

## MICHAEL GREENSTONE

### CONTACT INFORMATION

University of Chicago  
Kenneth C. Griffin Department of Economics  
1126 E. 59<sup>th</sup> Street  
Chicago, Illinois 60637  
Tel: (773) 702-8250  
Fax: (773) 702-8490  
Email: [mgreenst@uchicago.edu](mailto:mgreenst@uchicago.edu)  
Web: [www.michaelgreenstone.com](http://www.michaelgreenstone.com)

### EDUCATION

Ph.D., Economics, Princeton University, 1998  
B.A. with High Honors, Economics, Swarthmore College, June 1991

### PROFESSIONAL EXPERIENCE

#### CURRENT ACADEMIC POSITIONS

2023 – present Founding Director, Institute for Climate and Sustainable Growth, University of Chicago  
2019 – present Milton Friedman Distinguished Service Professor in Economics, the College, and the Harris School, University of Chicago  
2014 – present Director, Energy Policy Institute at the University of Chicago (EPIC)  
2015 – present Pritzker Director, Environment and Energy Lab, University of Chicago Urban Labs  
2014 – present Co-Director, The Climate Impact Lab

#### PREVIOUS ACADEMIC POSITIONS

2017 – 2023 Director, Becker Friedman Institute, University of Chicago  
2017 – 2020 Faculty Director, Tata Centre of Development at UChicago  
2014 – 2018 Milton Friedman Professor in Economics, the College, and the Harris School, University of Chicago  
2006 – 2014 3M Professor of Environmental Economics, Massachusetts Institute of Technology  
2006 – 2007 Visiting Professor, University of California Energy Institute and University of California, Berkeley (Economics Department and Center for Labor Economics)  
2005 – 2006 Visiting Professor at University of California, Berkeley (Center for Labor Economics) and Stanford (Department of Economics)  
2003 – 2006 3M Associate Professor of Economics (with tenure), Massachusetts Institute of Technology  
2000 – 2003 Assistant Professor of Economics, University of Chicago  
1998 – 2000 Robert Wood Johnson Scholar, University of California-Berkeley

#### CURRENT AFFILIATIONS and NONACADEMIC POSITIONS

2025 – present Affiliated Economist, Indian Network for Economic Research (INER) Indian School of Public Policy  
2025 – present Member, Scientific Council of the Barcelona School of Economics  
2025 – present Institute Advisory Committee, World Bank Group, Institute for Economic Development  
2023 – present Distinguished Associate, Energy Futures Foundation (EFI)  
2023 – present BREAD, Fellow  
2023 – present Climate Scoring Advisory Council Member, Brookings Institution (Center on Regulation and Markets)

2020 – present Chairman and Co-Founder, [Climate Vault](#)  
 2018 – present Creator and Founder, [Air Quality Life Index](#)  
 2020 – present Co-Chair of Environment, Energy, & Climate Change Program, [King Climate Action Initiative \(K-CAI\)](#)  
 2014 – 2018 Occasional Contributor, [The New York Times](#)  
 2013 – present Faculty Director, [The E2e Project](#)  
 2013 – present Advisory Council, [The Hamilton Project](#)  
 2010 – present Co-Director, Energy Research Programme, [International Growth Centre](#)  
 2013 – present Nonresident Senior Fellow (Economic Studies), [Brookings Institution](#)  
 2020 – present Executive Member to the Advisory Committee, [The World Bank SBI MNRE Technical Assistance Program](#)  
 2020 – 2022 Member, Commission d'experts sur les grands défis économiques  
 2006 – present Member, [The Abdul Latif Jameel Poverty Action Lab](#), MIT  
 2000 – present Research Associate (previously Faculty Research Fellow), [The National Bureau of Economic Research](#)  
 2019 – present Member, [Results for America Moneyball for Government](#)  
 2019 – present Research Fellow, [Centre for Economic Research in Pakistan](#)  
 2018 – present Academic Advisory Council Member, [CCS Public Policy School](#)  
 2016 – present Research Advisory Committee Member, [Centre for Environmental Health](#)  
 2015 – present Faculty Affiliate, [Center for Health and the Social Sciences](#), University of Chicago  
 2015 – present Senior Fellow (Economics, Justice, and Society), [NORC](#) at the University of Chicago  
 2014 – present Faculty Advisory Board Member, [The Paulson Institute](#)  
 2013 – present Member, Advisory Board to the [Yale Program on Financial Stability](#), Yale University  
 2006 – present Fellow, [Center for the Study of Poverty and Inequality at Stanford University](#)

#### PREVIOUS AFFILIATIONS and NONACADEMIC POSITIONS

2023 – 2025 Climate Grand Challenge Steering Committee Member, [National Academy of Medicine \(NAM\)](#)  
 2009 – 2010 Chief Economist, [White House Council of Economic Advisors](#)  
 2010 – 2013 Director, [The Hamilton Project](#)  
 2015 – 2017 Member, [Secretary of Energy Advisory Board](#)  
 2015 – 2019 Member, [Board on Science, Technology, and Economic Policy](#), National Academy of Sciences  
 2010 – 2020 Co-Chair of Environment, Energy, & Climate Change Program, [The Abdul Latif Jameel Poverty Action Lab](#), MIT  
 2015 – 2018 Member, [The Lancet Commission on Pollution and Health](#)  
 2010 – 2013 Senior Fellow (Economic Studies), [Brookings Institution](#)  
 2008 – 2014 Energy Council, [MIT Energy Initiative](#)  
 2008 – 2009 [Environmental Research Council](#), MIT  
 2008 – 2019 Advisory Board, [Ed Labs](#)  
 2007 – 2009 Nonresident Senior Fellow (Economic Studies), [Brookings Institution](#)  
 2002 – 2003 Research Fellow, [American Bar Foundation](#)  
 2001 – 2003 Research Associate, [Center for Integrating Statistical and Environmental Science](#), University of Chicago  
 2001 – 2003 Research Associate, [Population Research Center](#), University of Chicago  
 1998 – 2000 Visiting Scholar, [Center for Labor Economics](#), University of California Berkeley  
 1996 – 1998 Special Sworn Employee, [US Census Bureau](#)

#### FIELDS OF INTEREST

Environmental and Energy Economics, Public Finance, Development Economics, Labor Economics, and Health Economics

## FELLOWSHIPS AND AWARDS

UC Berkeley Haas Sustainable Business Research Prize, 2026  
Elected Member of the National Academy of Sciences, 2024  
Best Paper Award for Sustainable Paths Toward Carbon Neutrality, CICC Global Institute (CGI), 2021  
Association of Environmental and Resource Economists Publication of Enduring Quality Award, 2020  
Andrew Carnegie Fellowship Award, 2019  
Environmental Advocates of New York Advocate Award, 2019  
Association of Environmental and Resource Economists Fellow, 2018  
Econometric Society Fellow, 2015  
American Academy of Arts and Sciences Member, 2014  
Eligible Fellow, Center for Advanced Study in the Behavioral Sciences, 2005-2011  
12<sup>th</sup> Annual Kenneth J. Arrow Award for Best Paper in Field of Health Economics, 2004  
Albert Rees Prize for Best Dissertation in Labor Economics from Princeton in Previous Six Years, 2003  
Alfred P. Sloan Foundation Doctoral Dissertation Fellowship, 1996-1997  
Joseph L. Fisher Dissertation Award, Resources for the Future, 1996-1997

## PUBLICATIONS

73. “[Man vs. Machine: Technological Promise and Political Limits of Automated Regulation Enforcement](#),” (with Oliver R. Browne, Ludovica Gasse, and Olga Rostapshova), *The Review of Economics and Statistics*, July 2025, 107(4): 1136-1148.
72. “[Impacts of Climate Change on Global Agriculture Accounting for Adaptation](#),” (with Andrew Hultgren, Tamma A. Carleton, Michael Delgado, Diana R. Gergel, Trevor Houser, Solomon Hsiang, Amir Jina, Robert E. Kopp, Steven B. Malevich, Kelly E. McCusker, Terin Mayer, Ishan Nath, James Rising, Ashwin Rode, and Jiacan Yuan), *Nature*, June 2025, 642: 644-652.
71. “[Can Pollution Markets Work in Developing Countries? Experimental Evidence from India](#),” (with Rohini Pande, Anant Sudarshan and Nicholas Ryan), *The Quarterly Journal of Economics*, May 2025, 140(2): 1003–1060.
70. “[Non-Representativeness in Population Health Research: Evidence from a COVID-19 Antibody Study](#),” (with Deniz Dutz, Ali Hortacsu, Santiago Lacouture, Magne Mogstad, Azeem Shaik, Alexander Torgovitsky, and Winnie van Dijk), *American Economic Review: Insights*, September 2024, 6(3): 313-323.
69. “[The Economics of the Global Energy Challenge](#),” *AEA Papers and Proceedings*, May 2024, 114: 1-30.
68. “[Does the Squeaky Wheel Get More Grease? The Direct and Indirect Effects of Citizen Participation on Environmental Governance in China](#),” (with Mark Buntaine, Guojun He, Mengdi Liu, Shaoda Wang, and Bing Zhang). *American Economic Review*, March 2024, 114(3): 815-850.
67. “[Mandatory Disclosure Would Reveal Corporate Carbon Damages](#),” (with Christian Leuz and Patricia Breuer) *Science*, August 2023, 381: 837-840.
66. “[DSCIM-Coastal v1.1: An Open-Source Modeling Platform for Global Impacts of Sea Level Rise](#),” (with Nicholas Depsky, Ian Bolliger, Daniel Allen, Jun Ho Choi, Michael Delgado, Ali Hamidi, Trevor Houser, Robert E. Kopp, and Solomon Hsiang), *Geoscientific Model Development*, July 2023, 16(14): 4331-4366.
65. “[Selection Bias in Voluntary Random Testing: Evidence from a COVID-19 Antibody Study](#),” (with Deniz Dutz, Ali Hortacsu, Santiago Lacouture, Magne Mogstad, Azeem Shaikh, Alexander Torgovitsky, and Winnie van Dijk), *AEA Papers and Proceedings*, May 2023, 113: 526-566.

64. "[Valuing the Global Mortality Consequences of Climate Change Accounting for Adaptation Costs and Benefits](#)," (with Tamma A. Carleton, Amir Jina, Michael T. Delgado, Trevor Houser, Solomon M. Hsiang, Andrew Hultgren, Robert E. Kopp, Kelly E. McCusker, Ishan B. Nath, James Rising, Ashwin Rode, Hee Kwon Seo, Arvid Viaene, Jiacan Yuan, and Alice Tianbo Zhang), *The Quarterly Journal of Economics*, November 2022, 137(4): 2037-2105.
63. "[A Guide to Updating the US Government's Social Cost of Carbon](#)," (with Tamma A. Carleton), *Review of Environmental Economics and Policy*, July 2022, 16(2): 196-218.
62. "[Comment on 'The Social Cost of Carbon: Advances in Long-term Probabilistic Projections of Population, GDP, Emissions, and Discount Rates'](#)," *Brookings Papers on Economic Activity*, 2021, Fall: 276-294.
61. "[Can Technology Solve the Principal-Agent Problem? Evidence from China's War on Air Pollution](#)," (with Guojun He, Ruixue Jia, and Tong Liu), *American Economic Review: Insights*, March 2022, 4(1): 54-70.  
• Best Paper Award for Sustainable Paths Toward Carbon Neutrality by CICC Global Institute (CGI), 2021.
60. "[Estimating a Social Cost of Carbon for Global Energy Consumption](#)," (with Ashwin Rode, Tamma A. Carleton, Michael Delgado, Trevor Houser, Solomon Hsiang, Andrew Hultgren, Amir Jina, Robert E. Kopp, Kelly E. McCusker, Ishan B. Nath, James Rising, and Jiacan Yuan), *Nature*, 2021, 598: 308-314.
59. "[China's War on Pollution: Evidence from the First Five Years](#)," (with Guojun He, Shanjun Li, and Eric Yongchen Zou), *Review of Environmental Economics and Policy*, 2021, 15(2): 281-299.
58. "[Indoor Air Quality, Information, and Socioeconomic Status: Evidence from Delhi](#)," (with Kenneth Lee and Harshil Sahai), *AEA Papers and Proceedings*, May 2021, 111: 420-424.
57. "[Do Conservation Policies Work? Evidence from Residential Water Use](#)," (with Oliver R. Browne and Ludovica Gasse), *Environmental and Energy Policy and the Economy*, 2021, 2(1): 190-225.
56. "[Job Loss and Behavioral Change: The Unprecedented Effects of the India Lockdown in Delhi](#)," (with Kenneth Lee, Harshil Sahai, and Patrick Baylis), *COVID Economics*, October 2020, 51: 134-158.
55. "[Does Social Distancing Matter?](#)" (with Vishan Nigam), *COVID Economics*, April 2020, 7: 1-22.
54. "[Fuel Economy 2.0](#)," (with Cass R. Sunstein and Sam Ori), *Harvard Environmental Law Review*, 2020, 44(1): 1-42.
53. "[The Consequences of Treating Electricity as a Right](#)," (with Robin Burgess, Nicholas Ryan, and Anant Sudarshan), *Journal of Economic Perspectives*, 2020, 34(1): 145-169.
52. "[Do Credit Market Shocks Affect the Real Economy? Quasi-experimental Evidence from the Great Recession and "Normal" Economic Times](#)," (with Alexandre Mas and Hoai-Luu Nguyen), *American Economic Journal: Economic Policy*, 2020, 12(1): 200-225.
51. "[The Local Economic and Welfare Consequences of Hydraulic Fracturing](#)," (with Alexander W. Bartik, Janet Currie, and Christopher R. Knittel), *American Economic Journal: Applied Economics*, 2019, 11(4): 105-155.
50. "[The Value of Regulatory Discretion: Estimates from Environmental Inspections in India](#)," (with Esther Duflo, Rohini Pande, and Nicholas Ryan), *Econometrica*, 2018, 86(6): 2123-2160.
49. "[Do Energy Efficiency Investments Deliver? Evidence from the Weatherization Assistance Program](#)," (with Meredith Fowlie and Catherine Wolfram), *Quarterly Journal of Economics*, 2018, 133(3): 1597-1644.

48. "[Hydraulic Fracturing and Infant Health: New Evidence from Pennsylvania](#)," (with Janet Currie and Katherine Meckel), *Science Advances*, 2017, 3(12): 1-9.
47. "[The Continuing Impact of Sherwin Rosen's 'Hedonic Prices and Implicit Markets: Product Differentiation in Pure Competition'](#)," *Journal of Political Economy*, 2017, 125(6): 1891-1902.
46. "[Best Cost Estimate of Greenhouse Gases](#)," (with Richard Revesz, Michael Hanemann, Michael Livermore, Thomas Sterner, Denise Grab, Peter Howard, Jason Schwartz), *Science*, 2017, 357(6352): 655.
45. "[Defensive Investments and the Demand for Air Quality: Evidence from the NOx Budget Program](#)," (with Olivier Deschenes and Joseph Shapiro), *American Economic Review*, 2017, 107(10): 2958-2989.
44. "[New Evidence on the Impact of Sustained Exposure to Particulate Matter on Life Expectancy from China's Huai River Policy](#)," (with Avraham Ebenstein, Maoyong Fan, Guojun He, and Maigeng Zhou), *Proceedings of the National Academy of Sciences*, 2017, 114(39): 10384-10389.
43. "[Reforming the U.S. Coal Leasing Program](#)," (with Kenneth Gillingham, James Bushnell, Meredith Fowlie, Charles Kolstad, Alan Krupnick, Adele Morris, Richard Schmalensee, James Stock), *Science*, 2016, 354(6316): 1096-1098.
42. "[Opportunities for Advances in Climate Change Economics](#)," (with Marshall Burke, Melanie Craxton, Charles Kolstad, Chikara Onda, Hunt Allcott, Erin Baker, Lint Barrage, Richard Carson, Kenneth Gillingham, Josh Graff-Zivin, Stéphane Hallegatte, W. Michael Hanemann, Geoffrey Heal, Solomon Hsiang, Benjamin Jones, David Kelly, Robert Kopp, Matthew Kotchen, Robert Mendelsohn, Kyle Meng, Gilbert Metcalf, Juan Moreno-Cruz, Robert Pindyck, Steven Rose, Ivan Rudik, James Stock, and Richard S.J. Tol), *Science*, April 2016, Vol. 352(6283): 292-293.
41. "[Will We Ever Stop Using Fossil Fuels?](#)" (with Thomas Covert and Christopher R. Knittel), *Journal of Economic Perspectives*, 2016, 30(1): 117-138.
40. "[Up in Smoke: The Influence of Household Behavior on the Long-Run Impact of Improved Cooking Stoves](#)," (with Rema Hanna and Esther Duflo), *American Economic Journal: Economic Policy*, 2016, 8(1): 80-114.
39. "[Adapting to Climate Change: The Remarkable Decline in the U.S. Temperature-Mortality Relationship Over the 20<sup>th</sup> Century](#)," (with Alan Barreca, Karen Clay, Olivier Deschenes, and Joseph Shapiro), *Journal of Political Economy*, 2016, 124(1): 105-109.
38. "[Environmental Health Risks and Housing Values: Evidence from 1600 Toxic Plant Openings and Closings](#)," (with Janet Currie, Lucas Davis, and Reed Walker), *American Economic Review*, 2015, 105(2): 678-709.
37. "[Are the Non-Monetary Costs of Energy Efficiency Investments Large? Understanding Low Take-up of a Free Energy Efficiency Program](#)," (with Meredith Fowlie and Catherine Wolfram), *American Economic Review Papers and Proceedings*, 2015, 105(5): 201-204.
36. "[Growth, Pollution, and Life Expectancy: China from 1991-2012](#)," (with Avraham Ebenstein, Maoyong Fan, Guojun He, and Maigeng Zhou), *American Economic Review Papers and Proceedings*, 2015, 105(5): 226-231.
35. "[Convergence in Adaptation to Climate Change: Evidence from High Temperatures and Mortality, 1900-2004](#)," (with Alan Barreca, Karen Clay, Olivier Deschenes, and Joseph S. Shapiro), *American Economic Review*

*Papers and Proceedings*, 2015, 105(5): 247-251.

34. "[Envirodevonomics: A Research Agenda for an Emerging Field](#)," (with B. Kelsey Jack), *Journal of Economic Literature*, March 2015, 53(1): 5-42.
  - Reprinted in *Economics of the Environment: Selected Readings*, Seventh Edition, editor Robert Stavins, Cheltenham, UK: Edward Elgar, 2019.
33. "[Environmental Regulations, Air and Water Pollution, and Infant Mortality in India](#)," (with Rema Hanna), *American Economic Review*, 2014, 104(10): 3038-3072.
32. "[Using and Improving the Social Cost of Carbon](#)," (with William Pizer, Matthew Adler, Joseph Aldy, David Anthoff, Maureen Cropper, Kenneth Gillingham, Brian Murray, Richard Newell, Richard Richels, Arden Rowell, Stephanie Waldhoff, and Jonathan Wiener), *Science*, 2014, Vol. 346(6214): 1189-1190.
31. "[An Economic Perspective on the EPA's Clean Power Plan](#)," (with Meredith Fowlie, Lawrence Goulder, Matthew Kotchen, Severin Borenstein, James Bushnell, Lucas Davis, Charles Kolstad, Christopher Knittel, Robert Stavins, Michael Wara, Frank Wolak, and Catherine Wolfram), *Science*, 2014, 346(6211): 815-816.
30. "[Particulate Matter Matters](#)," (with Francesca Dominici and Cass R. Sunstein), *Science*, 2014, 344(6181): 257-259.
29. "[Truth-telling by Third-Party Auditors and the Response of Polluting Firms: Experimental Evidence from India](#)," (with Esther Duflo, Rohini Pande, and Nicholas Ryan), *Quarterly Journal of Economics*, 2013, 128(4): 1499-1545.
28. "[Evidence on the Impact of Sustained Exposure to Air Pollution on Life Expectancy from China's Huai River Policy](#)," (with Yuyu Chen, Avraham Ebenstein, and Hongbin Li), *Proceedings of the National Academy of Sciences*, 2013, 110(32): 12936-12941.
27. "[What Does Reputation Buy? Differentiation in a Market for Third-Party Auditors](#)," (with Esther Duflo, Rohini Pande, and Nicholas Ryan), *American Economic Review Papers and Proceedings*, 2013, 103(3): 314-319.
26. "[Developing a Social Cost of Carbon for US Regulatory Analysis: A Methodology and Interpretation](#)," (with Elizabeth Kopits and Ann Wolverton), *Review of Environmental Economics and Policy*, 2013, 7(1): 23-46.
25. "[The Economic Impacts of Climate Change: Evidence from Agricultural Output and Random Fluctuations in Weather: Reply](#)," (with Olivier Deschenes), *American Economic Review*, 2012, 102(7): 3761-3773.
24. "[Paying Too Much for Energy? The True Costs of Our Energy Choices](#)," (with Adam Looney), *Daedalus*, 2012, 241(2): 10-30.
23. "[Is There an Energy Efficiency Gap?](#)" (with Hunt Allcott), *Journal of Economic Perspectives*, 2012, 26(1): 3-28.
22. "[Climate Change, Mortality, and Adaptation: Evidence from Annual Fluctuations in Weather in the US](#)," (with Olivier Deschenes), *American Economic Journal: Applied Economics*, 2011, 3(4): 152-185.
21. "[Superfund Cleanups and Infant Health](#)," (with Janet Currie and Enrico Moretti), *American Economic Review Papers and Proceedings*, 2011, 101(3): 435-441.
20. "[The Changing Consequences of Attending Historically Black Colleges and Universities](#)," (with Roland Fryer), *American Economic Journal: Applied Economics*, 2010, 2(1): 116-48.

19. [“Comment on ‘On the Economics of Climate Policy’: Is Climate Change Mitigation the Ultimate Arbitrage Opportunity?”](#) (with Manasi Deshpande), *B.E. Journal of Economic Analysis & Policy*, 2010, 10(2): 28-40 (Symposium).
  - Reprinted in Mark Cohen, Don Fullerton and Robert Topel (eds.) *Distributional Aspects of Energy and Climate Policies*, Cheltenham, UK: Edward Elgar, 2013, 28-40.
18. [“Identifying Agglomeration Spillovers: Evidence from Winners and Losers of Large Plant Openings,”](#) (with Rick Hornbeck and Enrico Moretti), *Journal of Political Economy*, 2010, 118(3): 536-598.
17. [“Climate Change and Birth Weight,”](#) (with Olivier Deschenes and Jonathan Guryan), *American Economic Review Papers and Proceedings*, 2009, 99(2): 211-217.
16. [“Winter Heating or Clean Air? Unintended Impacts of China’s Huai River Policy,”](#) (with Douglas Almond, Yuyu Chen, and Hongbin Li), *American Economic Review Papers and Proceedings*, 2009, 99(2): 184-190.
15. [“Quasi-Experimental and Experimental Approaches to Environmental Economics,”](#) (with Ted Gayer), *Journal of Environmental Economics and Management*, 2009, 57(1): 21-44.
14. [“Does Hazardous Waste Matter? Evidence from the Housing Market and the Superfund Program,”](#) (with Justin Gallagher), *Quarterly Journal of Economics*, 2008, 123(3): 951-1003.
13. [“The Economic Impacts of Climate Change: Evidence from Agricultural Output and Random Fluctuations in Weather,”](#) (with Olivier Deschenes), *American Economic Review*, 2007, 97(1): 354-385.
12. [“Mandated Disclosure, Stock Returns, and the 1964 Securities Act Amendments,”](#) (with Paul Oyer and Annette Vissing-Jorgensen), *Quarterly Journal of Economics*, 2006, 121(2): 399-460.
11. [“Does Air Quality Matter? Evidence from the Housing Market,”](#) (with Kenneth Chay), *Journal of Political Economy*, 2005, 113(2): 376-424.
10. [“Did the Clean Air Act Cause the Remarkable Decline in Sulfur Dioxide Concentrations?”](#) *Journal of Environmental Economics and Management*, 2004, 47(3): 585-611.
  - Reprinted in *Spatial Aspects of Environmental Policy*, editors Jacqueline Geoghegan and Wayne Gray.
9. [“Estimating the Value of a Statistical Life: The Importance of Omitted Variables and Publication Bias,”](#) (with Orley Ashenfelter), *American Economic Review Papers and Proceedings*, 2004, 94(2): 454-460.
8. [“Using Mandated Speed Limits to Measure the Value of a Statistical Life,”](#) (with Orley Ashenfelter), *Journal of Political Economy*, 2004, 112(1): 226-267.
7. [“The Clean Air Act of 1970 and Adult Mortality,”](#) (with Kenneth Chay and Carlos Dobkin), *Journal of Risk and Uncertainty*, 2003, 27(3): 279-300.
6. [“The Impact of Air Pollution on Infant Mortality: Evidence from Geographic Variation in Pollution Shocks Induced by a Recession,”](#) (with Kenneth Chay), *Quarterly Journal of Economics*, 2003, 118(3): 1121-1167.
  - Kenneth J. Arrow Award for Best Paper in Field of Health Economics, 2003.
5. [“Estimating Regulation-Induced Substitution: The Effect of the Clean Air Act on Water and Ground Pollution,”](#) *American Economic Review Papers and Proceedings*, 2003, 93(2): 442-448.
4. [“The Impacts of Environmental Regulations on Industrial Activity: Evidence from the 1970 and 1977 Clean Air](#)

- [Act Amendments and the Census of Manufacturers](#),” *Journal of Political Economy*, 2002, 110(6): 1175-1219.  
 • Reprinted in *The Economics of Pollution Control*, editor Kathleen Segerson. Cheltenham, UK: Edward Elgar, 2011.
3. “[A Reexamination of Resource Allocation Responses to the 65-Mph Speed Limit](#),” *Economic Inquiry*, 2002, 40(2): 271-278.
2. “[The Convergence in Black/White Infant Mortality Rates during the 1960s](#),” (with Kenneth Chay), *American Economic Review Papers and Proceedings*, 2000, 90(2): 326-332.
1. “[Are There Sectoral Anomalies Too? The Pitfalls of Unreported Multiple Hypothesis Testing and a Simple Solution](#),” (with Paul Oyer), *Review of Quantitative Finance and Accounting*, 2000, 15(1): 37-55.

## WORKING PAPERS

17. “[Can Cost-Benefit Analysis Rise to the Climate Challenge?](#)” (with Ishan Nath, Kelly McCusker, Ian Bolliger, Tamma Carleton, Michael Delgado, Trevor Houser, Solomon Hsiang, Andrew Hultgren, Amir Jina, Robert Kopp, James Rising, and Ashwin Rode), April 2025.
16. “[The Local Damages from Global Climate Change](#),” (with Tamma Carleton, Solomon Hsiang, Andrew Hultgren, Robert Kopp, Kelly McCusker, Ishan Nath, James Rising, Ashwin Rode), March 2025.
15. “[The Global Electrification Frontier and Climate Change](#),” (with Robin Burgess, Nicholas Ryan, and Anant Sudarshan), Revisions requested, *Journal of Political Economy*, June 2025.
14. “[Do Renewable Portfolio Standards Deliver Cost-Effective Carbon Abatement?](#)” (with Ishan Nath), Conditionally Accepted, *Journal of Political Economy Microeconomics*, July 2024.
13. “[Is Workplace Temperature a Valuable Job Amenity? Implications for Climate Change](#),” (with Ashwin Rode, Rachel Baker, Tamma A. Carleton, Anthony D’Agostino, Michael Delgado, Timothy Foreman, Diana R. Gergel, Trevor Houser, Solomon Hsiang, Andrew Hultgren, Amir Jina, Robert E. Kopp, Steven B. Malevich, Kelly E. McCusker, Ishan Nath, Matthew Pecenco, James Rising, and Jiacan Yuan), Revisions requested, *Journal of Political Economy*, July 2024.
12. “[Can Machine Learning Improve the Environment? Evidence from a National Field Test Targeting Hazardous Waste Inspections](#),” (with Jesse F. Buchsbaum and Katherine Meckel), Revisions requested, *American Economic Review*, April 2024.
11. “[Is the Demand for Clean Air Too Low? Experimental Evidence from Delhi](#),” (with Patrick Baylis, Kenneth Lee, and Harshil Sahai), April 2024.
10. “[Measuring the Welfare Effects of Residential Energy Efficiency Programs](#),” (with Hunt Allcott), April 2024.
9. “[Weather, Climate Change and Death in India](#),” (with Robin Burgess, Olivier Deschenes, and Dave Donaldson), April 2024.
8. “[The Heterogeneous Value of a Statistical Life: Evidence from U.S. Army Reenlistment Decisions](#),” (with Kyle Greenberg, Stephen Ryan, and Michael Yankovich), Becker Friedman Institute for Economics WP# 2021-75, September 2021.
7. “[Toilets Can Work: Short and Medium Run Health Impacts of Addressing Complementarities and Externalities in Water and Sanitation](#),” (with Esther Duflo, Raymond Guiteras, and Thomas Clasen), September 2015.

6. "[The Effects of Environmental Regulation on the Competitiveness of U.S. Manufacturing](#)," (with John A. List and Chad Syverson), September 2012.
5. "[Is The 'Surge' Working? Some New Facts](#)," MIT Department of Economics Working Paper, November 2007.
4. "[Civil Rights, the War on Poverty, and Black-White Convergence in Infant Mortality in the Rural South and Mississippi](#)," (with Douglas Almond and Kenneth Chay), February 2007. Accepted subject to minor revisions at *American Economic Review*.
3. "[Bidding for Industrial Plants: Does Winning a 'Million Dollar Plant' Increase Welfare?](#)" (with Enrico Moretti), November 2004.
2. "[Air Quality, Infant Mortality, and the Clean Air Act of 1970](#)," (with Kenneth Chay), NBER Working Paper No. 10053, March 2004.
1. "[The Wage Consequences of Enclave Residence: Evidence from the 1980 and 1990 Censuses](#)," University of California-Berkeley, Center for Labor Economics Working Paper No. 6, November 1998.

#### **OTHER PUBLICATIONS**

13. "[China's Air Pollution Edges Back from the Brink](#)," *Asia Global Online*, July 19, 2018.
12. "[The Lancet Commission on Pollution and Health](#)," (with Philip J. Landrigan, Richard Fuller, Nereus J.R. Acosta, Olusoji Adeyi, Robert Arnold, Niladri Basu, Abdoulaye Bibi Baldé, Roberto Bertollini, Stephan Bose-O'Reilly, Jo Ivey Boufford, Patrick N. Breysse, Thomas Chiles, Chulabhorn Mahidol, Awa M. Coll-Seck, Maureen L. Cropper, Julius Fobil, Valentin Fuster, Andy Haines, David Hanrahan, David Hunter, Mukesh Khare, Alan Krupnick, Bruce Lanphear, Bindu Lohani, Keith Martin, Karen V. Mathiasen, Maureen A. McTeer, Christopher J.L. Murray, Johanita D. Ndahimananjara, Frederica Perera, Janez Potocnik, Alexander S. Preker, Jairam Ramesh, Johan Rockstrom, Carlos Salinas, Leona D. Samson, Karti Sandilya, Peter D. Sly, Kirk R. Smith, Achim Steiner, Richard B. Stewart, William A. Suk, Onno C.P. van Schayck, Gautam N. Yadama, Kandeh Yumkella, Ma Zhong), *The Lancet*, 2018, Vol 391(10119), 462-512.
11. "[Lower Pollution, Longer Lives: Life Expectancy Gains if India Reduced Particulate Matter Pollution](#)," (with Janhavi Nilekani, Rohini Pande, Nicholas Ryan, Anant Sudarshan, and Anish Sugathan), *Economic and Political Weekly*, 2015, 50(8): 40-46.
10. "[Water Pollution and Public Health in India: The Potential for a Market-friendly Approach](#)," (with Raahil Madhok, Rohini Pande, and Hardik Shah), *Health and South Asia*, Cambridge, MA: Harvard South Asia Institute, 2013, 61-65.
9. "[Renewing Economically Distressed American Communities](#)," (with Adam Looney), *Issues in Science and Technology*, Winter 2011.
8. "[Trends: Men in Trouble](#)," (with Adam Looney), *The Milken Institute Review*, 2011, 13(3): 8-16.
7. "[Towards an Emissions Trading Scheme for Air Pollutants in India: A Concept Note](#)," (with Esther Duflo, Rohini Pande and Nicholas Ryan), Discussion Paper, Ministry of Environment and Forest, Government of India, August, 2010.
6. "[Effective Regulation through Credible Cost-Benefit Analysis: The Opportunity Costs of Superfund](#)," in Edward Balleisen and David Moss (eds.) *Government and Markets: Toward a New Theory of Regulation*. Cambridge; New York: Cambridge University Press, 2010, 52-91.

5. "[Toward a Culture of Persistent Regulatory Experimentation and Evaluation](#)," in David Moss and John Cisternino (eds.) *New Perspectives on Regulation*, Cambridge, MA: The Tobin Project, 2009, 111-126.
- 4 "[Cooking Stoves, Indoor Air Pollution, and Respiratory Health in Rural Orissa](#)," (with Esther Duflo and Rema Hanna), *Economic and Political Weekly*, 2008, 43(32): 71-76.
3. "[Tradable Water Rights](#)," *Democracy*, Spring 2008.
2. "[Indoor Air Pollution, Health, and Economic Well-Being](#)," (with Esther Duflo and Rema Hanna), *Surveys and Perspectives Integrating Environment and Society*, 2008, 1(1).
1. "[The Value of Knowing](#)," (with Paul Oyer and Annette Vissing-Jorgensen), *Regulation*, 2006, 29(2): 52-61.

## INVITED LECTURES

- Keynote Address, SGFIN Research Conference on Sustainability, March 2024
- American Economic Association Distinguished Lecture, January 2024
- Keynote Address, World Bank – Climate Change and Sustainable Urbanization – January 2023
- London School of Economics Lecture Series, September 2022
- Keynote Lecturer College de France, June 2022
- Keynote Address, CICC Carbon Neutrality Forum, March 2021
- Keynote Address, Tylösand Summit, November 2020
- Keynote Address, Air Quality in South Asia: Opportunities and Challenges Webinar, U.S. Embassy (Public Affairs) New Delhi and Lung Care Foundation, July 2020
- Keynote Address, Chicago’s Inaugural Night of Ideas, Field Museum of Chicago, January 2020
- Keynote Address, Climate Policy and Sustainable Growth Conference, Princeton University, May 2019
- Keynote Address, ILO-CEPR-IGC-UNIGE Conference on Labour and Development, Center for Economic Policy Research, May 2019
- Keynote Address, IZA Workshop on Environment and Labor Markets, IZA - Institute of Labor Economics, May 2019
- Keynote Address, Global Education Benchmark Group Annual Conference, Pace Academy, April 2019
- Keynote Address, Emissions Trading System Workshop, Gujarat Pollution Control Board, January 2019
- Inaugural C Lab Lecture of the Global Research Poverty Lab, Northwestern University, December 2018
- Ch Ranbir Singh Memorial Lecture, Maharshi Dayanand University Rohtak, November 2018
- MIT and J-PAL Data, Decisions, Public Policy Lecture Series Lecture, October 2018
- Keynote Address, Workshop on Environmental Regulation and Industrial Performance, Toulouse School of Economics, May 2018
- Keynote Address, Volatility Institute Conference, NYU Stern, April 2018
- June and Edgar Martin Memorial Lecture, Miller Upton Forum, Beloit College, Beloit, Wisconsin, October 2017
- Keynote Address, Advances with Field Experiments Conference, University of Chicago, September 2017
- Plenary Session, Aspen Ideas Festival, Aspen Institute, June 2017
- Woody Thompson Lecture, Midwest Economics Association, Cincinnati, Ohio, March 2017
- Odisha Knowledge Hub Lecture Series, Odisha Secretariat, February 2017
- Keynote Address, Ivey Business School, The Global Energy Outlook: The Future of Fossil Fuels, October 2016
- NSF/SBE Distinguished Lecture, National Science Foundation, October 2016
- Marburg Lecture Series, Marquette University, November 2016
- Barcelona Graduate School of Economics Lecture Series, November 2016
- Inaugural Jon Goldstein Lecture, Heller-Hurwicz Economics Institute, University of Minnesota, October 2015
- UiO Energy Guest Lecture, University of Oslo, May 2015
- Grantham Research Institute on Climate Change and the Environment Public Lecture, London School of Economics, May 2015
- World Economic Forum, University of Chicago Panel, Davos, Switzerland, January 2015
- Global CEO Conclave at Vibrant Gujarat Summit, Gujarat, India, January 2015

International Growth Centre Annual Conference Public Lecture, London School of Economics, September 2014  
PHFI Foundation Day 2014 Lecture, New Delhi, India, March 2014  
Merrick Lecture, University of Virginia, May 2013  
Keynote Address, Southern California Conference in Applied Microeconomics, April 2012  
Keynote Address, IGC ISI India Development Policy Conference, Delhi, India, December 2011  
2010/2011 EADS Distinguished Visitor, American Academy in Berlin, November 2011  
IDB Conference on Development Challenges and Policies in Latin America and the Caribbean: What are The Issues? September 2011  
EPA and DOE Conference on Progress toward a Social Cost of Carbon, 2010  
Keynote Address, Developing Standards for Benefit-Costs Analysis Conference, 2010  
MIT Energy Conference Dinner Keynote, MIT, 2010  
Myron Scholes Global Markets Forum, University of Chicago Booth School, 2010  
Special Session Lecture, Royal Economic Society Conference, 2009  
Statistics in Society Lecture, New York University, 2009  
Razin Economic Policy Lecture, Georgetown University, Keynote Address,  
Hong Kong Economic Association Biennial Conference, 2008  
Bernard Saffran Lecture at Swarthmore College, 2008  
News Executives Climate Change Symposium, Stanford University, 2007  
J. Fish Smith and Lillian F. Smith Endowed Chair of Economics Visiting Lecture, BYU, 2004  
Lecture to National Association of Attorneys General, 2003  
Invited Address, 2<sup>nd</sup> World Congress of Environmental Economists, June 2002

## CONGRESSIONAL TESTIMONY

[“Under the Weather: Diagnosing the Health Costs of Climate Change,”](#) Testimony to the U.S. Senate Committee on the Budget, April 26, 2023.

[“Making the Case for Climate Action: The Growing Risks and Costs of Inaction,”](#) Testimony to the U.S. House Select Committee on the Climate Crisis, April 15, 2021.

[“The Devastating Health Impacts of Climate Change,”](#) Testimony to the U.S. House Committee on Oversight and Reform, August 5, 2020.

[“Economics of Climate Change,”](#) Testimony to the U.S. House Committee on Oversight and Reform, Subcommittee on Environment, December 19, 2019.

[“At What Cost? Examining the Social Cost of Carbon,”](#) Testimony to the U.S. House of Representatives Subcommittee on Environment and Subcommittee on Oversight, February 28, 2017.

[“Examining Practical Solutions to Improve the Federal Regulatory Process,”](#) Testimony to U.S. Senate Subcommittee on Regulatory Affairs and Federal Management, June 4, 2015.

[“The First Step to Cutting Red Tape: Better Analysis,”](#) Testimony to U.S. Congress Joint Economic Committee, April 30, 2014.

[“Eliminating Unnecessary and Costly Red Tape Through Smarter Regulations,”](#) Testimony to U.S. Congress Joint Economic Committee, June 26, 2013.

[“The True Costs of Alternative Energy Sources: Are We Unfairly Penalizing Natural Gas?”](#) Testimony to U.S. Congress Joint Economic Committee, April 26, 2012.

[“Improving Regulatory Performance: Lessons from the United Kingdom,”](#) Testimony to Congress, Senate Budget

Committee Task Force on Government Performance, November 16, 2011; also CEEPR WP No. 2011/019.

“[The Importance of Research and Development \(R&D\) for U.S. Competitiveness and a Clean Energy Future](#),” Testimony to Congress, Joint Economic Committee Hearing on Promoting a Clean Energy Economy, July 27, 2010; also CEEPR WP No. 2011-010.

“[Liability and Financial Responsibility for Oil Spills under the Oil Pollution Act of 1990 and Related Statutes](#),” Testimony to Congress, House Committee on Transportation and Infrastructure, June 9, 2010; MIT CEEPR Working Paper No. 2011-009.

## **PROFESSIONAL ACTIVITIES**

### **JOURNALS**

Editorial Board, *Ideas for India*, 2019 – present

Editor, *Journal of Political Economy*, 2015 – 2017

Editor, *Review of Economics and Statistics*, 2007 – 2010

Board of Editors, *American Economic Journal: Economic Policy*, 2007 – 2010; 2013 – 2015

Associate Editor, *Review of Economics and Statistics*, 2007

Board of Editors, *Review of Environmental Economics and Policy*, 2006 – 2020

Board of Editors, *Journal of Economic Literature*, 2005 – 2011

Associate Editor, *Journal of Business and Economic Statistics*, 2004 – 2006

### **PUBLIC SERVICE**

Reviewer, National Institutes of Health, Special Emphasis Panel, 2007

Member, US EPA Science Advisory Board, Environmental Economics Subcommittee, 2003 – 2009

Member, US EPA, Advisory Board for Methods for Estimating the Social Benefits of EPA Land Clean-Up and Reuse Programs, 2006-2007

Member, Secretary of Energy Advisory Board, Task Force on Energy R&D, 2010 – 2011

### **CONFERENCES**

Panelist, Evaluating the Performance of the Inflation Reduction Act’s Clean Energy Provisions Workshop, 2024

Program Committee, Association of Environmental and Resource Economists Summer Workshop, 2007 and 2008 (Chair)

Program Committee, North American Summer Meeting of the Econometric Society, 2007

Co-organizer, NBER Environmental and Energy Economics Summer Institute, 2002, 2004, 2006, 2008, 2014

Program Committee, 2003 American Economic Association Meetings

Program Committee, 2002 World Congress of Environmental Economists

Selection Committee, National Tax Association Dissertation Award, 2006 and 2007