

**Liuhua Shi, Sc.D.**

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**EMPLOYMENT**

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10/2021- Present	<b>Assistant Professor (tenure-track), Emory University</b>
12/2019-09/2021	<b>Assistant Professor (research-track), Emory University</b>
02/2019-09/2019	<b>Postdoctoral Research Fellow, Harvard University</b>
09/2016-01/2019	<b>Consultant, Environmental Consultant Company</b>

**EDUCATION**

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2012 – 2016	<b>Sc.D., Environmental Health, Harvard Chan School of Public Health, US</b> (Advisor: Dr. Joel Schwartz)
2009 – 2012	<b>M.S., Geography, Beijing Normal University, China</b>
2005 – 2009	<b>B.S., Geography, Beijing Normal University, China</b>

**PUBLICATIONS****Selected Publications (\*corresponding author; underlined are current/former students):**

- 1) **Shi, L.\***; Rosenberg, A.; Liu, P.; Danesh-Yazdi, M.; Réquia, W.; Steenland, K.; Chang, H.; Sarnat, J.; Liu, Y.; Zhang, K.; Zhao, J.; Schwartz, J., Low-concentration air pollution and mortality in American older adults: A national cohort analysis (2001-2017). (In review).
- 2) **Shi, L.\***; Steenland, K.; Li, H.; Liu, P.; Zhang, Y.; Lyles, R.; Requia, W.; Ilango, S.; Chang, H.; Wingo, T.; Weber, R.; Schwartz, J., Long-term air pollution exposure and incident dementia in American elderly population: a national cohort study (2000-2018). *Nature Communications*.
- 3) **Shi, L.\***, Blowing hot and cold over asthma hospitalizations (Invited editorial). *Thorax* 2021.
- 4) **Shi, L.**; Wu, X.; Danesh-Yazdi, M.; Braun, D.; Awad, Y.A.; Wei, Y.; Liu, P.; Di, Q.; Wang, Y.; Schwartz, J.; Dominici, F.; Kioumourtzoglou, M.A.; Zanobetti, A., Long-term Effects of PM<sub>2.5</sub> on Neurological Disorders in the American Medicare Population: a longitudinal cohort study. *The Lancet Planetary Health* 2020, 4(12), e557-e565.
- 5) **Shi, L.**; Kloog, I.; Zanobetti, A.; Liu, P.; Schwartz, J., Impacts of temperature and its variability on mortality in New England. *Nature Climate Change* 2015, 5, 988-991.
- 6) **Shi, L.\***; Zanobetti, A.; Kloog, I.; Coull, B.; Koutrakis, P.; Melly, S.; Schwartz, J., Low-concentration PM<sub>2.5</sub> and mortality: estimating acute and chronic effects in a population-based study. *Environmental Health Perspectives* 2016, 124, 46-52.  
\* Selected as one of the papers in [EHP's 2018 Journal Impact Factor Collection](#).

- 7) **Shi, L.\***; Liu, P.; Kloog, I.; Lee, M.; Kosheleva, A.; Schwartz, J., Estimating daily air temperature across the Southeastern United States using high-resolution satellite data: a statistical modeling study. *Environmental Research* 2016, 146, 51-58.
- 8) **Shi, L.\***; Liu, P.; Wang, Y.; Zanobetti, A.; Kosheleva, A.; Koutrakis, P.; Schwartz, J., Chronic effects of temperature on mortality in the Southeastern USA using satellite-based exposure metrics. *Scientific Reports* 2016, 6, 30161.
- 9) Liang, D.<sup>#</sup>; **Shi, L.<sup>#</sup>**; Zhao, J.; Liu, P.; Sarnat, J.; Gao, S.; Schwartz, J.; Liu, Y.; Scovronick, N.; Ebel, S.; Scovronick, N.; Chang, H.H., 2020. Urban Air Pollution May Enhance COVID-19 Case Fatality and Mortality Rates in the United States, *The Innovation*. (<sup>#</sup>co-first authors)
- 10) Wang, Y.; Xiao, S.; Zhang, Y.; Chang, H.; Martin, R.; Van Donkelaar, A.; Gaskins, A.; Liu, Y.; Liu, P.; **Shi, L.\***, Long-term exposure to PM<sub>2.5</sub> major components and mortality in the southeastern US. *Environment International*.
- 11) Huang, S.; Li, H.; Wang, M.; Qian, Y.; Steenland, K.; Caudle, W., Liu, Y.; Sarnat, J.; Papatheodorou, S.; **Shi, L.\***, 2021. Long-term Exposure to Nitrogen Dioxide and Mortality: A Systematic Review and Meta-Analysis. *Science of the Total Environment*.
- 12) Zhang, Y.; **Shi, L.**; Chang, H.; Schwartz, J.; Di, Q.; Goldberg, J.; Vaccarino, V., 2021. Co-Twin control study of fine particulate matter and the prevalence of metabolic syndrome risk factors. *Environmental Research*.
- 13) Wang, M.; Li, H.; Huang, S.; Qian, Y.; Steenland, K.; Xie, Y.; Papatheodorou, S.; **Shi, L.\***, 2021. Short-term Exposure to Nitrogen Dioxide and Mortality: a systematic review and meta-analysis. *Environmental Research*.
- 14) Li, H.; Deng, W.; Small, R.; Schwartz, J.; Liu, J.; **Shi, L.\***, 2021. Health Effects of Air Pollutant Mixtures on Overall Mortality Among the Elderly Population Using Bayesian Kernel Machine Regression (BKMR). *Chemosphere*.
- 15) Qian, Y.; Li, H.; Rosenberg, A.; Li, Q.; Sarnat, J.; Papatheodorou, S.; Schwartz, J.; Liang, D.; Liu, Y.; Liu, P.; **Shi, L.\***, Long-term exposure to low-level NO<sub>2</sub> and mortality among the elderly population in the southeastern US. *Environmental Health Perspectives* (Accepted).

#### Other Peer-Reviewed Publications:

- 16) Danesh-Yazdi, M.; Wang, Y.; Di, Q.; Wei, Y.; Requia, W.; **Shi, L.**; Sabbath, B.; Dominici, F.; Coull, B.; Koutrakis, P.; Evans, J.; Schwartz, J., 2021. Long-term Effect of Air Pollution on Hospital Admissions Among Medicare Participants Using a Doubly Robust Additive Model (DRAM). *Circulation*.
- 17) Danesh-Yazdi, M.; Wang, Y.; Di, Q.; Requia, W.; Wei, Y.; **Shi, L.**; Sabbath, B.; Dominici, F.; Coull, B.; Evans, J.; Koutrakis, P.; Schwartz, J., 2021. Long-term Effect of Exposure to Lower Concentrations of Air Pollution on Mortality among US Medicare Participants and Vulnerable Subgroups: a Doubly-Robust Approach.

***The Lancet Planetary Health.***

- 18) Gunthe, S.; Liu, P.; Panda, U.; Raj, S.; Sharma, A.; Derbyshire, E.; Reyes-Villegas, E.; Allan, J.; Chen, Y.; Wang, X.; Song, S.; Pöhker, M.; **Shi, L.**; Wang, Y.; Kommula, S.; Ravikrishna, R.; McFiggans, G.; Mickley, L.; Martin, S.; Pöschl, U.; Coe, H., 2021. Enhanced Aerosol Particle Growth Sustained by High Continental Chlorine Emission in India. *Nature Geoscience*.
- 19) Romanello et al. (including **Shi, L.**), The 2021 Report of The Lancet Countdown on Health and Climate Change: Code Red for a Healthy Future. *The Lancet*.
- 20) Li, J.; Garshick, E.; Hart, J.; Li, L.; **Shi, L.**; Al-Hemoud, A.; Huang, S.; Koutrakis, P., 2021. Estimation of particulate matter exposures in Iraq and Kuwait 2001-2018 during military deployment. *Environmental International*.
- 21) Cheng, S.; Zhang, H.; Wang, P.; Zou, K.; Duan, X.; Wang, S.; Yang, Y.; **Shi, L.**; Wang, W., 2021. Benchmark dose analysis for PAHs hydroxyl metabolites in urine based on mitochondrial damage of peripheral blood leucocytes in coke oven workers in China. *Environmental Toxicology and Pharmacology*.
- 22) Watts et al. (including **Shi, L.**), 2020, The 2020 Report of The Lancet Countdown on Health and Climate Change: responding to converging crises. *The Lancet*.
- 23) Yu, W.; Guo, Y.; **Shi, L.**; Li, S., 2020. The association between long-term exposure to low-level PM2.5 and mortality in the state of Queensland, Australia: A modelling study with the difference-in-differences approach. *PLoS Medicine* 17(6): e1003141.
- 24) Wei, Y.; Wang Y.; Wu X.; Di, Q.; **Shi, L.**; Koutrakis, P.; Zanobetti, A.; Dominici, F.; Schwartz, J, Causal effects of air pollution on mortality in Massachusetts. *American Journal of Epidemiology*, kwaa098.
- 25) Qiu, X.; Fong, K.; **Shi, L.**; Papatheodorou, S.; Di, Q.; Just, A.; Kosheleva, A.; Messerlian, C.; Schwartz, J., 2020. Prenatal exposure to particulate air pollution and gestational age at delivery in Massachusetts neonates 2001–2015: A perspective of causal modeling and health disparities. *Environmental Epidemiology*, 4(5), p.e113.
- 26) Requia, W.; Di, Q.; Silvern, R.; Kelly, J.; Koutrakis, P.; Mickley, L.; Sulprizio, M.; Amini, H.; **Shi, L.**; Schwartz, J, 2020. An ensemble learning approach for estimating ground-level ozone in the contiguous United States at high spatiotemporal resolution. *Environmental Science & Technology*.
- 27) Lou, H.; Wang, P.; Yang, S.; Hao, F.; Ren, X.; Wang, Y.; **Shi, L.**; Wang, J.; Gong, T. Combining and Comparing an Unmanned Aerial Vehicle and Multiple Remote Sensing Satellites to Calculate Long-Term River Discharge in an Ungauged Water Source Region on the Tibetan Plateau. *Remote Sensing*. 2020, 12, 2155.
- 28) Zou, K.; Wang, P.; Duan, X.; Yang, Y.; Zhang, H.; Wang, S.; **Shi, L.**; Wang, Y.; Yao, W.; Wang, W., 2020. Benchmark dose estimation for coke oven emissions based on oxidative damage in Chinese exposed workers. *Ecotoxicology and Environmental Safety*, 202, p.110889.

- 29) Zou, K.; Zhou, X.; Wang, W.; **Shi, L.**; Fu, X., 2020. The Association between Polymorphisms in miRNA and the Cholinesterase Activity of Workers in an Omethoate-exposed Environment. *International Journal of Environmental Health Research*.
- 30) Di, Q.; Amini, H.; **Shi, L.**; Kelly, J.; Mickley, L.; Amini, H.; Kloog, I; Silvern, R.; Sabath, B.; Choirat, C.; Koutrakis, P.; Lyapustin, A.; Wang, Y.; Schwartz, J, Assessing NO<sub>2</sub> Concentration with High Spatiotemporal Resolution across the Contiguous United States Using Ensemble Model Averaging. *Environmental Science & Technology* 2019.
- 31) Di, Q.; Amini, H.; **Shi, L.**; Kloog, I.; Silvern, R.; Kelly, J.; Sabath, B.; Choirat, C.; Koutrakis, P.; Lyapustin, A.; Wang, Y.; Mickley, L.; Schwartz, J, An Ensemble-based Model of PM<sub>2.5</sub> Concentration across the Contiguous United States with High Spatiotemporal Resolution. *Environmental International* 2019, 130.
- 32) Wei, Y.; Wang, Y.; Lin, C.; Yin, K.; Yang, J.; **Shi, L.**; Zanobetti, A.; Schwartz, J., Associations between seasonal temperature and dementia-associated hospitalizations in New England. *Environmental International* 2019, 126, 228-233.
- 33) Zu, K.; **Shi, L.**; Prueitt, R.; Liu, X.; Goodman, J., Critical review of long-term ozone exposure and asthma development. *Inhalation toxicology* 2018, 30, 99-113.
- 34) Lou, H.; Zhao, C.; Yang, S.; **Shi, L.**; Wang, Y.; Ren, X.; Bai, J., Quantitative evaluation of legacy phosphorus and its spatial distribution. *Journal of environmental management* 2018, 211, 296-305.
- 35) Zu, K.; Liu, X.; **Shi, L.**; Tao, G.; Loftus, C.; Lange, S.; Goodman, J., Concentration-response of short-term ozone exposure and hospital admissions for asthma in Texas. *Environment International* 2017, 104, 139-145.
- 36) Prueitt, R.; Lynch, H.; Zu, K.; **Shi, L.**; Goodman, J., Dermal exposure to toluene diisocyanate and respiratory cancer risk. *Environment International* 2017, 109, 181-192.
- 37) Wang, Y.; **Shi, L.**; Lee, M.; Liu, P.; Di, Q.; Zanobetti, A., Schwartz, J., Long-term exposure to PM<sub>2.5</sub> and mortality among older adults in the southeastern US. *Epidemiology* (Cambridge, Mass.) 2017, 28, 207-214.
- 38) Wang, Y.; Lee, M; Liu, P.; **Shi, L.**; Yu, Z.; Awad, Y.; Zanobetti, A; Schwartz, J., Doubly robust additive hazards models to estimate effects of a continuous exposure on survival. *Epidemiology* 2017, 28, 771-779.
- 39) Lou, H.; Yang, S.; Zhao, C.; Wang, Z.; **Shi, L.**; Wu, L.; Dong, G.; Cai, M.; Hao, F.; and Sun, Y., Using a nitrogen-phosphorus ratio to identify phosphorus risk factors and their spatial heterogeneity in an intensive agricultural area. *Catena* 2017, 149, 426-436.
- 40) Lou, H.; Yang, S.; Zhao, C.; Wang, Z.; Liu, X.; **Shi, L.**; Wu, L.; Hao, F.; Cai, M., Combining multi-source data to explore a mechanism for the effects of

- micrometeorological elements on nutrient variations in paddy land water. *Paddy and Water Environment* 2017, 15, 513-524.
- 41) Cox, L.; Liu, X.; **Shi, L.**; Zu, K.; and Goodman, J., 2017. Applying Nonparametric Methods to Analyses of Short-Term Fine Particulate Matter Exposure and Hospital Admissions for Cardiovascular Diseases among Older Adults. *Int. J. Environ. Res. Public Health*, 14, p.1051.
  - 42) Wang, Y.; **Shi, L.**; Zanobetti, A.; Schwartz, J., Estimating and projecting the effect of cold waves on mortality in 209 US cities. *Environment International* 2016, 94, 141-149.
  - 43) Lee, M.; **Shi, L.**; Zanobetti, A.; Schwartz, J., Study on the association between ambient temperature and mortality using spatially resolved exposure data. *Environmental Research* 2016, 151, 610-617.
  - 44) Akintoye, E.; **Shi, L.**; Obaitan, I.; Olusunmade, M.; Wang, Y.; Newman, J.; Dodson, J., Association between fine particulate matter exposure and subclinical atherosclerosis: A meta-analysis. *European Journal of Preventive Cardiology* 2016, 23, 602-612.
  - 45) Lou, H.; Yang, S.; Zhao, C.; **Shi, L.**; Wu, L.; Wang, Y.; Wang, Z., Detecting and analyzing soil phosphorus loss associated with critical source areas using a remote sensing approach. *Science of The Total Environment* 2016, 573, 397-408.
  - 46) Chang, C.; Barr, D.; Zhang, Q.; Dunlop, A.; Smarr, M.; Kannan, K.; Panuwet, P.; Tangpricha, V.; **Shi, L.**; Liang, D.; Corwin, E.; Ryan, B., 2021. Associations of Single and Multiple Per- and Polyfluoroalkyl Substance (PFAS) Exposure with Vitamin D Biomarkers in African American Women during Pregnancy. *Environmental Research*.
  - 47) Lou, H.; Scovronick, N.; Ren, X.; **Shi, L.**; Fu, Y.; Cai, M.; Luo, Y., A balance exists between vegetation recovery and human development over the past 30 years in the Guizhou Plateau, China. *Ecological Indicators*.

#### Articles submitted/In review:

- 48) Napoli et al. (including **Shi, L.**), Tracking the impacts of climate change on human health via indicators: a guidance from the Lancet Countdown. (In review).
- 49) Li, J.; Wang, Y.; Steenland, K.; Liu, P.; Donkelaar, A.; Martin, R.; Chang, H.; Caudle, M.; Schwarts, J.; Koutrakis, P.; **Shi, L.**, Long-term exposure to PM<sub>2.5</sub> major components and incident dementia. (In review).
- 50) Qiu, X.; Wei, Y.; Weisskopf, M.; Spiro, A.; **Shi, L.**; Castro, E.; Coull, B.; Koutrakis, P.; Schwartz, J., Long Term Exposure to Air Pollution, Climate Conditions and General Population Psychiatric Hospitalization – A Multi-State Analysis. (In review).
- 51) Gao, Q.; Zang, E.; Liu, M.; Bi, J.; Dubrow, R.; Lowe, S.; Chen, H.; Zeng, Y.; **Shi, L.**; Chen, K., Long-term Ozone Exposure and Cognitive Impairment among Chinese Older Adults: A Cohort Study. (In review).

- 52) Zhang, B.; Shen, H.; Yun, X.; Zhong, Q.; Henderson, B.; Wang, X.; **Shi, L.**; Gunthe, S.; Huey, L.; Tao, S.; Russell, A.; Liu, P., Global Emissions of Hydrogen Chloride and Particulate Chloride from Continental Sources. (Submitted).
- 53) Healy, J.; Danesh-Yazdi, M.; Wei, Y.; Dominici, F.; **Shi, L.**; Schwartz, J., Temperature variability and mortality across the United States. (Submitted).
- 54) Yitshak Sade, M.; **Shi, L.**; Colicino, E.; Amini, H.; Schwartz, J.; Di, Q.; Wright, R., Air pollution exposure and diabetes occurrence. (Submitted).
- 55) Danesh-Yazdi, M.; Wei, Y.; Di, Q.; Requia, W.; **Shi, L.**; Sabbath, B.; Dominici, F.; Schwartz, J., Long-term Exposure to Air Pollution and Temperature and Hospital Admissions with Cardiovascular and Respiratory Disease in the United States: a Difference in Differences Analysis. (Submitted).
- 56) Wei, Y.; Qiu, X.; Danesh-Yazdi, M.; Shtein, A.; **Shi, L.**; Peralta, A.; Coull, B.; Schwartz, J., The impact of exposure measurement error on the dose-response relationship between long-term exposure to PM<sub>2.5</sub> and mortality. (Submitted).
- 57) Ma, T.; Schwartz, J.; Danesh-Yazdi, M.; Requia, W.; Chang, H.; Vaccarino, V.; **Shi, L.\***, Long-term air pollution exposure and incident stroke in American elderly population: a national cohort study. (Submitted).

#### Published datasets:

- 58) Di, Q.; Wei, Y.; Shtein, A.; Hultquist, C.; Xing, X.; Amini, H.; **Shi, L.**; Kloog, I.; Silvern, R.; Kelly, J.; Sabath, M. B.; Choirat, C.; Koutrakis, P.; Lyapustin, A.; Wang, Y.; Mickley, L. J.; Schwartz, J., 2021. Daily and Annual PM<sub>2.5</sub> Concentrations for the Contiguous United States, 1-km Grids, v1 (2000 - 2016). Palisades, NY: *NASA Socioeconomic Data and Applications Center (SEDAC)*.

## RESEARCH FUNDING

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### *Grant Support - Current*

**1R01AG074357-01 (Shi)** 09/2021 – 05/2026

NIH

Air Pollution and Alzheimer's Disease and Related Dementias: A National Study

*Role: PI*

**1R21ES032606-01A1 (Shi)** 03/2021 – 02/2023

NIH/NIEHS

Climate Penalty: Climate-driven Increases in Ozone and PM<sub>2.5</sub> Levels and Mortality

*Role: PI*

**Internal Grant (Shi)** 09/2021 – 08/2022

Dean's Pilot and Innovation Grants – 3<sup>rd</sup> Round

PM<sub>2.5</sub> components and overall and cause-specific mortality

*Role: PI*

- Internal Grant (Shi)** 04/2020 – 03/2022  
The HERCULES Exposome Research Center  
A Big Data Approach to PM<sub>2.5</sub> and Its Components and Alzheimer's Disease  
*Role: PI*
- Internal Grant (Shi)** 05/2020 – 04/2022  
Goizueta Alzheimer's Disease Research Center  
PM<sub>2.5</sub> Components, Sources, and Alzheimer's Disease  
*Role: PI*
- Internal Grant (Shi)** 08/2021 – 08/2022  
Emory Climate and Health Research Incubator (ECHRI)  
Wildfire Smoke Exposure and Incident Stroke Among the Older Adults  
*Role: PI*
- 80NSSC21K0507 (Liu)** 02/2021 – 01/2025  
NASA  
Using Earth Observations to Support National and Global Environmental Health  
Research and Surveillance  
*Role: Co-I*
- 3R01ES027892-05S1 (Chang)** 07/2021 – 01/2022  
NIH  
Data Integration Methods for Environmental Exposures with Applications to Air  
Pollution and Asthma Morbidity  
*Role: co-I*
- 5R01ES027892 (Chang)** 12/2019 – 01/2022  
NIH/NIEHS  
Data Integration Methods for Environmental Exposures with Applications to Air  
Pollution and Asthma Morbidity  
*Role: co-I*
- P30ES019776 (Marsit)** 12/2019 – 03/2022  
NIH/NIEHS  
HERCULES: Health and Exposome Research Center at Emory  
*Role: Co-I*
- NNX16AQ28G (Liu)** 12/2019 – 8/2021  
NASA

Using Earth Observations to Support Regional and National Environmental Health Surveillance

*Role: Co-I*

**Internal Grant (P. Liu)**

09/2021 – 08/2022

The energy transition and public health

Assess climate-induced air pollution deterioration and its health risks in the southeastern United States

*Role: Co-I*

**INVITED TALKS AND PRESENTATIONS**

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- 2021 "Climate Change and Sustainability." Invited talk, National Institute on Aging Health and Retirement Study Data Monitoring Session. (Virtual)
- 2021 "Climate Change, Air Pollution, and Senior's Health." Invited talk, Peking University. (Virtual)
- 2021 "The application of remote sensing in environmental health." Invited talk, Beijing Normal University. (Virtual)
- 2021 "Long-term Effects of Fine Particulate Matter on Neurological Disorders in the US Medicare Population." China Health Policy and Management Society Annual Symposium 2021, Virtual. (Oral presentation)
- 2021 "Long-term air pollution exposure and incident dementia in an American elderly population: a national cohort study (2000-2018)." China Health Policy and Management Society Annual Symposium 2021, Virtual. (Oral presentation)
- 2021 "The application of remote sensing in Public Health." Invited talk, GeoInsider. (Virtual)
- 2021 "Air quality and neurological disorders." Invited talk, University of Copenhagen. (Virtual)
- 2021 "Air pollution and seniors' health." Invited talk, Yale University. (Virtual)
- 2021 "Urban air pollution may enhance COVID-19 case-fatality rate and mortality rate in US." Emory University. (Oral presentation)
- 2020 "Health effects of air pollution in the elderly population." Invited talk, Southern University of Science and Technology. (Virtual)
- 2020 "The application of remote sensing in environmental health studies." Invited talk, Beijing Normal University. (Virtual)
- 2020 "Long-term Effects of Fine Particulate Matter on Neurological Disorders in the US Medicare Population: a nationwide analysis." The 32nd Annual Conference of the ISEE, Virtual. (Oral presentation)
- 2019 "Climate Penalty: Climate-driven increases in ozone and PM<sub>2.5</sub> levels and mortality." The 31st Conference of the ISEE, Utrecht, The Netherlands. (Poster)



- 2016 "Chronic Effects of Temperature on Mortality in South Eastern United States."  
The 10th International Conference on Air Quality, Milan, Italy. (Oral presentation)
- 2015 "Long Term Impacts of Temperature and Temperature Variability on Mortality in New England: Implications for Public Health Risk of Future Climate Change."  
The 27th Conference of the ISEE, Sao Paulo, Brazil. (Poster)

## **SERVICE TO PROFESSION**

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- Ad hoc reviewer:  
The New England Journal of Medicine; The Lancet Public Health; Nature Communications; American Journal of Respiratory And Critical Care Medicine; Thorax; Environmental Health Perspectives; Environmental Science & Technology; Environmental International; Environmental Research; Environmental Pollution; Environmental Science and Pollution Research; Science of the Total Environment; Scientific Reports; The Innovation; Climatic Change; International Journal of Climatology; Journal of Environmental Management; Air Quality, Atmosphere & Health
- Guest editor, International Journal of Environmental Research and Public Health, special issue on The Exposome: Health Impacts of Environmental Exposures (2020-)
- Member, International Society of Environmental Epidemiology (2020-)
- Member, China Health Policy and Management Society (2020-)
- Member, American Heart Association (2021-)

## **SERVICE TO EMORY UNIVERSITY**

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- Member, RSPH Environmental Health Faculty Search Committee (2020-)
- Member, RSPH Computation and Data Science Advisory Group (2020-)
- Member, RSPH Environmental Health Master's Admissions Committee (2021)
- Member, RSPH Environmental Health Excellence Award Judge Panel (2021)

## **HONORS AND AWARDS**

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2021	Registration award of the 33 <sup>rd</sup> Annual Conference of the ISEE
2021	Runner-up for the 2020 CHPAMS Rising Scholar Best Paper Award
2020	Registration award of the 32 <sup>nd</sup> Annual Conference of the ISEE
2018	One of the papers in Environmental Health Perspectives' (EHP) 2018 Journal Impact Factor Collection
2016	Chinese Government Award for Outstanding Student Abroad
2012 – 2013	Harvard University Graduate Student Fellowship
2008	National Endeavor Scholarship

## **TEACHING EXPERIENCE**

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2020-	EH515 Air Quality in the Urban Environment (Emory, Co-instructor)
2020	EH587 Introduction to Satellite Remote Sensing (Emory, Co-instructor)
2020-	EH593R Data Analysis in Environmental Health (Emory, Co-instructor)
2021	EH590R R-based Quantitative Data Analysis (Emory, Co-instructor)

- 2020- EHS747 Advanced Environmental Epidemiology (Emory, Guest lecture)  
2021 SMKK09001U Environmental Epidemiology (University of Copenhagen, Guest lecture)  
2016 EH297 Atmospheric Environmental Seminars (Harvard, Teaching Assistant)  
2016 EPI204 Analysis of Case-Control, Cohort, and Other Epidemiologic Data (Harvard, Lab Instructor)

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**MASTER THESIS ADVISEES**

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- 2021 Yaoyao Qian (EH, 2021 Charles C. Shepard Award Finalists);  
Shiwen Huang (EH); Mingrui Wang (EH); Andrew Rosenberg (EH); Sabrina Bogovic (EH); Yuhan Zhang (EPI); Haomin Li (EPI)  
2022 Siyao Xiao (EH); Xianzhi Ye (EH)

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**VISTING PHD STUDENTS**

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- 2019 – 2021 Kuo Zhang (EH), Tsinghua University, China

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**DOCTORAL DISSERTATION ADVISEES**

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- Active Tszshan Ma (EH), committee member  
Qingyang Zhu (EH), committee member  
Wenhao Wang (EH), committee member  
Brigitte Pfluger (Nutrition), committee member

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**MENTORSHIP OF GRADUATE STUDENT**

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- 2021 – Yifan Wang (RAship); Haisu Zhang (RAship); Haomin Li (RAship)  
2020 – 2022 Ayana Cunningham (EH); Keyanna Ralph (EH)  
2021 – 2023 Tomorrow Bowen (EH); Xiajie Lyu (EH)

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**VISTING PHD STUDENTS**

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- 2019 – 2021 Kuo Zhang (EH), Tsinghua University, China

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**POSTDOC FELLOWS**

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- 2021 – Qiao Zhu

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**MENTORSHIP OF FACULTY**

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- 2020 – Maayan Yitshak-Sade, Icahn School of Medicine at Mount Sinai

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**SELECTED MEDIA COVERAGE**

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- November 22, 2021 “Long-term Exposure to Air Pollution May Increase Risk of Alzheimer’s, Other Neurological Disorders”  
<https://cos.gatech.edu/news/long-term-exposure-air-pollution-may-increase-risk-alzheimers-other-neurological-disorders>

- November 19, 2021 “Study Shows Exposure to Air Pollution May Increase Risk of Alzheimer’s and Other Neurological Disorders”  
<https://sph.emory.edu/news/news-release/2021/11/air-pollution-alzheimers.html>
- November 3, 2020 “Air pollution linked to risk of hospital admission with dementia”  
<https://www.medicalnewstoday.com/articles/air-pollution-linked-to-risk-of-hospital-admission-with-dementia>
- October 27, 2020 “Air pollution tied to neurological disorders in seniors”  
<https://consumer.healthday.com/10-27-air-pollution-tied-to-neurological-disorders-in-seniors-2648521554.html>
- October 26, 2020 “Study finds significant link between PM2.5 pollution and neurological disorders in US”  
<https://www.greencarcongress.com/2020/10/20201026-pm25.html>
- October 23, 2020 “Parkinson’s disease, Alzheimer’s, other neurological risks linked to air pollution study”  
<https://www.aboutlawsuits.com/air-pollution-dementia-study-2-177226/>
- October 20, 2020 “Air pollution tied to higher hospitalization risk for PD, other neurological disorders”  
<https://www.ajmc.com/view/air-pollution-tied-to-higher-hospitalization-risk-for-pd-other-neurological-disorders>
- October 20, 2020 “Study finds significant link between air pollution and neurological disorders”  
<https://www.publichealth.columbia.edu/public-health-now/news/study-finds-significant-link-between-air-pollution-and-neurological-disorders>
- October 20, 2020 “Air pollution may increase risk of neurological deterioration”  
<https://www.neuro-central.com/air-pollution-may-increase-risk-of-neurological-deterioration/>
- October 19, 2020 “Significant link found between air pollution and neurological disorders”  
<https://www.hsph.harvard.edu/news/press-releases/significant-link-found-between-air-pollution-and-neurological-disorders/>
- October 23, 2020 “Covid-19 and air pollution, dangerously intertwined”  
<https://www.ibsafoundation.org/covid-19-and-air-pollution-dangerously-intertwined/>
- October 8, 2020 “Log-term exposure to urban air pollutants linked to COVID-19 mortality”

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