

CURRICULUM VITAE

Mike Zhongyu He

PERSONAL DATA

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EDUCATION

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| 2015/Present | Columbia University, New York, New York (In progress) Doctor of Philosophy, Environmental Health Sciences Advisors: Drs. Marianthi-Anna Kioumourtzoglou and Patrick Kinney |
| 2015/2018 | Columbia University, New York, New York Master of Philosophy, Environmental Health Sciences |
| 2014/2015 | Johns Hopkins University, Baltimore, Maryland Graduate Certificate, Risk Sciences and Public Policy |
| 2014/2015 | Johns Hopkins University, Baltimore, Maryland Master of Health Science, Environmental Health Sciences Advisor: Dr. Ana Navas-Acien |
| 2013/2013 | Johns Hopkins University, Baltimore, Maryland Certificate, Advanced Health Sciences Chinese |
| 2010/2014 | Johns Hopkins University, Baltimore, Maryland Bachelor of Arts with Honors Majors: Public Health Studies/Earth & Planetary Sciences Minors: Music/Global Environmental Change & Sustainability |

HONORS AND AWARDS

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| 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

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| 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 | Ruth L. Kirschstein National Research Service Award (F31; \$62,198), 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 |
| 2011/2014 | Bloomberg Scholarship (\$117,550), Johns Hopkins University |

PUBLICATIONS

Peer-Reviewed Research Articles

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, Kioumourtoglou MA, **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, Kioumourtoglou MA, 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**.

Commentaries (Non-Scientific)

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

17. **He MZ**, Kioumourtzoglou 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, Kioumourtzoglou 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

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| 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

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| 2019/Present | 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

Oct 2019 Guest lecturer, *A Brief History of Air Pollution and Health*, Atmospheric and Climate Science for Public Health Course, Columbia University Mailman School of Public Health, New York, New York (Host: Jeffrey Shaman)

- Jul 2019 Presenter, *Five Ways of Telling the Same Story: Assessing Sensitivity of Exposure Model Choice in Air Pollution Studies*, Chinese Center for Disease Control and Prevention, Beijing, China (Host: Tiantian Li)
- Apr 2019 Guest lecturer, *Air Pollution and Climate Change: A Public Health Perspective*, Introduction to Atmospheric Chemistry Course, Columbia University, New York, New York (Host: Arlene Fiore)
- Apr 2019 Presenter, *Five Ways of Telling the Same Story: Assessing Sensitivity of Exposure Model Choice in Air Pollution Studies*, EHS Department Seminar, Columbia Mailman School of Public Health, New York, New York (Host: Joseph Graziano)
- Feb 2019 Guest lecturer, *Air Pollution, Health, and Climate Change*, Public Health Impacts of Climate Change Course, Columbia University Mailman School of Public Health, New York, New York (Host: Micaela Martinez)
- Jan 2019 Guest lecturer, *Air Pollution and Health in 2018: Case-Studies from China and the United States*, Diamond Bar High School, Diamond Bar, California (Host: Angela Jensvold)
- Nov 2018 Presenter, *Climate Change and Health*, Workshop for the Johns Hopkins Center for Talented Youth, New York, New York (Host: Gail Garbowski)
- Jul 2018 Presenter, *Facts and Alternative Facts: Approaches to Communicating Climate Change*, Chinese Center for Disease Control and Prevention, Beijing, China (Host: Tiantian Li)
- Mar 2018 Presenter, *Air Pollution, Climate Change, and Health in China: A Multi-County Study*, EHS Department Seminar, Columbia Mailman School of Public Health, New York, New York (Host: Joseph Graziano)
- Mar 2018 Guest lecturer, *Air Pollution, Health, and Climate Change*, Public Health Impacts of Climate Change Course, Columbia University Mailman School of Public Health, New York, New York (Host: Jeffrey Shaman)
- Nov 2017 Presenter, *Climate Change and Health*, Workshop for the Johns Hopkins Center for Talented Youth, New York, New York (Host: Gail Garbowski)
- Sep 2017 Presenter, *A (Brief) Introduction to Missing Data*, Chinese Center for Disease Control and Prevention, Beijing, China (Host: Tiantian Li)
- Sep 2017 Presenter, *Directed Acyclic Graphs as a Tool for Epidemiology*, Chinese Center for Disease Control and Prevention, Beijing, China (Host: Tiantian Li)

- Mar 2017 Presenter, *Air Pollution, Classical Music, and Everything in Between*, EHS Department Seminar, Columbia Mailman School of Public Health, New York, New York (Host: Joseph Graziano)
- Mar 2017 Guest lecturer, *Air Pollution, Health, and Climate Change*, Public Health Impacts of Climate Change Course, Columbia University Mailman School of Public Health, New York, New York (Host: Jeffrey Shaman)
- Jan 2017 Guest lecturer, *The Physics of Climate Change*, Diamond Bar High School, Diamond Bar, California (Host: Angela Jensvold)
- Jan 2017 Guest lecturer, *Air Pollution and Particulate Matter: Concepts and Recent Developments*, Diamond Bar High School, Diamond Bar, California (Host: Angela Jensvold)
- Jul 2016 Presenter, *The Effects of Air Purifiers and Education on the Jinan Children's Cohort: Preliminary Study Design*, Chinese Center for Disease Control and Prevention Workshop on Air Pollution and Health, Beijing, China (Host: Tiantian Li)
- Jul 2016 Presenter, *A Tale of Two Disciplines: Public Health in Classical Music*, Chinese Center for Disease Control and Prevention, Beijing, China (Host: Tiantian Li)
- Jun 2016 Presenter, *Fine Particulate Matter Concentrations in Six Regions of China: A Systematic Review and Evaluation of Satellite-Derived Data*, Chinese Center for Disease Control and Prevention, Beijing, China (Host: Tiantian Li)
- Apr 2016 Invited speaker, *Environment and Health Connections: Stories from the Deep Interior to the Ends of the Earth*, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland (Host: Ruth Quinn)
- Apr 2016 Presenter, *Regional Differences in Fine Particulate Matter Concentrations in Urban Chinese Cities: A Systematic Review*, EHS Department Seminar, Columbia Mailman School of Public Health, New York, New York (Host: Joseph Graziano)
- Jan 2016 Guest lecturer, *PM_{2.5}: Overview and Case Study*, Diamond Bar High School, Diamond Bar, California (Host: Angela Jensvold)
- Aug 2015 Presenter, *Systematic Review and Meta-Analysis: The Basics*, Jiangsu Provincial Center for Disease Control and Prevention, Nanjing, China (Host: Shiqi Zhen)
- Jul 2015 Presenter, *Model Selection in Biostatistics: Techniques and Application*, Jiangsu Provincial Center for Disease Control and Prevention, Nanjing, China (Host: Shiqi Zhen)

Jan 2015 Guest lecturer, *Environmental Health and Air Pollution*, Diamond Bar High School, Diamond Bar, California (Host: David Hong)

PROFESSIONAL SERVICE

Ad hoc reviewer for *Applied Economics, Environmental Pollution, Environmental Research, Environmental Research Connections, International Journal of Environmental Research and Public Health, Sustainability, and Urban Climate*

Co-organizer, Columbia Climate and Health Seminar Series (2018-2019)

TEACHING

Columbia University

2019 Teaching Scholar, Atmospheric and Climate Science for Public Health, P8301

2017/2019 Teaching Scholar, Public Health Impacts of Climate Change (3x), P8304

Johns Hopkins University

2015 Teaching Assistant, Statistical Methods in Public Health IV, PH.140.624

2015 Teaching Assistant, Statistical Methods in Public Health III, PH.140.623

2015 Teaching Assistant, Introduction to the Risk Sciences, PH.317.600

2014 Teaching Assistant, Statistical Methods in Public Health II, PH.140.622

2014 Teaching Assistant, Statistical Methods in Public Health I, PH.140.621

2013/2014 Teaching Assistant, Probability and Statistics for the Life Sciences (2x), EN.550.211

2013 Teaching Assistant, Statistical Analysis I, EN.550.111

2013 Teaching Assistant, General Biology Lab I, AS.020.153

2012/2014 Teaching Assistant, Public Health Biostatistics (3x), AS.280.345