# Yaguang Wei, PhD

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## **RESEARCH FOCUSES**

My research focuses on two main areas. First, I am very interested in environmental epidemiology investigating health impacts of air pollution and climate-relevant environmental stressors, by leveraging large-scale datasets and advanced epidemiologic and statistical methods. Although not exclusively, much of my work is conducted within large cohorts, including Medicare, Medicaid, SEER-Medicare, and State Inpatient Databases.

Another aspect of my work involves exposure modeling. I have been generating exposure estimates of air pollution and weather variables at neighborhood scales for the whole U.S., and making these data publicly available through NASA to foster collective efforts to tackle complex environmental health challenges.

#### EDUCATION

2017 - 2021	<b>PhD, Environmental Health</b> , Population Health Sciences Program Harvard Graduate School of Arts and Sciences, Cambridge, MA Thesis: Causal Propositions on Air Pollution and Human Health Committee: Joel Schwartz, Brent Coull, Petros Koutrakis
2015 - 2017	MS, Biostatistics Harvard T.H. Chan School of Public Health, Boston, MA
2013 - 2015	MS, Actuarial Science Columbia University, New York, NY
2009 - 2013	BEc, Actuarial Science Central University of Finance and Economics, Beijing, China

# ACADEMIC APPOINTMENTS

2024 -	Assistant Professor Department of Environmental Medicine and Climate Science Icahn School of Medicine at Mount Sinai, New York, NY
2023 - 2024	<b>Research Associate</b> Department of Environmental Health Harvard T.H. Chan School of Public Health, Boston, MA
2021 - 2023	<b>Postdoctoral Research Fellow</b> Department of Environmental Health Harvard T.H. Chan School of Public Health, Boston, MA

## **PROFESSIONAL SOCIETIES**

International Society for Environmental Epidemiology (ISEE) Society for Epidemiologic Research (SER)

# **GRANT, AWARDS & FELLOWSHIP**

2022 – 2023 Harvard NIEHS P30 Center Pilot Project "Differential Effects of Ambient Multipollutant Exposures on Cancer Mortality, Recurrence, and Comorbidities by Contextual Characteristics: A Pilot Analysis of SEER-Medicare".

2022	Top 4 Finalist of Lilienfeld Postdoctoral Paper Award, SER Annual Conference.
2022	Postdoctoral Travel Award, Harvard T.H. Chan School of Public Health.
2021	Outstanding Abstract Early Career Researcher, ISEE Annual Conference.
2021	Student and PostDoc Committee Travel Scholarship, SER Annual Conference.
2020 - 2021	Pedagogy Fellow, Harvard T.H. Chan School of Public Health.
2020	Best Environmental Epidemiology Paper Award, ISEE Annual Conference.

# PEER-REVIEWED PUBLICATIONS

- Wei Y, Feng Y, Danesh Yazdi M, Yin K, Castro E, Shtein A, Qiu X, Peralta AA, Coull BA, Dominici F & Schwartz J. Exposure-response associations between chronic exposure to fine particulate matter and risks of hospital admission for major cardiovascular diseases: population based cohort study. *BMJ*. 2024;384:e076939.
- Sun Y, Milando C, Spangler K, Wei Y, Schwartz J, Dominici F, Nori-Sarma A, Sun S & Wellenius G. Short term exposure to low level ambient fine particulate matter and natural cause, cardiovascular, and respiratory morbidity among US adults with health insurance: case time series study. *BMJ*. 2024;384:e076322.
- Feng Y, Castro E, Wei Y, Jin T, Qiu X, Dominici F & Schwartz J. Long-term exposure to ambient PM<sub>2.5</sub>, particulate constituents and hospital admissions from non-respiratory infection. *Nature Communications*. 2024;15(1):1518.
- Castro E, Liu A, Wei Y, Kosheleva A & Schwartz J. Modification of the PM<sub>2.5</sub>- and extreme heat-mortality relationships by historical redlining: a case-crossover study in thirteen U.S. states. *Environmental Health*. 2024;23(1):1-6.
- 5. de Bont J, Nori-Sarma A, Stafoggia M, Banerjee T, Ingole V, Jaganathan S, Mandal S, Rajiva A, Krishna B, Kloog I, Lane K, Mall RK, Tiwari AS, Wei Y, Wellenius GA, Prabhakaran D, Schwartz J, Prabhakaran P & Ljungman P. Impact of heatwaves on all-cause mortality in India: a comprehensive multicity study. *Environment International*. 2024:108461.
- Danesh Yazdi M, Amini H, Wei Y, Castro E, Shi L & Schwartz J. Long-term exposure to PM<sub>2.5</sub> species and all-cause mortality among Medicare patients using mixtures analyses. *Environmental Research*. 2024:118175.
- Shupler M, Huybrechts K, Leung M, Wei Y, Schwartz J, Li L, Koutrakis P, Hernández-Díaz S & Papatheodorou S. Short-term increases in NO<sub>2</sub> and O<sub>3</sub> concentrations during pregnancy and stillbirth risk in the US: A time-stratified, case crossover study. *Environmental Science & Technology*. 2024;58(2):1097-1108.
- 8. Liu CS, Wei Y, Danesh Yazdi M, Qiu X, Castro E, Zhu Q, Li L, Koutrakis P, Ekenga CC, Shi L & Schwartz J. Long-term association of air pollution and incidence of lung cancer among older Americans: a national study in the Medicare cohort. *Environment International*. 2023;181:108266.
- 9. Shupler M, Huybrechts K, Leung M, Wei Y, Schwartz J, Hernández-Díaz S & Papatheodorou S. The association of short term increases in ambient PM<sub>2.5</sub> and temperature exposures with stillbirth: racial/ethnic disparities among Medicaid recipients. *American Journal of Epidemiology*. In press.
- Wei Y, Danesh Yazdi M, Ma T, Castro E, Liu CS, Qiu X, Healy JP, Vu BN, Wang C, Shi L & Schwartz J. Additive effects of ten-year exposures to PM<sub>2.5</sub> and NO<sub>2</sub> and primary cancer incidence in American older adults. *Environmental Epidemiology*. 2023;7(4):e265.
- 11. Wang Y, Qiu X, Wei Y & Schwartz J. Long-term exposure to ambient  $PM_{2.5}$  and hospitalizations for myocardial infarction among U.S. residents: a difference-in-differences analysis. *Journal of the*

American Heart Association. 2023:e029428.

- 12. Wang C, Amini H, Xu Z, Peralta AA, Danesh Yazdi M, Qiu X, Wei Y, Just A, Heiss J, Hou L, Zheng Y, Coull BA, Kosheleva A, Baccarelli AA & Schwartz J. Long-term exposure to ambient fine particulate components and leukocyte epigenome-wide DNA Methylation in older men: the Normative Aging Study. *Environmental Health*. 2023;22(1):54.
- Healy JP, Danesh Yazdi M, Wei Y, Qiu X, Shtein A, Dominici F, Shi L & Schwartz J. Seasonal temperature variability and mortality in the medicare population. *Environmental Health Perspectives*. 2023;31(7):077002.
- 14. Schwartz J, Wei Y, Dominici F & Danesh Yazdi M. Effects of low-level air pollution exposures on hospital admission for myocardial infarction using multiple causal models. *Environmental Research*. 2023;116203.
- 15. Leung M, Modest AM, Hacker MR, Wylie BJ, **Wei Y**, Schwartz J, Iyer HS, Hart JE, Coull BA, Laden F, Weisskopf MG & Papatheodorou S. Traffic-related air pollution and ultrasound parameters of fetal growth in eastern Massachusetts, USA. *American Journal of Epidemiology*. 2023;kwad072.
- 16. Qiu X, Shi L, Kubzansky LD, **Wei Y**, Castro E, Li H, Weisskopf MG & Schwartz J. Association of Longterm exposure to air pollution with late-life depression in older adults in the US. *JAMA Network Open*. 2023;6(2):e2253668.
- Leung M, Laden F, Coull BA, Modest AM, Hacker MR, Wylie BJ, Iyer HS, Hart JE, Wei Y, Schwartz J, Weisskopf MG & Papatheodorou S. Ambient temperature during pregnancy and fetal growth in Eastern Massachusetts, USA. *International Journal of Epidemiology*. 2023;52(3):749–760.
- 18. Feng Y, Wei Y, Coull BA & Schwartz J. Measurement error correction for ambient PM<sub>2.5</sub> exposure using stratified regression calibration: effects on all-cause mortality. *Environmental Research*. 2022;114792.
- 19. Wang C, Xu Z, Qiu X, Wei Y, Peralta AA, Danesh Yazdi M, Jin T, Li W, Just A, Heiss J, Hou L, Zheng Y, Coull BA, Kosheleva A, Sparrow D, Amarasiriwardena C, Wright RO, Baccarelli AA & Schwartz J. Epigenome-wide DNA methylation in leukocytes and toenail metals: the normative aging study. *Environmental Research*. 2022;114797.
- Peralta AA, Gold DR, Danesh Yazdi M, Wei Y & Schwartz J. The role of short-term air pollution and temperature on arterial stiffness in a longitudinal closed cohort of elderly individuals. *Environmental Research*. 2022;216:114597.
- Qiu X, Wei Y, Weisskopf MG, Spiro A, Shi L, Castro E, Coull B, Koutrakis P & Schwartz J. Air pollution, climate conditions and risk of hospital admissions for psychotic disorders in U.S. residents. *Environmental Research*. 2022;23:114636.
- 22. Liu Y, Béliveau A, **Wei Y**, Chen MY, Record-Lemon RM, Kuo PL, Pritchard E, Tang X & Chen G. A gentle introduction to Bayesian network meta-analysis using an automated R package. *Multivariate Behavioral Research*. 2022;22:1-7.
- 23. Jin T, Amini H, Kosheleva A, Danesh Yazdi M, **Wei Y**, Castro E, Di Q, Shi L & Schwartz J. Associations between long-term exposures to airborne PM<sub>2.5</sub> components and mortality in Massachusetts: mixture analysis exploration. *Environmental Health*. 2022;21(1):96.
- 24. Liu R, Wei Y, Qiu X, Kosheleva A & Schwartz J. Short term exposure to air pollution and mortality in the US: a double negative control analysis. *Environmental Health*. 2022;21(1):81.
- 25. Qiu X, Wei Y, Amini H, Wang C, Weisskopf MG, Koutrakis P & Schwartz J. Fine particle components and risk of psychiatric hospitalization in the US. *Science of the Total Environment*. 2022:157934.

- 26. Wei Y, Qiu X, Danesh Yazdi M, Shtein A, Shi L, Yang J, Peralta AA, Coull BA & Schwartz J. The impact of exposure measurement error on the estimated concentration-response relationship between long-term exposure to PM<sub>2.5</sub> and mortality. *Environmental Health Perspectives*. 2022;130(7):077006.
- 27. Danesh Yazdi M, **Wei Y**, Di Q, Réquia WJ, Shi L, Sabath MB, Dominici F and & Schwartz J. The effect of long-term exposure to air pollution and seasonal temperature on hospital admissions with cardiovascular and respiratory disease in the United States: a difference-in-differences analysis. *Science of the Total Environment*. 2022;843:156855.
- 28. Ma T, Danesh Yazdi M, Schwartz J, Réquia WJ, Di Q, Wei Y, Chang HH, Vaccarino V, Liu P & Shi L. Long-term air pollution exposure and incident stroke in American older adults: a national cohort study. *Global Epidemiology*. 2022;4:100073.
- 29. Qiu X, Danesh Yazdi M, Wei Y, Di Q, Just A, Zanobetti A, Weisskopf MG, Dominici F and & Schwartz J. Associations of short-term exposure to air pollution and increased ambient temperature with psychiatric hospital admissions in older adults in the USA: a case–crossover study. *The Lancet Planetary Health*. 2022;6(4):e331-e341.
- 30. Wei Y, Qiu X, Sabath MB, Danesh Yazdi M, Yin K, Li L, Peralta AA, Wang C, Koutrakis P, Zanobetti A, Dominici F & Schwartz J. Air pollutants and asthma hospitalization in the Medicaid population. *American Journal of Respiratory and Critical Care Medicine*. 2022;205:1075–1083.
- Li L, Dominici F, Blomberg AJ, Bargagli-Stoffi FJ, Schwartz J, Coull BA, Spengler JD, Wei Y, Lawrence J & Koutrakis P. Exposure to unconventional oil and gas development and all-cause mortality in Medicare beneficiaries. *Nature Energy*. 2022;7:177–185.
- 32. Li L, Stern RA, Blomberg AJ, Kang CM, Wei Y, Liu M, Peralta AA, Lawrence J, Vieira C & Koutrakis P. Ratios between radon concentrations in upstairs and basements: a study in the Northeastern and Midwestern United States. *Environmental Science & Technology Letters*. 2022.
- 33. Leung M, Weisskopf MG, Laden F, Coull BA, Modest AM, Hacker MR, Wylie BJ, Wei Y, Schwartz J & Papatheodorou S. Exposure to PM<sub>2.5</sub> during pregnancy and fetal growth in Eastern Massachusetts, USA. *Environmental Health Perspectives*. 2022;130(1):017004.
- 34. Danesh Yazdi M, Wang Y, Di Q, Requia WJ, Wei Y, Shi L, Sabath MB, Dominici F, Coull B, Evans JS, Koutrakis P & Schwartz J. 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. 2021;5(10):e689-e697.
- 35. Wei Y, Danesh Yazdi M, Di Q, Requia WJ, Dominici F, Zanobetti A & Schwartz J. Emulating causal dose-response relations between air pollutants and mortality in the Medicare population. *Environmental Health*. 2021;20(1):53.
- Wei Y, Coull B, Koutrakis P, Yang J, Li L, Zanobetti A & Schwartz J. Assessing additive effects of air pollutants on mortality rate in Massachusetts. *Environmental Health*. 2021;20(1):19.
- 37. Li L, Blomberg AJ, Lawrence J, Requia W, Wei Y, Liu M, Peralta AA & Koutrakis P. A spatiotemporal ensemble model to predict gross beta particulate radioactivity across the contiguous United States. *Environment International*. 2021;19;156:106643.
- 38. Wei Y, Tiwari AS, Li L, Solanki B, Sarkar J, Mavalankar D & Schwartz J. Assessing mortality risk attributable to high ambient temperatures in Ahmedabad, 1987 to 2017. *Environmental Research*. 2021;198:111232.
- 39. Li L, Blomberg AJ, Stern R, Kang C, Papatheodorou S, Wei Y, Liu M, Peralta AA, Vieira C & Koutrakis P. Predicting monthly community-level domestic radon concentrations in greater Boston area with an ensemble learning model. *Environmental Science & Technology*. 2021;55;10:7157–7166.

- 40. Danesh Yazdi M, Wang Y, Di Q, **Wei Y**, Requia WJ, Shi L, Sabath MB, Dominici F, Coull BA, Evans JS, Koutrakis P & Schwartz J. Long-term association of air pollution and hospital admissions among Medicare participants using a doubly robust additive model. *Circulation*. 2021;143(16):1584–1596.
- 41. Schwartz J, Wei Y, Di Q, Dominici F & Zanobetti A. A national difference in differences analysis of the effect of PM<sub>2.5</sub> on annual death rates. *Environmental Research*. 2021;194:110649.
- 42. Wang C, Ni W, Yao Y, Just A, Heiss J, **Wei Y**, Gao X, Coull BA, Kosheleva A, Baccarelli AA, Peters A & Schwartz J. DNA methylation-based biomarkers of age acceleration and all-cause death, myocardial infarction, stroke, and cancer in two cohorts: the NAS, and KORA F4. *EBioMedicine*. 2021;63:103151.
- Wei Y & Schwartz J. TWO AUTHORS REPLY. American Journal of Epidemiology. 2021;190 (3):488–490.
- 44. Shi L, Wu X, Danesh Yazdi M, Braun D, Awad YA, Wei Y, Liu P, Di Q, Wang Y, Schwartz J, Dominici F, Kioumourtzoglou MA & Zanobetti A. Long-term effects of PM2·5 on neurological disorders in the American Medicare population: a longitudinal cohort study. *The Lancet Planetary Health*. 2020;4(12):e557-e565.
- 45. 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 rate in Massachusetts. *American Journal of Epidemiology*. 2020;189(11):1316-1323.
- 46. Yin K, Brydges H, Lawrence KW, Wei Y, Karlson KJ, McAneny DB, Edwards NM, Reardon MJ & Dobrilovic N. Primary cardiac lymphoma. *The Journal of Thoracic and Cardiovascular Surgery*. 2020;S0022-5223(20)32706-9.
- 47. Peralta AA, Link MS, Schwartz J, Luttmann-Gibson H, Dockery DW, Blomberg A, Wei Y, Mittleman MA, Gold DR, Laden F, Coull BA & Koutrakis P. Exposure to air pollution and particle radioactivity with the risk of ventricular arrhythmias. *Circulation*. 2020;142(9):858-867.
- 48. Qiu XY, Wei Y, Wang Y, Di Q, Sofer T, Awad YA & Schwartz J. Inverse probability weighted distributed lag effects of short-term exposure to PM<sub>2.5</sub> and ozone on CVD hospitalizations in New England Medicare participants exploring the causal effects. *Environmental Research*. 2020;182:109095.
- 49. Lin CK, Hsu YT, Brown KD, Pokharel B, Wei Y & Chen ST. Residential exposure to petrochemical industrial complexes and the risk of leukemia: a systematic review and exposure-response meta-analysis. *Environmental Pollution*. 2020;258:113476.
- 50. Yin K, Luo R, Wei Y, Wang F, Zhang Y, Karlson KJ, Zhang Z, Reardon MJ & Dobrilovic N. Survival outcomes in patients with primary cardiac sarcoma in the United States. *The Journal of Thoracic and Cardiovascular Surgery*. 2020;S0022-5223(20)30209-9.
- 51. Wang F, Wan Y, Yin K, **Wei Y**, Wang B, Yu X, Ni Y, Zheng J, Huang T, Song M & Li D. Lower circulating branched-chain amino acid concentrations among vegetarians are associated with changes in gut microbial composition and function. *Molecular Nutrition and Food Research*. 2019;63(24):1900612.
- 52. Wei Y, Wang Y, Di Q, Choirat C, Wang Y, Koutrakis P, Zanobetti A, Dominici F & Schwartz J. Short term exposure to fine particulate matter and hospital admission risks and costs in the Medicare population: time stratified, case crossover study. *BMJ*. 2019;367:16258.
- 53. Wang N, Ma Y, Liu Z, Liu L, Yang K, **Wei Y**, Liu Y, Chen X, Sun X & Wen D. Hydroxytyrosol prevents PM<sub>2.5</sub>-induced adiposity and insulin resistance by restraining oxidative stress related NF-KB pathway and modulation of gut microbiota in a murine model. *Free Radical Biology and Medicine*. 2019;141:393-407.
- 54. Wei Y, Wang Y, Lin CK, Yin K, Yang J, Shi L, Li L, Zanobetti A & Schwartz J. Associations between

seasonal temperature and dementia-associated hospitalizations in New England. *Environment International*. 2019;126:228-233.

55. Lin CK, Lin RT, Chen T, Zigler C, Wei Y & Christiani DC. A global perspective on coal-fired power plants and burden of lung cancer. *Environmental Health*. 2019;18(1):9.

## NON-PEER-REVIEWED PUBLICATIONS

- 1. Wei Y & Schwartz J. The updated WHO air quality guidelines are a big step forward but not a complete solution. *BMJ Opinion*. 2024.
- 2. Wang Y, Danesh Yazdi M, Wei Y & Schwartz J. Long-Term exposure to air pollution below regulatory standards and cardiovascular diseases among US Medicare beneficiaries: a double negative control approach. Preprint available at https://www.researchsquare.com/article/rs-3530201/v1.
- 3. Amini H, Danesh Yazdi M, Di Q, Réquia WJ, Wei Y, Awad YA, Shi L, Franklin M, Kang CM, Wolfson J, James P, Habre R, Zhu Q, Apte J, Andersen Z, Dominici F, Koutrakis P & Schwartz J. Hyperlocal super-learned PM<sub>2.5</sub> components across the contiguous US. Preprint available at https://www.researchsquare.com/article/rs-1745433/v1.
- 4. Amini H, Danesh Yazdi M, Di Q, Réquia WJ, Wei Y, Awad YA, Shi L, Franklin M, Kang CM, Wolfson J, James P, Habre R, Zhu Q, Apte J, Andersen Z, Xing X, Hultquist C, Kloog I, Dominici F, Koutrakis P & Schwartz J. Hyperlocal US PM<sub>2.5</sub> trace elements super-learned. Preprint available at https://www.rese archsquare.com/article/rs-2052258/v1.
- 5. Wei Y, Dominici F & Schwartz J. Yaguang Wei: The dangers of air pollution for human health. *BMJ Opinion*. 2019.

#### PUBLISHED AIR POLLUTANT DATASETS

- Di Q, Wei Y, Shtein A, Xing X, Castro E, Amini H, Hultquist C, Shi L, Kloog I, Silvern R, Kelly JT, Sabath MB, Choirat C, Koutrakis P, Lyapustin A, Wang Y, Mickley LJ, Daouk Y & Schwartz J. Daily and Annual NO<sub>2</sub> Concentrations for the Contiguous United States, 1-km Grids, v1.10 (2000–2016). *Palisades, NY: NASA Socioeconomic Data and Applications Center (SEDAC)*. 2024. Publicly accessible at https://doi.org/10.7927/rz28-p167.
- Requia WJ, Wei Y, Shtein A, Xing X, Castro E, Di Q, Silvern R, Kelly J, Koutrakis P, Mickley LJ, Sulprizio MP, Amini H, Hultquist C, Shi L, Daouk Y & Schwartz J. Daily 8-Hour Maximum and Annual O<sub>3</sub> Concentrations for the Contiguous United States, 1-km Grids, v1.10 (2000–2016). *Palisades, NY:* NASA Socioeconomic Data and Applications Center (SEDAC). 2024. Publicly accessible at https: //doi.org/10.7927/5tht-jg22.
- 3. Di Q, Wei Y, Shtein A, Xing X, Castro E, Amini H, Hultquist C, Shi L, Kloog I, Silvern R, Kelly J, Sabath MB, Choirat C, Koutrakis P, Lyapustin A, Wang Y, Mickley LJ, Daouk Y & Schwartz J. Daily and Annual PM<sub>2.5</sub> Concentrations for the Contiguous United States, 1-km Grids, v1.10 (2000–2016). *Palisades, NY: NASA Socioeconomic Data and Applications Center (SEDAC)*. 2024. Publicly accessible at https://doi.org/10.7927/g2n9-ca10.
- 4. Wei Y, Xing X, Shtein A, Castro E, Hultquist C, Danesh Yazdi M & Schwartz J. Daily and Annual PM<sub>2.5</sub>, O<sub>3</sub>, and NO<sub>2</sub> Concentrations at ZIP Codes for the Contiguous U.S., v1 (2000–2016). *Palisades, NY: NASA Socioeconomic Data and Applications Center (SEDAC)*. 2022. Publicly accessible at https://doi.org/10.7927/9yp5-hz11.
- 5. Amini H, Danesh Yazdi M, Di Q, Requia W, Wei Y, AbuAwad Y, Shi L, Franklin M, Kang CM, Wolfson JM, James P, Habre R, Zhu Q, Apte JS, Andersen ZJ, Xing X, Hultquist C, Kloog I, Dominici F, Koutrakis P & Schwartz J. Annual Mean PM<sub>2.5</sub> Trace Elements (TEs) 50m Urban and 1km Non-Urban Area Grids

for Contiguous U.S., v1 (2000–2019). Palisades, NY: NASA Socioeconomic Data and Applications Center (SEDAC). 2023. Publicly accessible at https://doi.org/10.7927/1x94-mv38.

Amini H, Danesh Yazdi M, Di Q, Requia W, Wei Y, AbuAwad Y, Shi L, Franklin M, Kang CM, Wolfson JM, James P, Habre R, Zhu Q, Apte JS, Andersen ZJ, Xing X, Hultquist C, Kloog I, Dominici F, Koutrakis P & Schwartz J. Annual Mean PM<sub>2.5</sub> Components (EC, NH<sub>4</sub>, NO<sub>3</sub>, OC, SO<sub>4</sub>) 50m Urban and 1km Non-Urban Area Grids for Contiguous U.S., v1 (2000–2019). *Palisades, NY: NASA Socioeconomic Data and Applications Center (SEDAC)*. 2023. Publicly accessible at https://doi.org/10.7927/7wj3-en73.

#### PRESENTATIONS

#### **Oral Presentations**

2024	"Grouped mixtures of air pollutants and seasonal temperature anomalies and cardiovascular hospitalizations among U.S. residents". SER Annual Conference, Austin, Texas.
2024	"Exposure-response relationships between chronic exposure to fine particulate matter and hospi- talization risks for major cardiovascular diseases". SER Annual Conference, Austin, Texas.
2023	"Incorporating exposure uncertainty in estimating causal exposure-response relationships between long-term exposure to $PM_{2.5}$ and cardiovascular disease". ISEE Annual Conference, Virtual.
2022	"The impact of exposure measurement error on the estimated concentration-response relationship between long-term exposure to $PM_{2.5}$ and mortality". ISEE Annual Conference, Athens, Greece.
2022	"The impact of exposure measurement error on the estimated dose-response relationship between long-term exposure to $PM_{2.5}$ and mortality". SER Annual Conference, Chicago, IL.
2021	"Assessing additive effects of air pollutants on mortality rate in Massachusetts". SER Annual Conference, Virtual.
2021	"Acute exposures to air pollutants and asthma hospitalization in the Medicaid population". National Studies on Air Pollution and Health Meeting, Harvard T.H. Chan School of Public Health, Virtual.
2021	"Emulating causal dose-response relations between air pollutants and mortality in the Medicare population". ISEE Young Annual Conference, Virtual.
2021	"Assessing additive effects of air pollutants on mortality rate in Massachusetts". Harvard/MIT ACE Center Advisory Committee Meeting, Virtual.
Posters	
2023	"Mixture effects of air pollutants and seasonal temperature anomalies on cardiovascular hospital- izations". ISEE Annual Conference, Virtual.
2023	"Ten-year exposures to $PM_{2.5}$ and $NO_2$ and cancer incidence in American older adults". ISEE Annual Conference, Virtual.
2023	"Additive effects of 10-year exposures to $PM_{2.5}$ and $NO_2$ on cancer incidence in American older adults". SER Annual Conference, Portland, OR.
2023	"Additive effects of 10-year exposures to $PM_{2.5}$ and $NO_2$ on cancer incidence in American older adults". Dana-Farber/Harvard Cancer Center Early Career Investigators Symposium, Boston, MA.
2022	"Long-term effects of air pollutant exposures on site-specific cancer incidence in elders". ISEE Annual Conference, Athens, Greece.

2021	"Emulating causal dose-response relations between air pollutants and mortality in the Medicare population". ISEE Annual Conference, Virtual.
2021	"Acute exposures to air pollutants and asthma hospitalization in the Medicaid population". ISEE Annual Conference, Virtual.
2021	"Emulating causal dose-response relations between air pollutants and mortality in the Medicare population". SER Annual Conference, Virtual.
2020	"Causal effects of air pollution on mortality in Massachusetts". ISEE Annual Conference, Virtual.
2019	"A time-series analysis of hot temperatures and mortality in Ahmedabad, 1987 to 2017". ISEE Annual Conference, Utrecht, Netherlands.
2018	"Associations between seasonal temperature and dementia-associated hospitalizations in New England". Harvard T.H. Chan Annual Poster Day, Boston, MA.

#### SERVICES

#### Member of SER Communications Committee

#### Ad Hoc Reviewer

Nature, Nature Medicine, Nature Communications, BMJ, BMJ Open, Lancet Planetary Health, Environment International, American Journal of Epidemiology, Science of the Total Environment, Epidemiology, International Journal of Epidemiology, Environmental Pollution, Environmental Research, Environmental Health, Environmental Research Letters, Air Quality, Atmosphere & Health, BMC Public Health, Atmospheric Environment, International Journal of Public Health, PLoS One

Poster Judge for 2022 SER Annual Conference

Abstract Reviewer for 2021–2023 SER Annual Conferences and 2020–2021 ISEE Annual Conferences

#### **TEACHING & MENTORSHIP**

# Harvard T.H. Chan School of Public Health

2019	Teaching fellow for graduate course "Advanced Regression for Environmental Epidemiology" - Responsibilities include developing new course materials, delivering labs, grading assign-
	ments/exams, and meeting with students individually – Overall student evaluation: 4.8/5.0
2018	Teaching assistant for graduate course "Advanced Regression for Environmental Epidemiology" $-$ Overall student evaluation: $5.0/5.0$

## Harvard Medical School

2016 Teaching assistant for graduate course "Graphic Communication & Visualizing Your Data Using R"

## SELECTED PRESS COVERAGE

- 1. Boston Globe: "Air pollution can increase risk of several cancers for older adults, even at low exposures, Harvard study says".
- 2. Reuters: "Air pollution tied to hospitalizations for wide range of illnesses".
- 3. The Guardian: "Impact of air pollution on health may be far worse than thought, study suggests".
- 4. CNN: "More reasons air pollution will send you to the hospital".

- 5. The Times: "Pollution linked to kidney failure and septicaemia".
- 6. U.S. News: "Even in Small Doses, Air Pollution Harms Older Americans".
- 7. Science Daily: "Air pollution linked to several new causes of hospital admissions".
- 8. ABC News: "Bushfires, air quality and hospital admissions".