

CURRICULUM VITAE

Mike Zhongyu He

PERSONAL DATA

Department of Environmental Medicine and Climate Science
Icahn School of Medicine at Mount Sinai
One Gustave L. Levy Place, Box 1057
New York, NY 10029-6574

Email: mike.he@mssm.edu

Website: <https://mikezhe.com>

Teaching Portfolio: <https://blogs.cuit.columbia.edu/zh2263/>

ACADEMIC APPOINTMENTS

Jul 2024 – Present	Icahn School of Medicine at Mount Sinai Department of Environmental Medicine and Climate Science Department of Public Health Instructor
Sep 2022 – Present	Barnard College Department of Environmental Science Adjunct Assistant Professor
Sep 2021 – Present	Columbia University Department of Sociology Quantitative Methods in the Social Sciences Program Adjunct Assistant Professor

EDUCATION / TRAINING

Aug 2021 – Present	Columbia University Mailman School of Public Health Career MODE Program Trainee Mentors: Drs. Elena Colicino and Stefanie Ebelt
Sep 2020 – Jun 2024	Icahn School of Medicine at Mount Sinai Department of Environmental Medicine and Climate Science Postdoctoral Fellow Mentors: Drs. Itai Kloog, Maayan Yitshak-Sade, and Robert Wright

Sep 2015 – Jul 2020	Columbia University Mailman School of Public Health Department of Environmental Health Sciences Columbia Climate and Health Program Doctor of Philosophy, Environmental Health Sciences Advisors: Drs. Marianthi-Anna Kioumourtzoglou and Patrick Kinney Dissertation Title: <i>Air pollution and adverse health effects: Assessing exposure windows and sensitivity to modeling choices</i>
Sep 2015 – Oct 2018	Columbia University Mailman School of Public Health Master of Philosophy, Environmental Health Sciences
Sep 2014 – May 2015	Johns Hopkins Bloomberg School of Public Health Graduate Certificate, Risk Sciences and Public Policy
Sep 2014 – May 2015	Johns Hopkins Bloomberg School of Public Health Master of Health Science, Environmental Health Sciences Advisor: Dr. Ana Navas-Acien
Jun 2013 – Aug 2013	Johns Hopkins University Certificate, Advanced Health Sciences Chinese
Sep 2010 – May 2014	Johns Hopkins University Bachelor of Arts with Honors Majors: Public Health Studies/Earth & Planetary Sciences Minors: Music/Global Environmental Change & Sustainability

HONORS AND AWARDS

2023	Winner, SNRN Poster Awards Competition, 35 th Annual Conference of the International Society for Environmental Epidemiology
2023	Second Place, 2023 Clinical Climate Change Conference Poster Award
2023	Finalist, Presidential Awards for Outstanding Teaching, Columbia University
2022	Extramural Paper of the Month (February), NIEHS Environmental Factor Title: <i>Evaluating the Impact of the Clean Heat Program on Air Pollution Levels in New York City</i>
2015	Induction to the Delta Omega Honorary Society, Alpha Chapter, Johns Hopkins Bloomberg School of Public Health

2015 Recipient of the AAAS/Science Program for Excellence in Science, American Association for the Advancement of Science

FUNDING

2024 – Present	Mentored Career Development Award (KL2; \$262,558), Institutes for Translational Sciences, Icahn School of Medicine at Mount Sinai Title: <i>The role of immune function in the association between air pollution and vaccine antibody response in the PROGRESS cohort</i>
2024	Professional Development Fund (\$3,225), Barnard Contingent Faculty BCF-UAW
2023	Travel Award (\$1,500), 35 th Annual Conference of the International Society for Environmental Epidemiology
2022	Sylff Research Grant (\$4,710), Sylff Association Title: <i>The association between air pollution and immunological response in children</i>
2022	Travel Award (\$1,400), 34 th Annual Conference of the International Society for Environmental Epidemiology
2022 – 2023	Pilot Research Project Grant (\$25,000), Mount Sinai Transdisciplinary Center on Early Environmental Exposures Title: <i>Air Pollution, Mitochondrial Heteroplasmy, and Vaccine Efficacy in Children</i>
2021 – 2024	Ruth L. Kirschstein National Research Service Award (T32; <i>Research Training Program in Environmental Pediatrics</i>), Eunice Kennedy Shriver National Institute of Child Health and Human Development
2021	Registration Award, 33 rd Annual Conference of the International Society for Environmental Epidemiology
2020	Registration Award, 32 nd Annual Conference of the International Society for Environmental Epidemiology
2019	Student Conference and Leadership Experience Award (\$800), Columbia Mailman School of Public Health
2019	HAQAST5 Travel Award (\$1,500), NASA Health and Air Quality Applied Sciences Team Meeting

2018	Teaching Observation Fellowship (\$2,000), Center for Teaching and Learning, Columbia University
2018	Student Conference Travel Award (\$900), Columbia Mailman School of Public Health
2018 – 2020	Ruth L. Kirschstein National Research Service Award (F31; \$60,272), National Institute of Environmental Health Sciences Title: <i>Assessing Current and Future Health Impacts of Fine Particulate Matter in China and the United States</i>
2017 – 2019	Sasakawa Young Leaders Fellowship (\$3,750), The Ryoichi Sasakawa Young Leaders Fellowship Fund
2016	Weatherhead Fellowship (\$1,500), Weatherhead East Asian Institute, Columbia University
2015 – 2018	Ruth L. Kirschstein National Research Service Award (T32; <i>Interdisciplinary Training in Climate and Health</i>), National Institute of Environmental Health Sciences
2011 – 2014	Bloomberg Scholarship (\$117,550), Johns Hopkins University

PUBLICATIONS

Peer-Reviewed Research Articles

36. Hu C-Y, Gutierrez-Avila I, **He MZ**, Lavigne É, Alcalá CS, Yitshak-Sade M, Lamadrid-Figueroa H, Tamayo-Ortiz M, Mercado-García A, Just AC, Gennings C, Téllez-Rojo MM, Wright RO, Wright RJ, Rosa MJ: Windows of susceptibility and joint effects of prenatal and postnatal ambient air pollution and temperature exposure on asthma and wheeze in Mexican children. Environment International 193: 109122. **2024**.
35. Mailloux BJ, McGillis C, Maenza-Gmelch T, Culligan PJ, **He MZ**, Kaspi G, Miley M, Komita-Moussa E, Sanchez TR, Steiger E, Zhao H, Cook EM: Large-scale determinants of street tree growth rates across an urban environment. PLOS ONE. **2024**.
34. Li T, Chen C, Zhang M, Zhao L, Liu Y, Guo Y, Wang Q, Du H, Xiao Q, Liu Y, **He MZ**, Kinney PL, Cohen AJ, Tong S, Shi X: Accountability analysis of health benefits related to National Action Plan on air pollution prevention and control in China. PNAS Nexus 3(4). **2024**.
33. Huang S, Wu J, **He M**: The air pollution-fertility relationship: evidence from China. Applied Economics. **2024**.
32. Guo B, Zhao C, **He MZ**, Senter C, Zhou Z, Peng J, Li S, Fitzpatrick AL, Lindström S, Stebbins RC, Noppert GA, Li C: Identifying patterns of reported findings on long-term cardiac complications of COVID-19: a systematic review and meta-analysis. BMC Medicine 21:468. **2023**.

31. Nunez Y, Balilian A, Parks RM, **He MZ**, Hansen J, Raaschou-Nielsen O, Ketzel M, Khan J, Vermeulen R, Peters S, Weisskopf MG, Re DB, Kioumourtzoglou M-A: Critical Time Windows in the Association between PM_{2.5} Exposure and Amyotrophic Lateral Sclerosis: A Case-Control Study in Denmark. Am J Epidemiol 192(9): 1499-1508. **2023**.
30. **He MZ**, Yitshak-Sade M, Just AC, Gutiérrez-Avila I, Dorman M, de Hoogh K, Mijling B, Wright RO, Kloog I: Predicting fine-scale daily NO₂ over Mexico City using an ensemble modeling approach. Atmospheric Pollution Research 14(6): 101763. **2023**.
29. Chen C, Li T, Sun Q, Shi W, **He MZ**, Wang J, Liu J, Zhang M, Jiang Q, Wang M, Shi X: Short-term exposure to ozone and cause-specific mortality risks and thresholds in China: Evidence from nationally representative data, 2013-2018. Environment International 171: 107666. **2023**.
28. Du P, Du H, Lu K, **He MZ**, Feng D, He M, Liu T, Hu J, Li T: Traffic-related PM_{2.5} and its specific constituents on circulatory mortality: a nationwide modelling study in China. Environment International 170: 107652. **2022**.
27. **He MZ**, Kloog I, Just AC, Gutiérrez-Avila I, Colicino E, Téllez-Rojo MM, Pizano-Zárate M, Tamayo-Ortiz M, Cantoral A, Soria-Contreras DC, Baccarelli AA, Wright RO, Yitshak-Sade M: Intermediate- and long-term associations between air pollution and ambient temperature and glycated hemoglobin levels in women of child bearing age. Environment International 165: 107298. **2022**.
26. Liu W, **He MZ**, Dambach P, Schwertz R, Chen S, Yu F, Marx M: Trends of overweight and obesity among preschool children from 2013 to 2018: a cross-sectional study in Rhine-Neckar County and the City of Heidelberg, Germany. BMC Public Health 22:941. **2022**.
25. Wang Y, Du Y, Fang J, Dong X, Wang Q, Ban J, Sun Q, Ma R, Zhang W, **He MZ**, Liu C, Niu Y, Chen R, Kan H, Li T: A Random Forest Model for Daily PM_{2.5} Personal Exposure Assessment for a Chinese Cohort. Environ Sci Technol Lett 9, 466-472. **2022**.
24. Du H, Liu Y, Shi G, Wang F, **He MZ**, Li T: Associations between Source-Specific Fine Particulate Matter and Mortality and Hospital Admissions in Beijing, China. Environ Sci Technol 56, 1174-1182. **2022**.
23. Zhang L*, **He MZ***, Gibson EA, Perera F, Lovasi GS, Clougherty JE, Carrión D, Burke K, Fry D, Kioumourtzoglou M-A: Evaluating the Impact of the Clean Heat Program on Air Pollution Levels in New York City. Environmental Health Perspectives 129(12). **2021**.
*Co first-authors
22. **He MZ**, Do V, Liu S, Kinney PL, Fiore AM, Jin X, DeFelice N, Bi J, Liu Y, Insaf TZ, Kioumourtzoglou M-A: Short-term PM_{2.5} and cardiovascular admissions in NY State: assessing sensitivity to exposure model choice. Environmental Health 20:93. **2021**.
21. Ban J, Sun Y, Zhang Y, **He MZ**, Sun Q, Chen C, Li T: Changes in Public Perception and Behaviors under Compound Heatwave in COVID-19 Epidemic – Beijing, China, 2020. China CDC Weekly 3(32): 675-682. **2021**.
20. Ma R, Ban J, Wang Q, Zhang Y, Yang Y, **He MZ**, Li S, Shi W, Li T: Random forest model based fine scale spatiotemporal O₃ trends in the Beijing-Tianjin-Hebei region in China, 2010 to 2017. Environmental Pollution 116635. **2021**.
19. Liu S, Xing J, Westervelt DM, Liu S, Ding D, Fiore AM, Kinney PL, Zhang Y, **He MZ**, Zhang H, Sahu SK, Zhang F, Zhao B, Wang S: Role of emission controls in reducing the 2050 climate change penalty for PM_{2.5} in China. Science of the Total Environment 765: 144338. **2021**.

18. Sun Z, Chen C, Yan M, Shi W, Wang J, Ban J, Sun Q, **He MZ**, Li T: Heat wave characteristics, mortality and effect modification by temperature zones: a time-series study in 130 counties of China. International Journal of Epidemiology 49(6): 1813-1822. **2020**.
17. Fang X, Liu W, Ai J, **He M**, Wu Y, Shi Y, Shen W, Bao C: Forecasting incidence of infectious diarrhea using random forest in Jiangsu Province, China. BMC Infectious Diseases 20:222. **2020**.
16. **He MZ**, Kinney PL, Li T, Chen C, Sun Q, Ban J, Wang J, Liu S, Goldsmith J, Kioumourtzoglou M-A: Short- and intermediate-term exposure NO₂ and mortality: A multi-county analysis in China. Environmental Pollution 261: 114165. **2020**.
15. Zhang Y, Li T, Ma R, Yin Z, Wang J, **He MZ**, Xu D, Gao X, Wang Q, Kraus VB, Lv Y, Zhong Y, Kinney PL, Shi X: Long-term exposure to ambient fine particulate matter and fasting blood glucose level in a Chinese elderly cohort. Science of the Total Environment 717: 137191. **2020**.
14. Chen C, Li T, Wang L, Qi J, Shi W, **He MZ**, Sun Q, Wang J, Zhu H, Shi X: Short-term Exposure to Fine Particles and Risk of Cause-Specific Mortality – China, 2013-2018. China CDC Weekly 1(1): 8-12. **2019**.
13. Jin X, Fiore AM, Civerolo K, Bi J, Liu Y, van Donkelaar A, Martin RV, Al-Hamdan M, Zhang Y, Insaf TZ, Kioumourtzoglou M-A, **He MZ**, Kinney PL: Comparison of multiple PM_{2.5} exposure products for estimating health benefits of emission controls over New York State, USA. Environ Res Lett 14 084023. **2019**.
12. Westervelt DM, Ma C, **He MZ**, Fiore AM, Kinney PL, Kioumourtzoglou M-A, Wang S, Xing J, Ding D, Correa G: Mid-21st century ozone air quality and health burden in China under emissions scenarios and climate change. Environ Res Lett 14 074030. **2019**.
11. Yang Y, **He MZ**, Li T, Yang X: MRI combined with PET-CT of different tracers to improve the accuracy of glioma diagnosis: a systematic review and meta-analysis. Neurosurg Rev 42: 185-195. **2019**.
10. Li T, Guo Y, Liu Y, Wang J, Wang Q, Sun Z, **He MZ**, Shi X: Estimating mortality burden attributable to short-term PM_{2.5} exposure: A national observational study in China. Environment International 125: 245-251. **2019**.
9. Chen C, Xu D, **He MZ**, Wang Y, Du Z, Du Y, Qian Y, Ji D, Li T: Fine particulate constituents and mortality: a time-series study in Beijing, China. Environ Sci Technol 52, 11378-11386. **2018**.
8. Zhang Y, Cui L, Xu D, **He MZ**, Zhou J, Han L, Li X, Li T: The association of ambient PM_{2.5} with school absence and symptoms in schoolchildren: a panel study. Pediatric Research 84: 28-33. **2018**.
7. Sun Q, Wang W, Chen C, Ban J, Xu D, Zhu P, **He MZ**, Li T: Acute effect of multiple ozone metrics on mortality by season in 34 Chinese counties, 2013-2015. Journal of Internal Medicine 283 (5), 481-488. **2018**.
6. Wang Q, Wang J, **He MZ**, Kinney PL, Li T: A county-level estimate of PM_{2.5} related chronic mortality risk in China based on multi-model exposure data. Environment International 110: 105-112. **2018**.
5. Liu W, **He MZ**, Wang Y, Wang Y, Zhou Y, Wu M, Tang Z, Dai Y, Yuan B, Zhen S, Cheskin LJ: Differences in health-related behaviors between middle school, high school, and college students in Jiangsu province, China. Asia Pacific J Clin Nutr 26(4): 731-737, **2017**.

4. Ban J, Xu D, **He MZ**, Sun Q, Chen C, Wang W, Zhu P, Li T: The effect of high temperature on cause-specific mortality: A multi-county analysis in China. Environment International 106: 19-26. **2017**.
3. **He MZ**, Zeng X, Zhang K, Kinney PL: Fine Particulate Matter Concentrations in Urban Chinese Cities, 2005-2016: A Systematic Review. Int J Environ Res Public Health 14(2), 191. **2017**.
2. Ban J, Huang L, Chen C, Guo Y, **He MZ**, Li T: Integrating new indicators of predictors that shape the public's perception of local extreme temperature in China. Science of the Total Environment 579: 529-536. **2017**.
1. Achey MA, **He MZ**, Akst LM: Vocal Hygiene Habits and Vocal Handicap Among Conservatory Students of Classical Singing. J of Voice 30(2): 192-197, **2016**.

Other Publications

3. Li T, Zhang Yi, **He MZ**, Shi X: Reply: Cardiovascular Disease Is the Condition, Air Pollution the Risk Factor, Fossil Fuel Combustion the Cause. Journal of the American College of Cardiology 79(2). **2022**.
2. **He MZ**: Singing for science. Science 364 (6439), 506, **2019**.
1. **He MZ**: China's Health Care System: A Summer Experience. Epidemic Proportions 11: 34-35, **2014**.

CONFERENCE PRESENTATIONS AND POSTERS

32. **He MZ**, Yitshak-Sade M, Kloog I, Just AC, Lesseur C, Quataert SA, Téllez-Rojo MM, Torres L, Lamadrid H, Berin MC, Wright RO, Jusko TA, Colicino E: Long-term postnatal exposure to air pollution and routine vaccine antibody levels in children. Pecha Kucha Oral Presentation. International Society for Environmental Epidemiology 2024 Conference. Santiago, Chile. August **2024**.
31. Kim JY, **He MZ**: Comparative study of the effect of air pollution and sunlight on the crimes and hate crimes. Poster Presentation. 2023 American Society of Criminology Annual Meeting. Philadelphia, Pennsylvania. November **2023**.
30. **He MZ**, Yitshak-Sade M, Kloog I: A hybrid spatiotemporal model for estimating daily NO₂ concentrations across Israel. Poster Discussion. International Society for Environmental Epidemiology 2023 Conference. Kaohsiung, Taiwan. September **2023**.
29. **He MZ**, Yitshak-Sade M, Kloog I, Just AC, Lesseur C, Quataert SA, Téllez-Rojo MM, Berin MC, Wright RO, Jusko TA, Colicino E: Associations between nitrogen dioxide and routine vaccine antibody levels in children. Oral Presentation. International Society for Environmental Epidemiology 2023 North American Chapter Conference. Corvallis, Oregon. June **2023**.
28. Guo B, Zhao C, **He MZ**, Senter C, Zhou Z, Peng J, Li S, Fitzpatrick AL, Lindström S, Stebbins RC, Noppert GA, Li C: Identifying patterns of reported findings on long-term cardiac symptoms of COVID-19: a living systematic review and meta-analysis. Poster Presentation. 2023 Society for Epidemiologic Research Meeting. Portland, Oregon. June **2023**.
27. **He MZ**, Yitshak-Sade M, Kloog I, Just AC, Lesseur C, Quataert SA, Téllez-Rojo MM, Berin MC, Wright RO, Jusko TA, Colicino E: Associations between nitrogen dioxide and routine vaccine antibody levels in children. Poster Presentation. 2023 Clinical Climate Change Conference: Clinical Care for Workers in the Climate Crisis. New York, New York. June **2023**.

26. **He MZ**, Yitshak-Sade M, Kloog I, Just AC, Lesseur C, Quataert SA, Téllez-Rojo MM, Berin MC, Wright RO, Jusko TA, Colicino E: Associations between nitrogen dioxide and routine vaccine antibody levels in children. Poster Presentation. 2023 Mexico-USA Exposome Symposium. Mexico City, Mexico. May **2023**.
25. **He MZ**, Yitshak-Sade M, Kloog I, Just AC, Lesseur C, Quataert SA, Téllez-Rojo MM, Berin MC, Wright RO, Jusko TA, Colicino E: Associations between nitrogen dioxide and routine vaccine antibody levels in children. Oral Presentation. Mount Sinai Child Health Research Day 2023. New York, New York. April **2023**.
24. **He MZ**, Yitshak-Sade M, Just AC, Gutiérrez-Avila I, Dorman M, de Hoogh K, Wright RO, Kloog I: Predicting fine-scale daily NO₂ over Mexico City using an ensemble modeling approach. Poster Presentation. International Society for Environmental Epidemiology 2022 Conference. Athens, Greece. September **2022**.
23. **He MZ**, Yitshak-Sade M, Just AC, Gutiérrez-Avila I, Dorman M, de Hoogh K, Wright RO, Kloog I: Predicting fine-scale daily NO₂ over Mexico City using an ensemble modeling approach. Poster Presentation. 2022 NYC Exposome Symposium. New York, New York. July **2022**.
22. **He MZ**, Kloog I, Just AC, Gutiérrez-Avila I, Colicino E, Téllez-Rojo MM, Pizano-Zárate M, Tamayo-Ortiz M, Baccarelli AA, Wright RO, Yitshak-Sade M: Associations between air pollution and temperature on glycated hemoglobin levels in women of child bearing age. Poster Presentation. 2022 Clinical Climate Change Conference: Mental Health and Well-being for Patients and Clinicians (online). January **2022**.
21. Wang Y, Du Y, Fang J, Dong X, Wang Q, Ban J, Sun Q, Ma R, **He MZ**, Chen R, Kan H, Li T: A Random Forest Model for PM_{2.5} Personal Exposure Assessment for a Chinese Cohort. Oral Presentation. International Society for Environmental Epidemiology 2021 Conference (online). August **2021**.
20. **He MZ**, Kloog I, Just AC, Gutiérrez-Avila I, Colicino E, Téllez-Rojo MM, Pizano-Zárate M, Tamayo-Ortiz M, Baccarelli AA, Wright RO, Yitshak-Sade M: Associations between air pollution and temperature on glycated hemoglobin levels in women of child bearing age. Oral Presentation. International Society for Environmental Epidemiology 2021 Conference (online). August **2021**.
19. **He MZ**, Kinney PL, Fiore AM, Do V, Jin X, Liu S, DeFelice N, Bi J, Liu Y, Insaf T, Kioumourtoglou M-A: Short-term PM_{2.5} and cardiovascular admissions in NY State: assessing sensitivity to exposure model choice. Oral Presentation. American Geophysical Union 2020 Fall Meeting (online). December **2020**.
18. Zhang L, **He MZ**, Perera F, Lovasi G, Clougherty J, Carrión D, Burke K, Kioumourtoglou M-A: Evaluating the impact of the Clean Heat Program on air pollution levels in New York City. Poster Presentation. International Society for Environmental Epidemiology 2020 Conference (online). August **2020**.
17. **He MZ**, Kioumourtoglou M-A, Kinney PL, Fiore A, Jin X, Do V, Liu S, Insaf T, Michalski A: Fine particulate matter and cardiovascular admissions in NY State: an assessment of exposure model choice sensitivity and spatial-temporal effect modification. Oral Presentation. New Applications in the Use of Satellite Data Monitoring for Population Health. Huntsville, Alabama. October **2019**.
16. **He MZ**, Do V, Liu S, Kinney PL, Fiore A, Jin X, DeFelice N, Kioumourtoglou M-A: Short-term PM_{2.5} and cardiovascular admissions in NY State: assessing sensitivity of exposure model choice. Oral Presentation. International Society for Environmental Epidemiology 2019 Conference, Utrecht, Netherlands. August **2019**.

15. **He MZ**, Kioumourtzoglou M-A, Kinney PL, Fiore A, Jin X, Do V, Liu S, Insaf T, Michalski A: Fine particulate matter and respiratory admissions: an assessment of short-term exposure model choice sensitivity for health studies. Oral Presentation. NASA Health and Air Quality Applied Sciences Team 6th Biannual Meeting, Pasadena, California. July **2019**.
14. Jin X, Fiore AM, Civerolo K, Johnson S, Bi J, Liu Y, van Donkelaar A, Martin R, Al-Hamdan M, Zhang Y, Insaf T, Kioumourtzoglou M-A, **He MZ**, Kinney P: Quantifying health benefits of emission reduction over New York State using multiple PM_{2.5} products. Oral Presentation. New York State Energy Research and Development Authority Energy-Related Air Quality and Health Effects Workshop. Albany, New York. April **2019**.
13. **He MZ**, Kioumourtzoglou M-A, Kinney PL, Fiore A, Jin X, Do V, Liu S, Insaf T, Michalski A: Short-Term PM_{2.5} and Cardiovascular Admissions in NY State: Assessing Sensitivity of Exposure Model Choice. Oral Presentation. NASA Health and Air Quality Applied Sciences Team 5th Biannual Meeting, Phoenix, Arizona. January **2019**.
12. Jin X, Fiore A, Civerolo K, Johnson S, Bi J, Liu Y, Martin R, van Donkelaar A, Zhang Y, Kinney PL, Kioumourtzoglou M-A, **He MZ**: Quantifying health benefits of emission reduction over New York State using multiple PM_{2.5} products. Oral Presentation. NASA Health and Air Quality Applied Sciences Team 5th Biannual Meeting, Phoenix, Arizona. January **2019**.
11. Westervelt D, Ma CT, Fiore AM, Kinney PL, **He MZ**, Xing J, Wang S: The impact of emissions scenarios and climate change over China on ozone air quality in China and the United States. Oral Presentation. American Geophysical Union 2016 Fall Meeting, Washington DC. December **2018**.
10. **He MZ**, Li T, Kinney PL, Chen C, Sun Q, Ban J, Wang J, Liu S, Goldsmith J, Kioumourtzoglou M-A: Short- and Intermediate-Term Exposure to NO₂ and Mortality: A Multi-County Analysis. Oral Presentation. Columbia University Air Pollution Extremes Workshop, New York, New York. November **2018**.
9. Du Z, **He MZ**, Ban J, Wang Q, Li T. The Research on National Heat Vulnerability Assessment of China. Poster Presentation. International Society for Environmental Epidemiology-Exposure Sciences 2018 Conference, Ottawa, Canada. August **2018**.
8. **He MZ**, Li T, Kinney PL, Kioumourtzoglou M-A: Short- and Intermediate-Term Exposure to NO₂ and Mortality in 42 Chinese Counties. Poster Presentation. International Society for Environmental Epidemiology-Exposure Sciences Asia Chapter 2018 Conference, Taipei, Taiwan. June **2018**.
7. Ma C, Westervelt D, Fiore A, Kinney PL, **He MZ**, Rieder H, Wang S, Correa G: Impact of Future Emissions and Climate Change on Surface Ozone over China. Oral Presentation. American Geophysical Union 2017 Fall Meeting, New Orleans, Louisiana. December **2017**.
6. Jin X, Fiore A, Civerolo K, Ku M, Insaf T, Kinney PL, Kioumourtzoglou M-A, **He MZ**, Curci G, Lyapustin A, Wang Y, Martin R, van Donkelaar A: Combining satellite data and CMAQ model to map PM_{2.5} exposure over the Northeast U.S.A. Oral Presentation. NASA Health and Air Quality Applied Sciences Team 3rd Annual Meeting, Palisades, New York. November **2017**.
5. **He MZ**, Kioumourtzoglou M-A, Kinney PL, Fiore A, Jin X, Insaf T, Michalski A: Associations between Air Pollution and Hospital Admissions in New York State. Oral Presentation. NASA Health and Air Quality Applied Sciences Team 3rd Biannual Meeting, Palisades, New York. November **2017**.
4. Wang Q, Wang J, **He MZ**, Kinney PL, Li T: A county-level estimate of PM_{2.5} related chronic mortality risk in China based on multi-model exposure data. Oral Presentation. International

Society for Environmental Epidemiology 2017 Conference, Sydney, Australia. September **2017**.

3. **He MZ**, Li T, Kinney PL, Kioumourtzoglou M-A: Short- and Intermediate-Term Exposure to NO₂ and Mortality: A Multi-County Analysis in China. Poster Presentation. International Society for Environmental Epidemiology 2017 Conference, Sydney, Australia. September **2017**.
2. **He MZ**, Zeng X, Zhang K, Kinney PL: Regional Differences in Fine Particulate Matter Concentrations in Urban Chinese Cities: A Systematic Review. Oral Presentation. 2016 Symposium on Public Health in Asia, Baltimore, Maryland. February **2016**.
1. Meyer-Fong T, Johnson Y, **He MZ**, Meyer C: Language Study and Research on Public Health in Asia. Oral Presentation. 2015 Symposium on Public Health in Asia, Baltimore, Maryland, February **2015**.

SOCIETY MEMBERSHIP

2020 – Present	American Geophysical Union
2017 – Present	International Society for Environmental Epidemiology
2015 – Present	American Association for the Advancement of Science
2015 – Present	Delta Omega Honor Society, Alpha Chapter
2014 – Present	Sigma Gamma Epsilon Honor Society, Alpha Kappa Chapter

LEADERSHIP

2021 – 2024	Committee Member, EMPH Postdoctoral Leadership Committee, Icahn School of Medicine at Mount Sinai
2020 – 2024	Department Representative, Postdoctoral Executive Committee, Icahn School of Medicine at Mount Sinai
2019 – 2020	Vice President of Administration, University PhD Council, Columbia University
2018 – 2019	School Representative, University PhD Council, Columbia University
2016 – 2018	Department Representative, Graduate Student Advisory Council, Columbia University

INVITED PRESENTATIONS

Aug 2024	<i>A Brief History of Air Pollution and Health</i> , Beijing American Center, Embassy of the United States, Beijing, China (Host: William Follmer)
May 2024	<i>Introduction to GIS in Environmental Epidemiology and Exposomic Research</i> (with Dr. Itai Kloog), Sapporo Exposome Symposium, Hokkaido University, Sapporo, Japan (Host: Shoji Nakayama)
Jan 2024	<i>Introduction to GIS in Environmental Epidemiology and Exposomic Research</i> (with Dr. Itai Kloog), 2024 USA Exposome Symposium, Meharry Medical College, Nashville, Tennessee (Host: Paul Juárez)
Oct 2023	<i>Associations between nitrogen dioxide and routine vaccine antibody levels in children</i> , Northwestern University Feinberg School of Medicine, Chicago, Illinois (Host: Cecilia Berin)
Jun 2022	<i>Air pollution in Mexico City: new approaches for old problems</i> , AP Environmental Science Professional Development Night, Cincinnati, Ohio (Host: Laura Hainsworth)
Mar 2022	<i>Air pollution in Mexico City: new approaches for old problems</i> , EMPH Department Seminar, Icahn School of Medicine at Mount Sinai, New York, New York (Host: Maayan Yitshak-Sade)
May 2020	<i>Evaluating the Impact of the Clean Heat Program on Air Pollution Levels in New York City</i> , EHS Department Seminar, Columbia Mailman School of Public Health, New York, New York (Host: Joseph Graziano)
Apr 2020	<i>Applying to PhD & Doctoral Programs</i> , Office of Career Services, Columbia University Mailman School of Public Health, New York, New York (Host: Heather Krasna)
Jul 2019	<i>Five Ways of Telling the Same Story: Assessing Sensitivity of Exposure Model Choice in Air Pollution Studies</i> , Chinese Center for Disease Control and Prevention, Beijing, China (Host: Tiantian Li)
Apr 2019	<i>Five Ways of Telling the Same Story: Assessing Sensitivity of Exposure Model Choice in Air Pollution Studies</i> , EHS Department Seminar, Columbia Mailman School of Public Health, New York, New York (Host: Joseph Graziano)
Nov 2018	<i>Climate Change and Health</i> , Workshop for the Johns Hopkins Center for Talented Youth, New York, New York (Host: Gail Garbowski)

Jul 2018	<i>Facts and Alternative Facts: Approaches to Communicating Climate Change</i> , Chinese Center for Disease Control and Prevention, Beijing, China (Host: Tiantian Li)
Mar 2018	<i>Air Pollution, Climate Change, and Health in China: A Multi-County Study</i> , EHS Department Seminar, Columbia Mailman School of Public Health, New York, New York (Host: Joseph Graziano)
Nov 2017	<i>Climate Change and Health</i> , Workshop for the Johns Hopkins Center for Talented Youth, New York, New York (Host: Gail Garbowski)
Sep 2017	<i>A Brief Introduction to Missing Data</i> , Chinese Center for Disease Control and Prevention, Beijing, China (Host: Tiantian Li)
Sep 2017	<i>Directed Acyclic Graphs as a Tool for Epidemiology</i> , Chinese Center for Disease Control and Prevention, Beijing, China (Host: Tiantian Li)
Mar 2017	<i>Air Pollution, Classical Music, and Everything in Between</i> , EHS Department Seminar, Columbia Mailman School of Public Health, New York, New York (Host: Joseph Graziano)
Aug 2016	<i>The Effects of Air Purifiers and Education on the Jinan Children's Cohort: Preliminary Study Design</i> , Chinese Center for Disease Control and Prevention Workshop on Air Pollution and Health, Beijing, China (Host: Tiantian Li)
Jul 2016	<i>A Tale of Two Disciplines: Public Health in Classical Music</i> , Chinese Center for Disease Control and Prevention, Beijing, China (Host: Tiantian Li)
Jun 2016	<i>Fine Particulate Matter Concentrations in Six Regions of China: A Systematic Review and Evaluation of Satellite-Derived Data</i> , Chinese Center for Disease Control and Prevention, Beijing, China (Host: Tiantian Li)
Apr 2016	<i>Environment and Health Connections: Stories from the Deep Interior to the Ends of the Earth</i> , Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland (Host: Ruth Quinn)
Apr 2016	<i>Regional Differences in Fine Particulate Matter Concentrations in Urban Chinese Cities: A Systematic Review</i> , EHS Department Seminar, Columbia Mailman School of Public Health, New York, New York (Host: Joseph Graziano)

Aug 2015	<i>Systematic Review and Meta-Analysis: The Basics</i> , Jiangsu Provincial Center for Disease Control and Prevention, Nanjing, China (Host: Shiqi Zhen)
Jul 2015	<i>Model Selection in Biostatistics: Techniques and Application</i> , Jiangsu Provincial Center for Disease Control and Prevention, Nanjing, China (Host: Shiqi Zhen)

PROFESSIONAL SERVICE

Journal Referee

Archives of Public Health, Applied Economics, Applied Sciences, Atmosphere, Atmospheric Environment, Atmospheric Pollution Research, BMC Cancer, BMC Cardiovascular Disorders, BMC Geriatrics, BMC Medicine, BMC Psychiatry, BMC Public Health, Chemosphere, Diabetes Care, Discover Atmosphere, Eco-Environment & Health, Ecotoxicology and Environmental Safety, Environmental Geochemistry and Health, Environmental Health, Environmental Health Perspectives, Environmental Monitoring and Assessment, Environmental Pollution, Environmental Research, Environmental Research: Health, Environmental Research Communications, Environmental Research Letters, Environmental Science & Technology, Environmental Sciences Europe, European Heart Journal, Frontiers in Environmental Health, Frontiers in Public Health, GeoHealth, Global Heart, Heliyon, International Journal of Environmental Research and Public Health, Journal of Environmental Management, Journal of Exposure Science and Environmental Epidemiology, Journal of Hazardous Materials, Journal of the American College of Cardiology, Lipids in Health and Disease, Mathematics, Nature Cities, npj Climate and Atmospheric Science, Nutrition Metabolism and Cardiovascular Diseases, PeerJ, Polymers, Preventive Medicine Reports, Remote Sensing of Environment, Science of the Total Environment, Scientific Reports, Sustainable Cities and Society, Sustainability, The Innovation, The Lancet Planetary Health, The Lancet Public Health, Urban Climate, Urban Science, Vaccines, and Viruses

2024 – Present	Editorial Board Member, <i>Scientific Reports</i>
2023 – Present	Guest Editor (Special Issue), <i>Ecotoxicology and Environmental Safety</i>

Academic Conferences and Meetings

2024	Co-chair, <i>Chemical exposures and health outcomes I</i> (Pecha Kucha Session), International Society for Environmental Epidemiology 2024 Conference
2023	Co-chair, <i>Virtual Only Europe/Africa</i> (Virtual Oral Presentation Session), International Society for Environmental Epidemiology 2023 Conference
2022	Co-chair, <i>Air pollution: maternal and neonatal health</i> (Oral Presentation Session), International Society for Environmental Epidemiology 2022 Conference
2022 – Present	Reader, AP Environmental Science, College Board Advanced Placement Program
2021	Co-chair, <i>Obesogenic environmental exposures</i> (E-Poster Discussion Session), International Society for Environmental Epidemiology 2021 Conference
2019	Planning Committee, Applications in the Use of Satellite Data Monitoring for Population Health Conference

2019 – Present Abstract Reviewer, International Society for Environmental Epidemiology Annual Conference

Departmental and University Committees

2022 – Present Admissions Committee, Quantitative Methods in the Social Sciences Program, Columbia University

2021 Hybrid Return to Work Taskforce, Department of Environmental Medicine and Public Health, Icahn School of Medicine at Mount Sinai

2021 – 2023 Student/Trainee Learning Environment Committee, Icahn School of Medicine at Mount Sinai

2018 – 2019 Co-Organizer, Climate and Health Seminar Series (13 seminars), Columbia Climate and Health Program

TEACHING

Icahn School of Medicine at Mount Sinai

Summer 2024 Co-Instructor (with Dr. Itai Kloog), Harnessing the Power of Geo-informatics to Improve Health Care, GPH101

Columbia University

Spring 2025 Course Instructor, Data Analysis for the Social Sciences, GR5015

Fall 2024 Course Instructor, Environmental Data Analysis, BC3017

Fall 2024 Course Instructor, Theory and Methodology for the Social Sciences, GR5010

Spring 2024 Course Instructor, Data Analysis for the Social Sciences, GR5015

Fall 2023 Co-Instructor (with Dr. Michael Parrott), GIS and Spatial Analysis of Social Data, GR5070

Fall 2023 Course Instructor, Environmental Data Analysis, BC3017

Fall 2023 Course Instructor, Theory and Methodology for the Social Sciences, GR5010

Spring 2023 Course Instructor, Environmental Data Analysis, BC3017

Spring 2023 Course Instructor, Data Analysis for the Social Sciences, GR5015

Fall 2022 Course Instructor, Environmental Data Analysis, BC3017

Fall 2022 Course Instructor, Theory and Methodology for the Social Sciences, GR5010

Spring 2022	Course Instructor, Data Analysis for the Social Sciences, GR5015
Fall 2021	Course Instructor, Theory and Methodology for the Social Sciences, GR5010
Fall 2019	Teaching Scholar, Atmospheric and Climate Science for Public Health, P8301
Spring 2019	Teaching Scholar, Public Health Impacts of Climate Change, P8304
Spring 2018	Teaching Scholar, Public Health Impacts of Climate Change, P8304
Spring 2017	Teaching Scholar, Public Health Impacts of Climate Change, P8304
<i>Johns Hopkins University</i>	
Spring 2015	Teaching Assistant, Statistical Methods in Public Health IV, PH.140.624
Spring 2015	Teaching Assistant, Statistical Methods in Public Health III, PH.140.623
Spring 2015	Teaching Assistant, Introduction to the Risk Sciences, PH.317.600
Fall 2014	Teaching Assistant, Statistical Methods in Public Health II, PH.140.622
Fall 2014	Teaching Assistant, Statistical Methods in Public Health I, PH.140.621
Fall 2014	Teaching Assistant, Public Health Biostatistics, AS.280.345
Fall 2014	Course Designated Tutor, Fundamentals of Epidemiology, AS.280.350
Fall 2014	Course Mentor, General Biology II, AS.020.152
Spring 2014	Teaching Assistant, Probability and Statistics for the Life Sciences, EN.550.211
Fall 2013	Teaching Assistant, Statistical Analysis I, EN.550.111
Fall 2013	Course Mentor, General Biology I, AS.020.151
Fall 2013	Teaching Assistant, General Biology Lab I, AS.020.153
Fall 2013	Teaching Assistant, Public Health Biostatistics, AS.280.345
Spring 2013	Teaching Assistant, Probability and Statistics for the Life Sciences, EN.550.211

Fall 2012	Teaching Assistant, Public Health Biostatistics, AS.280.345
<i>Certifications</i>	
Jan 2019 – Oct 2020	Teaching Development Program (Advanced Track), Columbia Center for Teaching and Learning
Sep 2018 – May 2019	Teaching Observation Fellowship, Columbia Center for Teaching and Learning
Jun 2018	Innovative Teaching Summer Institute, Columbia Center for Teaching and Learning
Jan 2018 – May 2018	Reflective Teaching Seminar, Columbia Center for Teaching and Learning
<i>Guest Lectures</i>	
Nov 2024	<i>Case Studies in Air Pollution and Health: from Epidemiology to Machine Learning</i> , Environmental Data Science Course, The University of Texas at Arlington, Arlington, Texas (Host: Yike Shen)
Apr 2024	<i>Health Impacts of Air Pollution</i> , Air Quality Modeling Course, Rutgers University, New Brunswick, New Jersey (Host: Xiaomeng Jin)
Mar 2024	<i>Air Pollution and Climate Modeling</i> , Diamond Bar High School, Diamond Bar, California (Host: Angela Jensvold)
Mar 2024	<i>A Brief History of Air Pollution and Health</i> , Epidemiology II: Epidemiologic Methods and Design Course, Icahn School of Medicine at Mount Sinai, New York, New York (Host: Maayan Yitshak-Sade)
Mar 2023	<i>A Brief History of Air Pollution and Health</i> , Epidemiology II: Epidemiologic Methods and Design Course, Icahn School of Medicine at Mount Sinai, New York, New York (Host: Maayan Yitshak-Sade)
Mar 2022	<i>A Brief History of Air Pollution and Health</i> , Epidemiology II: Epidemiologic Methods and Design Course, Icahn School of Medicine at Mount Sinai, New York, New York (Host: Maayan Yitshak-Sade)
Sep 2021	<i>From Red Alert to Blue Skies: Past, Present, and Future of Air Pollution and Health Studies</i> , Diamond Bar High School, Diamond Bar, California (Host: Angela Jensvold)
Mar 2021	<i>A Brief History of Air Pollution and Health</i> , Epidemiology II: Epidemiologic Methods and Design Course, Icahn School of Medicine at Mount Sinai, New York, New York (Host: Maayan Yitshak-Sade)

Feb 2020	<i>Air Pollution, Health, and Climate Change</i> , Public Health Impacts of Climate Change Course, Columbia University Mailman School of Public Health, New York, New York (Host: Micaela Martinez)
Oct 2019	<i>A Brief History of Air Pollution and Health</i> , Atmospheric and Climate Science for Public Health Course, Columbia University Mailman School of Public Health, New York, New York (Host: Jeffrey Shaman)
Apr 2019	<i>Air Pollution and Climate Change: A Public Health Perspective</i> , Introduction to Atmospheric Chemistry Course, Columbia University, New York, New York (Host: Arlene Fiore)
Feb 2019	<i>Air Pollution, Health, and Climate Change</i> , Public Health Impacts of Climate Change Course, Columbia University Mailman School of Public Health, New York, New York (Host: Micaela Martinez)
Jan 2019	<i>Air Pollution and Health in 2018: Case-Studies from China and the United States</i> , Diamond Bar High School, Diamond Bar, California (Host: Angela Jensvold)
Mar 2018	<i>Air Pollution, Health, and Climate Change</i> , Public Health Impacts of Climate Change Course, Columbia University Mailman School of Public Health, New York, New York (Host: Jeffrey Shaman)
Mar 2017	<i>Air Pollution, Health, and Climate Change</i> , Public Health Impacts of Climate Change Course, Columbia University Mailman School of Public Health, New York, New York (Host: Jeffrey Shaman)
Jan 2017	<i>The Physics of Climate Change</i> , Diamond Bar High School, Diamond Bar, California (Host: Angela Jensvold)
Jan 2017	<i>Air Pollution and Particulate Matter: Concepts and Recent Developments</i> , Diamond Bar High School, Diamond Bar, California (Host: Angela Jensvold)
Jan 2016	<i>PM_{2.5}: Overview and Case Study</i> , Diamond Bar High School, Diamond Bar, California (Host: Angela Jensvold)
Jan 2015	<i>Environmental Health and Air Pollution</i> , Diamond Bar High School, Diamond Bar, California (Host: David Hong)

ADVISING AND MENTORSHIP

2024	Chuhe Wu, MA student (thesis advisor)
2024	Karen Kurosawa, MA student (thesis advisor)
2024	Junchen Xiong, MA student (thesis advisor)
2024	Junyi Zhang, MA student (thesis advisor)
2024	Rei Hrn Lim, MA student (thesis advisor)
2024	Jintong Yu, MA student (thesis advisor)
2024	Soo Yeon Choi, MA student (thesis advisor)
2024	Judy Li, MA student (thesis advisor)
2024	Ellen Ren, MA student (thesis advisor)
2023	Ega Kurnia Yazid, MA student (thesis advisor)
2023	Yiming Wang, MA student (thesis advisor)
2023	Ruiqi Xue, MA student (thesis advisor)
2023	Yuling Yang, MA student (thesis advisor)
2023	Xi Lin, MA student (thesis advisor)
2023	Goedele Mangelaars, MA student (thesis advisor)
2023	Soobin Oh, MA student (thesis advisor)
2023	Youn Soo Kim, MA student (thesis advisor)
2023	Jackson Rudoff, MA student (thesis advisor)
2022	Alana Reinert, MA student (thesis advisor)
2022	Zhengze Hou, MA student (thesis advisor)
2022	Toby Law, MA student (thesis advisor)
2019	Siliang Liu, MPH student (co-mentored with Dr. Kioumourtzoglou)

2019

Vivian Do, MPH student (co-mentored with Dr. Kioumourtzoglou)