

RUOHAO ZHANG

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EMPLOYMENT

Assistant Professor, Department of Agricultural Economics, Sociology & Education The Pennsylvania State University	2023 - Present
Visiting Researcher, Economics Department Binghamton University	2022 - Present
Assistant Professor of Data Science, Economics & Environmental Studies Centre College	2022 - 2023
Postdoctoral Fellow, Kellogg School of Management Northwestern University	2021 - 2022
Postdoctoral Fellow, Pritzker School of Law Northwestern University	2021 - 2022

EDUCATION

Ph.D. Economics, Binghamton University Dissertation Title: Air Pollution, Environmental Regulation and Social Equity	2016 – 2021
M.S. Statistics, Syracuse University	2013 – 2016
M.A. Economics, Syracuse University	2013 – 2015
B.S. Information Management and Economics, University of International Relations	2009 – 2013

RESEARCH FIELDS

Environmental Economics, Health Economics, Applied Microeconomics, Econometrics

PUBLICATIONS

- Vladimir A., Barreto Parra P.N., Franchi L., Whittle J., Meurer J., Weston B., Luo E., Yuan A., **Zhang R.** and Black B. (2023). “Evidence on COVID-19 Mortality and Disparities Using a Novel Measure, COVID Excess Mortality Percentage: Evidence from Indiana, Wisconsin, and Illinois”, forthcoming at *PLOS One*.
- Zhang R.** and Khanna N., (2023). “Public Pressure and Heterogeneous Effects of Voluntary Pollution Abatement”, forthcoming at *Journal of the Association of Environmental and Resource Economists*.
- Vladimir A., Barreto Parra P.N., Whittle J., Meurer J., Weston B., Luo E., Yuan A., Franchi L., **Zhang R.** and Black B. (2023). “Selection Effects and COVID-19 Mortality Risk after Pfizer vs. Moderna Vaccination: Evidence from Linked Mortality and Vaccination Records”, *Vaccines*, 11(5):971.
- Zhang R.**, Li H., Khanna N., Krupnick A., Hill E. and Sullivan D. (2023). “Air Quality Impacts of Shale Gas Development in Pennsylvania”, *Journal of the Association of Environmental and Resource Economists*, 10(2):447-486.
- Vladimir A., Barreto Parra P.N., Whittle J., Meurer J., Weston B., Luo E., Franchi L., Yuan A., **Zhang R.** and Black B. (2023). “Understanding COVID-19 Vaccine Effectiveness Against Death Using a Novel Measure: COVID Excess Mortality Percentage”, *Vaccines*, 11(2):379.

6. Barreto Parra P.N., Vladimir A., Meurer J., Whittle J., Luo E. , **Zhang R.** and Black B. (2022) “The Effect of the COVID-19 Pandemic on the Elderly: Population Fatality Rates, Years of Life Lost, and Life Expectancy”, *The Elder Law Journal*, 30(1):34-84
7. **Zhang R.** (2022). “Economic impact payment, human mobility and COVID-19 mitigation in the USA”, *Empirical Economics*, 62(1):3041-3060.
8. **Zhang R.**, Li H. and Khanna N. (2021). “The Environmental Justice and the COVID-19 Pandemic: Evidence from New York State”, *Journal of Environmental Economics and Management*, 110(1):102522.
9. **Zhang R.**, Kumbhakar S. C., and Lai H. (2021). “Estimation of Panel Model with Heteroscedasticity in both Idiosyncratic and Individual Specific Errors”, *Econometric Reviews*, 40(4):415–432.

GRANTS

1. “From Awareness to Action: Assessing PFAS exposure in communities and evaluating the effectiveness of its mitigation strategies” (PI), *Illinois-Indiana Sea Grant*, \$100,000; 2023 – 2025

SELECTED WORKING PAPERS

1. **Zhang R.**, Li H. and Khanna N. “Firm Behavior under Unanticipated Change in Regulation: Power Plant Emissions During the 2018 – 2019 Federal Government Shutdown”, revise & resubmit at *Journal of the Association of Environmental and Resource Economists*.
2. **Zhang R.** and Khanna N. “Strategic Local Regulators and the Efficacy of Pollution Standards”, Working Paper (presented at *AERE 2021, ASSA 2022, APPAM 2022*).
3. **Zhang R.** “Behind Environmental Injustice: Disparate Siting Industries and Post-siting Local Demographic Transformation”, Working Paper (presented at *ASSA 2023*).
4. Wang T. and **Zhang R.** “Environmental Regulation and Performance of Chinese Manufacturing Firms”, Working Paper (presented at *CES 2023*).

SELECTED WORK IN PROGRESS

1. Li H., **Zhang R.**, and Khanna N. “The Multigenerational Persistence of Environmental Justice: An Analysis of Residential Sorting Behavior”, in progress.
(Presented at NAREA 2021, AAEA 2021, ASSA 2022, MEA 2022, AERE 2022, Funded by NSF Award Number: 2200648)
2. **Zhang R.**, Khanna N., and Hansen-Lewis J. “NAAQS and the Composition of Ambient Fine Particulate Matter”, in progress.
(Presented at AERE 2022)
3. Li H. and **Zhang R.** “Post-Disasters Migration, Social Segregation, and Climate Justice: An Analysis of Residential Sorting Behavior”, in progress.
(presented at CES-NA 2023)
4. **Zhang R.**, Li H., and Khanna N. “Highway Noise Pollution and Infant Health”, in progress.
5. **Zhang R.** and Tondji JB. “The Efficiency and Environmental Justice of EPA’s Clean Air Act Inspections”, in progress.

RECENT SEMINARS AND PRESENTATIONS

- **2023** Allied Social Sciences Associations (ASSA) | Chinese Economists Society North America Conference | Penn State University AESE | East Carolina University | Climate Change Economics Forum Online Seminar
- **2022** Allied Social Sciences Associations (ASSA) | Association of Environmental and Resource Economics (AERE) | Skidmore College | Centre College
- **2021** Allied Social Sciences Associations (ASSA) | Association of Environmental and Resource Economics (AERE) | Agriculture and Applied Economics Association (AAEA) | Midwest Economics Association (MEA) | Northeastern Agricultural and Resource Economics Association (NAREA) | The Online Summer Workshop in Environment, Energy, and Transportation Economics (OSWEET)
- **2020** Association of Environmental and Resource Economics (AERE) | Agriculture and Applied Economics Association (AAEA) | Western Economic Association (WEA) | Southern Economics Association (SEA) | Northeastern Agricultural and Resource Economics Association (NAREA) | Binghamton University | Delhi School of Economics
- **2019** Agriculture and Applied Economics Association (AAEA)

PROFESSIONAL ACTIVITIES

Referee for *Journal of the Association of Environmental and Resource Economists*($\times 1$), *Economic Modelling* ($\times 1$), *Oxford Bulletin of Economics and Statistics* ($\times 1$), *Empirical Economics* ($\times 4$), *International Journal of Public Health*($\times 1$), *Review of Policy Research*($\times 1$), *Environmental Justice* ($\times 1$)

FELLOWSHIPS, HONORS AND AWARDS

Alice E. Trost Dissertation Award, Economics Department, Binghamton University, 2021
Graduate Student Excellence Awards in Research, Binghamton University, 2021
Economics Department Fellowship for Professional Development, Binghamton University, 2020
Travel Grant, Binghamton University, 2019

MEDIA COVERAGE

“Understanding COVID-19 Vaccine Effectiveness Against Death Using a Novel Measure: COVID Excess Mortality Percentage”:

[U.S. NEWS](#), [The Atlantic](#)

“The Environmental Injustice of the COVID-19 Pandemic: Evidence from New York State”:

[BingU News](#)

“Air Quality Impacts of Shale Gas Development in Pennsylvania”:

[Environmental Health News](#), [BingU News](#), [WBNG News Channel 12](#), [Greensboro News & Record](#)