- 10/16/2019 Memphis PAHs Study. Shelby County Air Board Quarterly Meeting. Memphis, TN.
- 06/16/2019 Environmental Education & Community Engagement in Air Pollution Studies. Education Seminar, Zhejiang University. Hangzhou, Zhejiang, China.
- 01/10/2019 Community-scale Air Toxics Monitoring Studies in Memphis. Air Quality Seminar, Kansas State University. Kansas City, MO.
- 06/28/2018 Trends, Sources and Risks of Atmospheric PAHs. University of Nottingham Ningbo China.
- 03/08/2017 Indoor Air Pollution and Health, Valuating the Health, Social, and Building Systems Resilience Benefits of Weatherizing Affordable Multifamily Housing. Chicago, IL.
- 11/07/2015 Monitoring Air Emissions in Memphis, Sierra Club 2015 National Environmental Justice Conference. Memphis, TN.
- 03/12/2015 Assessing Human Exposure to Air Pollutants in Different Environments. Louisiana State University Super Fund Center, Baton Rouge, LA.
- 11/01/2014 Reducing Exposure to Airborne Chemical Toxics (REACT): Community-Scale Air Monitoring in Memphis. Sierra Club 2014 National Environmental Justice Conference. Memphis, TN.
- 06/20/2014 Update on Shelby County Air Toxics Study and New Environmental Justice Initiatives in Air Permitting. The Memphis Chapters of ASSE, AIHA, and MCAHMP, Memphis, TN.
- 05/24/2013 Variability, Determinants, and Sources of Volatile Organic Compounds (VOCs) in Indoor and Outdoor Air, Nankai University, Tianjin, China.
- 05/22/2013 Risk Assessment and Environmental Disparities of Exposure to Air Toxics, Nankai University, Tianjin, China.
- 05/16/2013 Variability, Determinants, and Sources of Volatile Organic Compounds (VOCs) in Indoor and Outdoor Air, China Research Academy of Environmental Science, Beijing, China.
- 05/15/2013 Variability, Determinants, and Sources of Volatile Organic Compounds (VOCs) in Indoor and Outdoor Air, China Petroleum University, Beijing, China.
- 09/17/2012 "Reducing Exposure to Airborne Chemical Toxics (REACT)", Memphis stakeholders, Memphis, TN
- 04/30/2012 "Reducing Exposure to Airborne Chemical Toxics (REACT)", Engineers' Club of Memphis, Memphis, TN.
- 03/22/2012 "Health Effects and Measurements of Particle Pollution", Physics Seminar, Department of Physics, University of Memphis.
- 10/04/2011 "Transportation and Environmental Health Disparity: Uneven Distributions of Traffic-Related Air Pollution and the Associated Cancer Risks in Memphis", Tiger Blue Goes Green, University of Memphis.
- 02/04/2010 "Human Exposure to Airborne Volatile Organic Compounds: Measurements, Determinants, Risks, and Future Studies", Public Health Research Series, School of Public Health, University of Memphis.

10. Media

- 10/04/2021 Air Pollution Exposure Primer: [Air Pollution Exposure - Chunrong Jia - October 4, 2021 - YouTube](#). Social and Environmental Exposures and the Developmental Origins of Health Disparities. Portland, OR, USA. April 21st-22nd, 2022.
- 08/31/2021 Collaboration with TDEC mentioned by the commissioner. <https://t.e2ma.net/message/xati6o/tjlrpe>
- 05/03/2021 Interviewed by E&E News. <https://www.eenews.net/stories/1063731519>
- 02/24/2021 Interviewed by MLK50. <https://mlk50.com/2021/02/24/valero-cleans-up-oil-after-memphis-refinery-flare-excess-toxic-gas-release/>
- 06/23/2020 Interviewed by WKNO. <https://www.wknofm.org/post/streets-cleared-air-did-not>
- 08/15/2019 Interviewed by www.nola.com. https://www.nola.com/news/article_1f44a828-c070-11e9-8305-0f8891102167.html
- 10/27/2017 Fighting Air Pollution on the Fly. <https://insideunmannedsystems.com/fighting-air-pollution-fly/>
- 08/22/2013 Interviewed by WYPL TV regarding Memphis Air Toxics Study
- 10/27/2011 Green snapshots in *The Commercial Appeal*

11. Teaching

- 2020- PUBH 4121 Environmental Health: Practice and Applications (online and in-person)
- 2020- PUBH 3120 Environmental Health: Basics and Methods (online and in-person)
- 2020- PUBH 7335 Structural and Environmental Issues in Urban Communities
- 2010- PUBH 7120 Environmental Health I, University of Memphis (online and in-person)
- 2015-2020 PUBH 7129 Environmental Sampling & Analysis, University of Memphis
- 2010-2019 PUBH 7203 Principles of Exposure and Risk Assessment, University of Memphis
- 2010 PUBH 7122 Environmental Health II, University of Memphis
- 1999 Environmental Impact Assessment, Nankai University, China

12. Mentoring / Advising

12.1 Research Staff

Xianqian (Sean) Fu, Research Associate, 2016-2021

12.2 Dissertation, thesis and project committees

Ph.D. Level -

- Advisor Namuun Batbaatar, Ph.D. student in epidemiology concentrating on environmental health. 2021-
- Co-advisor Ashley Robinson, Ph.D. student in epidemiology. 2019-
- Co-advisor Mark'Quest Ajoku, Ph.D. student in epidemiology. 2018-
- Member Lourdes Vera, Ph.D. student in anthropology, Northeastern University. 2019-2022
Dissertation: "Engaging Environmental Data Justice to Build Collective Efficacy in Karnes County, Texas"
- Chair Zhuqing Xue, Ph.D. student, School of Public Health. 2013-2018

Dissertation: “Human Exposure to Air Toxics in Urban Environments: Health Risks, Sociodemographic Disparities, and Mixture Profiles”

First place, 2015 University of Memphis Tiger Blue Goes Green Student Research Competition

Member Doctoral Dissertation Committee, Thomas Eugene Watts III, Ph.D. student, Department of Chemistry, “Method Development, Analysis, and Modeling of Drinking Water Contaminants and Disinfection By-Products”. 2014-2016

Member Doctoral Dissertation Committee, Meggan Larson, Ph.D. student, Department of Chemistry, “Disinfection By-Products Rapid Response Kit”. 2010-2012

Master level -

Chair Master’s Thesis Committee, Fariha Sultana, MPH. “Characterizing Polycyclic Aromatic Hydrocarbons (PAHs) in Ambient Air in the Memphis Tri-state Area”. 2017-

Chair Master’s Thesis Committee, Bhavin Chauban, MPH. “Mold in Residences and the Associated Respiratory Disease/Symptoms Among Occupants”. 2015-2016

Member Master’s Thesis Committee, Daleniece Higgins, MPH. 2014-2016

Chair Master’s Project Committee, Marshall Varnum, MPH. “Monitoring Carcinogenic Air Toxics in Memphis: REACT Study”. 2013-2015.

Chair Master’s Thesis Committee, Nikolas Carlson, MPH, “Examining the Role of In-home Environmental Exposure in High-Risk Childhood Asthma Severity”. 2014-2015

Chair Master’s Project Committee, Katherine Miller, MPH, “Developing Emergency Response Plans and Emergency Kits for Homeless/Transient Populations”. 2010-2011

Member Master’s Project Committee, Raquel Marion, MPH, “Risk Communication Action Plan for the Memphis and Shelby County Health Department Pollution Control Ambient Air Toxins Project”. 2009-2010

12.3 Advising

MPH Students

- (1) Amanda Ibrahim, 2021-
- (2) Caprisha Wynette Davis, 2021-
- (3) Jasmine Hamlin, 2020-
- (4) RonKayla Kerneese Collins, 2020-
- (5) Brandy N Brown, 2020-
- (6) Travis Treece, 2019-
- (7) Jody Browder, 2018-
- (8) Fariha Sultana, 2017-
- (9) Cem Akkus, 2018-2019
- (10) Terri Ledsinger, 2017-2019
- (11) Darius E. James, 2016-2018
- (12) Bhavin Chauhan, 2015-2016
- (13) Cheyenne E Medlock, 2014-2016
- (14) Nicholas Carlson, 2014-2015
- (15) Marshall Varnum, 2013-2015
- (16) Deepthi Janga, 2013-2015
- (17) Jordan A Riddle, 2012-2014
- (18) Felecia Malone, 2012-2014

- (19) Christopher Williams, 2012-2014
- (20) Neha Singh, 2011-2013
- (21) Justin Hendrix, 2011-2013
- (22) Raelyn Pirtle, 2011-2012
- (23) Faydra Buford, 2010-2012
- (24) Agatha Asemota, 2009-2011
- (25) Patrick W. Denning, 2009-2011

12.4 Advisees' honors

- (1) Namuun Batbaatar, Ph.D. student in Epidemiology. First place in the 2022 Student Research Forum at the University of Memphis, March 28, 2022. Poster "Contamination and Health Risks of Polycyclic Aromatic Hydrocarbons (PAHs) in the Soil in Memphis".
- (2) RonKayla Collins, MPH. 2021 Public Health Community Scholar.
- (3) Fariha Sultana, MPH. Second place in the 30th Annual Graduate Student Research Forum at the University of Memphis, March 2018. Poster "Characterizing Polycyclic Aromatic Hydrocarbons (PAHs) in Ambient Air in the Memphis Tri-state Area".
- (4) Zhuqing Xue, Ph.D. First place in Tiger Blue Goes Green research competition event at University of Memphis, October 2014.
- (5) Zhuqing Xue, Ph.D. Second Place in Annual Interdisciplinary Case Competition, University of Memphis, September 2014.
- (6) Patrick W. Denning, MPH. Second place in the 22nd Annual Graduate Student Research Forum at the University of Memphis, April 2010. Poster "Ventilation Conditions in University Offices and Classrooms - A Pilot Study".

12.5 Summer Interns

- (1) Riya Valaulikar, St. Mary's Episcopal School, Summer intern, 2019
- (2) Kavin Cao, White Station High School, Summer intern, 2019
- (3) Javaris D. Rodgers, Grand Canyon University, Summer intern, 2017
- (4) Kanha Mishra, Memphis University School, Summer intern, 2016
- (5) Reeva Kedia, White Station High School, Summer intern, 2016
- (6) Aubrey Devine, Undergraduate student at Rhodes College, Summer intern, 2013
- (7) Summer Preg, Undergraduate student at Rhodes College, Summer intern, 2013

13. Services

- 2020- Chair of Award Committee, Division of EBE, School of Public Health
- 2020- University of Memphis Research Council
- 2020- Committee on Faculty Affairs and Development (COFAD), School of Public Health
- 2019- Epidemiology Ph.D. Comprehensive Examination Committee, Division of EBE, School of Public Health
- 2018- Epidemiology Ph.D. Admissions Committee, Division of EBE, School of Public Health
- 2016- Epidemiology Curriculum Committee (PhD), Division of EBE, School of Public Health
- 2021 Search Committee - Pre-Award Coordinator, School of Public Health
- 2020-2021 Search Committee – Epidemiology Faculty, School of Public Health
- 2011-2019 MPH Curriculum Committee, School of Public Health

2018-2020 Award Committee, Division of EBE, School of Public Health
 2018-2019 Urban Health Curriculum Committee, co-chair, School of Public Health
 2013-2018 Graduate Studies Committee, School of Public Health
 2014-2015 Search Committee - Environmental Health Faculty, School of Public Health
 Search Committee - Biostatistics Faculty, School of Public Health
 2013-2014 Search Committee - Environmental Health Faculty, School of Public Health
 Search Committee - Biostatistics Faculty, School of Public Health
 2011-2014 Committee on Faculty Affairs and Development (COFAD), School of Public Health
 2011-2012 Search Committee - Director of Research, School of Public Health
 Search Committee - Environmental Health Faculty, School of Public Health
 2010-2011 Environmental Studies Minor Committee, University of Memphis
 Search Committee - Environmental Health Faculty, School of Public Health
 2009-2010 Search Committee - Epidemiology Faculty, School of Public Health
 MPH Program Admissions Committee, School of Public Health

14. Collaborators (since 2016)

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|------|------------------------------|--|
| (1) | Jack Spengler (mentor) | Harvard School of Public Health |
| (2) | Gary Adamkiewicz (mentor) | Harvard School of Public Health |
| (3) | Junfeng (Jim) Zhang (mentor) | Duke University, School of the Environment |
| (4) | Diana Hernandez | Columbia University, School of Public Health |
| (5) | Diana Ceballos | Boston University, Dept of Environmental Health |
| (6) | Sara Wiley | Northeastern University, College of Social Sciences and Humanities |
| (7) | Ellison Carter | Colorado State University, Dept of Civil and Environmental Engineering |
| (8) | Eric Rubin | Harvard School of Public Health |
| (9) | Xiaoli Duan | University of Science and Technology Beijing, School of Energy and Environmental Engineering |
| (10) | Jun He | University of Nottingham Ningbo China, Department of Chemical and Environmental Engineering |
| (11) | Ngee-Sing Chung | Middle Tennessee State University, Dept of Chemistry |
| (12) | Debra Bartelli | University of Memphis, School of Public Health |
| (13) | Xinhua Yu | University of Memphis, School of Public Health |
| (14) | Jim Holt | Tennessee Department of Environment and Conservation |
| (15) | Larry Smith | Shelby County Health Department, Pollution Control Section |