# Education

Ph.D., 2001, Economics, Duke University, Durham, NC.

M.A., 1997, Economics, Duke University, Durham, NC.

B.A., 1992, cum laude with distinction, Economics, Duke University, Durham, NC.

# **Primary Appointments**

| 2023—       | Professor, Dept. of Agricultural & Resource Economics, NC State University. Director, Center for Environmental and Resource Economic Policy |
|-------------|---|
| 2013 - 2022 | Professor, Department of Economics, Georgia State University.   |
| 2006 - 2013 | Associate Professor, Department of Economics, Georgia State University.   |
| 2001 - 2006 | Fellow, Resources for the Future, Washington, DC.   |
| 1992 - 1995 | Economist, Triangle Economic Research, Durham, NC (1994-5) and Research Triangle Institute, RTP, NC (1992-4).                               |

# **Secondary Appointments**

| 2010—       | Research Associate, National Bureau of Economic Research (NBER)  —Faculty Research Fellow, 2009-2010                     |
|-------------|--|
| 2015—       | Senior Fellow, Property and Environment Research Center (PERC) —Senior Research Fellow, 2010-15                          |
| 2024—       | Faculty Affiliate and department representative, Philosophy, Politics, and Economics (PPE) program, NCSU                 |
| 2018 - 2022 | Faculty Affiliate and economics coordinator, Philosophy, Politics, and Economics (PPE) program, GSU                      |
| 2018 - 2022 | Faculty Affiliate, Jean Beer Blumenfeld Center for Ethics, GSU Dept. of Philosophy                                       |
| 2017 - 2022 | Faculty Affiliate, Urban Studies Institute, GSU —Previously, Council for the Progress of Cities 2011-15 (chair, 2012-14) |
| 2008 - 2015 | Faculty Affiliate, Center for the Comparative Study of Metropolitan Growth, GSU College of Law                           |
| 2005 - 2006 | Adjunct Assistant Professor, Georgetown Public Policy Institute.   |
| 2003 - 2004 | Adjunct Assistant Professor, Georgetown Dept. of Economics.  |

# Fellowships, Honors and Awards

- Honorary Fellow, Society of Benefit-Cost Analysis, inducted 2024
- Spengler Prize for best book of the year from the History of Economics Society, 2024
- R. Musgrave prize for best paper in the National Tax Journal (with W. Oates), 2013.
- Outstanding Faculty Achievement Award, Georgia State University, 2011.
- Craufurd Goodwin prize for best article from the History of Economics Society, 2010.
- Julian Simon Fellow, Property and Environment Research Center, 2007.
- David C. Lincoln Fellowship (Lincoln Institute of Land Policy), 2007.
- Harvey Fellow (Mustard Seed Foundation), 1998-2001.
- Best undergraduate honors thesis, Department of Economics, Duke University, 1992.

### **Editorial Boards**

- Editor, Review of Environmental Economics & Policy, 2023—.
   —Board of Editors, 2021-22.
- Board of Editors, *History of Political Economy*, 2006-2012, 2019—.
- Editorial Council, Journal of Environmental Economics & Management, 2009-20.
- Associate Editor, Southern Economic Journal, 2012-2024.
- Book Review Editor, Journal of the History of Economic Thought, 2009-12.

#### **Publications**

#### Books

- 1. Pricing the Priceless: A History of Environmental Economics, Cambridge University Press, 2023.
  - —Winner of Spengler Prize for best book of the year, History of Economics Society
- 2. The Political Economy of Environmental Justice, ed., Stanford University Press, 2012.
- 3. *Keeping Faith, Losing Faith: Religious Belief and Political Economy*, ed., Duke University Press, 2008 (with B. Bateman).
- 4. Environmental Policy Analysis with Limited Information: Principles and Applications of the Transfer Method, Cheltenham, UK: Edward Elgar, 1998 (with W.H. Desvousges and F.R. Johnson).

# **Current Working Papers**

- 5. "Hell with the Lid Off: Racial Segregation and Environmental Equity in America's Most Polluted City," NBER Working Paper 32950, Sept. 2024 (with R. Walsh and W. Mathews).
- 6. "Capitalization as a Two-Part Tariff," NBER Working Paper 25699 (updated Sept. 2024) (with K. Mangum).
- 7. "Non-Parametric Tests of Output- and Cost-Sharing Games," Aug. 2024 (with Y. Liu).
- 8. "Smoke from Factory Chimneys: The Applied Economics of Air Pollution in the Progressive Era," NBER Working Paper 32328, April 2024 (with R. Walsh).
- 9. "Valuing New Product and Policy Characteristics using a Simple Linear Program," March 2024.

### Journal Articles

- 10. "Nonparametric Tests of the Tragedy of the Commons," *Journal of Economic Behavior and Organization* 224, 2024, pp. 521-36 (with Y. Liu, F. Asche, and M. Smith).
- 11. "Impact of *in Utero* Airborne Lead Exposure on Long-Run Adult Socio-Economic Outcomes: A Population Analysis Using US Survey and Administrative Data," *PLOS ONE*, 2023, https://doi.org/10.1371/journal.pone.0293443 (with M.R. Banzhaf).
- 12. "Distribution and Disputation: Net Benefits, Equity, and Public Decision Making," *Journal of Benefit-Cost Analysis* 14(2), 2023, pp. 205-29.
- 13. "The Value of Statistical Life: A Meta-analysis of Meta-analyses," *Journal of Benefit-Cost Analysis* 13(2), 2022, pp 182-97.
- 14. "Financing Outdoor Recreation: An Introduction," Land Economics 98(3), 2022, pp. 421-27.
- 15. "Bundling Private Complements to Finance Public Goods," *Land Economics* 98(3), 2022, pp. 440-60 (with V.K. Smith).
- 16. Difference-in-Differences Hedonics," *Journal of Political Economy* 129(8), 2021, pp. 2385-2414.
- 17. "Age-Based Property Tax Exemptions," *Journal of Urban Economics* 121, 2021 (with R. Mickey and C. Patrick).
- 18. "Markets and Theological Ethics: An Environmental Economist Replies to his Queen," *Journal of Economics, Theology, and Religion* 1(2), 2021, pp. 193-215.
- 19. "Panel-Data Hedonics: Rosen's First Stage as a 'Sufficient Statistic,'" *International Economic Review* 61(2), 2020, pp. 973-1000.

- 20. "Best Practices in Using Hedonic Property Value Models for Welfare Measurement," *Review of Environmental Economics and Policy* 14, 2020, pp. 260-81 (with K.C. Bishop, N.V. Kuminoff, K.J. Boyle, J.C. Pope, V.K. Smith, C. Timmins, and K. von Gravenitz).
- 21. "Fuel Consumption and Gasoline Prices: The Role of Assortative Matching between Households and Automobiles," *Journal of Environmental Economics and Management* 95, 2019, pp. 1-25 (with T. Kasim).
- 22. "Environmental Justice: The Economics of Race, Place, and Pollution," *Journal of Economic Perspectives* 33(1), 2019, pp. 185-208 (with L. Ma and C. Timmins).
- 23. "Environmental Justice: Establishing Causal Relationships," *Annual Review of Resource Economics* 11, 2019, pp. 377-98 (with L. Ma and C. Timmins).
- 24. "The Environmental Turn in Natural Resource Economics: John Krutilla and 'Conservation Reconsidered,' "Journal of the History of Economic Thought 44(1), 2019, pp. 27-46.
- 25. "Valuation of Ecosystem Services in the Southern Appalachian Mountains", *Environmental Science & Technology* 50(6), 2016, pp. 2830-6 plus online supplement (with D. Burtraw, S.C. Criscimagna, B.J. Cosby, D.A. Evans, A.J. Krupnick, and J.V. Siikamäki).
- 26. "The Cold War Origins of the Value of Statistical Life (VSL)," *Journal of Economic Perspectives* 28(4), 2014, pp. 213-26.
- 27. "The Market for Local Public Goods," Case-Western Reserve Law Review 64(4), 2014, pp. 1441-80.
- 28. "Benefits of the Ballot Box for Species Conservation," *Ecology Letters* 17(3), 2014, pp. 294-302 (with P.R. Armsworth, K. Kroetz, J.N. Sanchirico).
- 29. "On Fiscal Illusion in Local Public Finance: Re-examining Ricardian Equivalence and the Renter Effect," *National Tax Journal* 66(3), 2013, pp. 511-40 (with W.E. Oates).

  —Winner of Richard Musgrave award for most outstanding paper in the *National Tax Journal*, 2013.
- 30. "Segregation and Tiebout Sorting: The Link between Place-Based Investments and Neighborhood Tipping," *Journal of Urban Economics* 74, 2013, pp. 83-98 (with R.P. Walsh).
- 31. "Interjurisdictional Housing Prices and Spatial Amenities: Which Measures of Housing Prices Reflect Local Public Goods?" *Regional Science and Urban Economics* 43, 2013, pp. 635-48 (with O. Farooque).
- 32. "Non-Regulatory Approaches to the Environment: Coasean and Pigouvian Perspectives," *Review of Environmental Economics & Policy* 7(2), 2013, pp. 238-58 (with T. Fitzgerald and K. Schnier).
- 33. "Fiscal Federalism and Interjurisdictional Externalities: New Results and an Application to US Air Pollution," *Journal of Public Economics* 96, 2012, pp. 449-464 (with B.A. Chupp).

- 34. "Do Households Prefer Small School Districts? A Natural Experiment," *Southern Economic Journal* 78(3), 2012, pp. 819-41 (with G. Bhalla).
- 35. "Designing Economic Instruments for the Environment in a Decentralized Fiscal System," *Journal of Economic Surveys* 26(2), 2012, pp. 177-202 (with J. Alm).
- 36. "The Architecture and Measurement of an Ecosystem Services Index," *Sustainability*, 4(4), 2012, pp. 430-61 (with J. Boyd).
- 37. "Regulatory Impact Analyses of Environmental Justice Effects," *Journal of Land Use and Environmental Law* 27(1), 2011, pp. 1-30.
- 38. "Consumer Sovereignty in the History of Environmental Economics," *History of Political Economy* 43(2), 2011, pp. 339-46.
- 39. "Can the Land Tax Help Curb Urban Sprawl? Evidence from Growth Patterns in Pennsylvania," *Journal of Urban Economics* 67(2), 2010, pp. 169-79 (with N. Lavery).
- 40. "Selection and Design of Local Referenda for Land Conservation," *Journal of Policy Analysis and Management* 29(4), 2010, pp. 769-98 (with W.E. Oates and J.N. Sanchirico).
- 41. "Economics at the Fringe: Non-Market Valuation Studies and their Role in Land Use Plans in the United States," *Journal of Environmental Management* 91(3), 2010, pp. 592-602.
- 42. "Can Weak Substitution Be Rehabilitated?" *Environmental and Resource Economics*, 45(2), 2010, pp. 203-21 (with M.F. Evans, and C. Poulos, V.K. Smith).
- 43. "Consumer Surplus with Apology: A Historical Perspective on Non-Market Valuation and Recreation Demand," *Annual Review of Resource Economics* 2, 2010, pp. 183-207.
- 44. "Objective or Multi-objective? Two Historically Competing Visions for Benefit-Cost Analysis," *Land Economics* 85(1), 2009, pp. 1-23.
  - —Winner of 2010 "Best Article" prize from the History of Economics Society.
- 45. "Do People Vote with their Feet? An Empirical Test of Tiebout's Mechanism," *American Economic Review* 98(3), 2008, pp. 843-63 (with R.P. Walsh).
  - —Reprinted in *The Economics of Land Markets and their Regulation*, ed. by P. Cheshire and C. Hilber, Elgar, 2017.
- 46. "Meta Analysis in Model Implementation: Choice Sets and the Valuation of Air Quality Improvements," *Journal of Applied Econometrics* 22, 2007, pp. 1013-31 (with V.K. Smith).
- 47. "What Are Ecosystem Services? The Need for Standardized Environmental Accounting Units," *Ecological Economics* 63(2-3), 2007, pp. 616-26 (with J. Boyd).
  - —Reprinted in *Sustainability Economics* (The International Library of Critical Writings in Economics), ed. by Giles Atkinson and Sam Frankhauser, Elgar, 2019.
- 48. "Quality Adjusted Price Indexes and the Willig Condition," *Economics Letters* 94(1), 2007, pp. 43-8 (with V.K. Smith).

- 49. "Valuation of Natural Resource Improvements in the Adirondacks," *Land Economics* 82(3), 2006, pp. 445-64 (with D. Burtraw, D. Evans, and A.J. Krupnick).
- 50. "Green Price Indices," *Journal of Environmental Economics and Management* 49(2), 2005, pp. 262-80.
- 51. "Efficient Emission Fees in the US Electricity Sector," *Resource and Energy Economics* 26, 2004, pp. 317-341 (with D. Burtraw and K. Palmer).
- 52. "Estimating the General Equilibrium Benefits of Large Changes in Spatially Delineated Public Goods," *International Economic Review* 45(4), 2004, pp. 1047-1077 (with H. Sieg, V.K. Smith, and R. Walsh).
  - —Reprinted in *Distributional Effects of Environmental and Energy Policy*, ed. by D. Fullerton, 2009, Ashgate.
  - —Also reprinted in *Revealed Preference Approaches to Environmental Valuation, vol. II*, ed. by J. Herriges and C. Kling, 2008, Ashgate.
- 53. "General Equilibrium Benefits for Environmental Improvements: Projected Ozone Reductions under EPA's Prospective Analysis for the Los Angeles Air Basin," *Journal of Environmental Economics and Management* 47(3), 2004, pp. 559-584 (with H. Sieg, V.K. Smith, and R. Walsh).
  - —Reprinted in *Benefit-Cost Analysis*, vol. II (in *The International Library of Critical Writings in Economics*), edited by R.O. Zerbe, 2008, Elgar.
  - —Also reprinted in *Revealed Preference Approaches to Environmental Valuation, vol. II*, ed. by J. Herriges and C. Kling, 2008, Ashgate.
- 54. "A Diagrammatic Exposition of Weak Complementarity and the Willig Condition," *American Journal of Agricultural Economics* 86(2), 2004, pp. 455-466 (with V.K. Smith).
  - —Reprinted in *Revealed Preference Approaches to Environmental Valuation, vol. I*, ed. by J. Herriges and C. Kling, 2008, Ashgate.
- 55. "The Form and Function of Price Indexes: An Historical Accounting," *History of Political Economy* 36(4), 2004, pp. 589-616.
- 56. "Interjurisdictional Housing Prices in Locational Equilibrium," *Journal of Urban Economics*, 52(1), 2002, pp. 131-153 (with H. Sieg, V.K. Smith, and R. Walsh).
- 57. "Productive Nature and the Net Product," *History of Political Economy* 32(3), 2000, pp. 17-52.
- 58. "The Role of Optimizing Behavior in Willingness-to-Pay Estimates for Air Quality," *American Journal of Agricultural Economics, papers and proceedings* 81(5), 1999, pp. 1112-1117 (with H. Sieg, V.K. Smith, and R. Walsh).
- 59. "Archiving the History of Economics," *Journal of Economic Literature* 36, 1998, pp. 1496-1501 (with T.A. Gayer, S.J. Meardon, and E.R. Weintraub).

- 60. "Valuing Morbidity: An Integration of the Willingness to Pay and Health Status Index Literatures," *Journal of Health Economics* 16, 1997, pp. 641-665 (with E.E. Fries and F.R. Johnson).
- 61. "Assessing the Externalities of Electricity Generation in the Midwest," *Resource and Energy Economics* 18, 1996, pp. 395-421 (with W.H. Desvousges and F.R. Johnson).

# **Book Chapters**

- 62. "Environmental Justice." In *The Elsevier Encyclopedia of Resource, Energy, and Environmental Economics*, ed. by M. Khanna, forthcoming (with L. Ma).
- 63. "Surviving the First Year of Graduate School -- And Thriving," in *Thriving in Economics*, ed. by Tatyana Deryugina. Academic Sequitur, 2023.
- 64. "Age-Based Property Tax Exemptions Effects on Home Prices and Migration of Older Homeowners," in *Tools for State and Local Fiscal Management*, ed. by A. Hathaway, J. Martinez, and C. Thayer. Cheltenham, UK: Elgar, 2021, pp. 91-110 (with P. Bluestone, N. Warner, and P. Johnson).
- 65. "Environmental Justice and Coasean Bargaining," in *Distributional Effects of Environmental Markets*, ed. by C. Costello. Bozeman, MT: Property and Environment Research Center, 2019, pp. 11-18 (with L. Ma and C. Timmins).
- 66. "Constructing Markets: Environmental Economics and the Contingent Valuation Controversy," in *The Age of the Applied Economist: The Transformation of Economics since the 1970s*, ed. by R. Backhouse and B. Cherrier, *History of Political Economy* 49(s), Durham, NC: Duke University Press, pp. 213-39, 2017.
- 67. "Environmental Justice." In *The Elsevier Encyclopedia of Resource, Energy, and Environmental Economics*, ed. by J. Shogren, pp. 278-81, 2013.
- 68. "The Political Economy of Environmental Justice: An Introduction," in *The Political Economy of Environmental Justice*, ed. by H.S. Banzhaf, pp. 1-20, Stanford University Press, 2012.
- 69. "Moving Beyond Cleanup: Identifying the Crucibles of Environmental Gentrification," in *The Political Economy of Environmental Justice*, ed. by H.S. Banzhaf, pp. 23-51, Stanford University Press, 2012 (with E. McCormick).
- 70. "Environmental Gentrification and Discrimination," in *The Political Economy of Environmental Justice*, ed. by H.S. Banzhaf, pp. 75-111, Stanford University Press, 2012 (with J. Sidon and R.P. Walsh).
- 71. "The Chicago School of Welfare Economics," in *The Elgar Companion to the Chicago School*, ed. by R. Emmett, pp. 59-69, Cheltenham, UK: Edward Elgar, 2010.
- 72. "Valuing Benefits from Ecosystem Improvements Using Preference Methods: An Example from Reducing Acidification in the Adirondacks Park," in *Saving Biological Diversity: Balancing Protection of Endangered Species and Ecosystems*, ed. by R. Askins and G. Dreyer,

- pp. 101-117, New York: Springer, 2008 (with D.A. Evans, D. Burtraw, A.J. Krupnick, and J. Siikamäki).
- 73. "Keeping Faith, Losing Faith: An Introduction," in *Keeping Faith, Losing Faith: Religious Belief and Political Economy*, ed. by H.S. Banzhaf and B. Bateman, *History of Political Economy* 40(s), pp. 1-20, Durham, NC: Duke University Press, 2008.
- 74. "The Other Economics Department: Demand and Value Theory in Early Agricultural Economics," in *Agreement on Demand: The History of 20<sup>th</sup> Century Demand Theory*, ed. by P. Mirowski and D.W. Hands, *History of Political Economy* 38(s), pp. 9-31, Durham, NC: Duke University Press, 2006.
- 75. "Quantifying the Qualitative: Quality-Adjusted Price Indexes, 1915-1961," in *The Age of Economic Measurement*, ed. by J.L. Klein and M.S. Morgan, *History of Political Economy* 33(s), pp. 345-70, Durham, NC: Duke University Press, 2001.

### Book Reviews

- 76. Review of *Scarcity: A History from the Origins of Capitalism to the Climate Crisis*, by Fredrik Albritton Jonsson and Carl Wennerlind, Harvard University Press, *Journal of the History of Economic Thought*, forthcoming.
- 77. Review of *Thinking like an Economist: How Efficiency Replaced Equality in U.S. Public Policy*, by E.P. Berman, Princeton University Press, *History of Political Economy* 56(1): 167-70, 2024.
- 78. Review of Enlightenment's Frontier: The Scottish Highlands and the Origins of Environmentalism, by F.A. Jonsson, Yale University Press, Journal of the History of Economic Thought 38(4): 568-71, 2016.
- 79. Review of *The Cost of Living in America: A Political History of Economic Statistics, 1880-2000*, by T. Stapleford, Cambridge University Press, *History of Political Economy* 44(3): 541-3, 2012.
- 80. Review of *The Hesitant Hand: Taming Self-Interest in the History of Economic Ideas*, by S.G. Medema, Princeton University Press, *Journal of the History of Economic Thought* 33(2), 2011.
- 81. Review of *The Environmental Consequences of War*, edited by J.E. Austin and C.E. Bruch, Cambridge University Press, *Journal of Economic Literature* 40(3), 2002.

### Other Publications

- 82. "The Conservative Roots of Carbon Pricing," National Affairs, Fall 2020.
- 83. "Conservation Reconsidered' Turns 50: The Environmental Turn in Natural Resource Economics," *Resources*, Spring 2017.
  - —Reprinted in Resources: 60th Anniversary Special Issue, May 2019.

- 84. "Age-Based Property Tax Exemptions in Georgia," *State Tax Notes*, Sept. 26, 2016, pp. 1055-60 (with R. Mickey and C. Patrick).
- 85. "Laissez Faire Environmental Economics: What an 18th century French Political Economist Can Teach us about Today's Natural Resource Debates," *PERC Reports* 33, Winter 2014, pp. 14-15.
- 86. "Time to End Daylight Savings," Wall Street Journal, Nov. 2, 2012.
- 87. "The Case for Cap-and-Trade," PERC Reports 29, Summer, 2011.
- 88. "Environmental Quality in a Federation: Which Level of Government should Regulate Air Pollution?" *VoxEU*, July 1, 2010 (with B.A. Chupp).
- 89. "Tax the other Smoke: Raise the Gas Tax," *Atlanta Journal-Constitution*, March 17, 2010, p. A19 (with P. Ferraro).
- 90. "Views on Toxic Atlanta," Atlanta Journal-Constitution, Sunday Nov. 8, 2009, p. B6.
- 91. "Liberty and (Environmental) Justice for All," PERC Reports 27, Summer 2009, pp. 28-31.
- 92. "The Political Economy of Environmental Justice," *RFF Policy Commentary*, May 22, 2009.

  —Reprinted in *Issues of the Day: One Hundred Policy Commentaries on Climate, Energy, the Environment, Transportation, and Public Health Policy*, ed. by I.W.H. Parry and F. Day. Washington, DC: Resources for the Future, 2010, pp. 100-101.

  —Also reprinted in *At Issue: Environmental Racism and Classism*, ed. By Anne Cunningham, New GreenHaven Press, 2017.
- 93. "Conservation through the Ballot Box: The Success of Local Referenda for the Preservation of Open Space," *Landlines*, April 2008 (with W.E. Oates and J. Sanchirico).
- 94. "Environmental Justice: Opportunities through Markets," PERC Policy Series 42, 2008.
- 95. "Voting For Conservation: What Is The American Electorate Revealing?" *Resources*, Winter 2006 (with W.E. Oates, J. Sanchirico, D. Simpson, and R. Walsh).
- 96. "Ecosystem Services and Government Accountability: The Need for a New Way of Judging Nature's Value," *Resources*, Summer 2005 (with J. Boyd).
- 97. "Forever Wild, But Do We Care? How New Yorkers Value Natural Resource Improvements in the Adirondacks," *Resources*, Summer 2005 (with D. Burtraw, D. Evans, and A.J. Krupnick).
- 98. "Establishing a Bureau of Environmental Statistics," *Issues in Science and Technology*, Winter 2004, pp. 26-30.
- 99. "Accounting for the Environment," *Resources*, Fall 2003.

  —Reprinted in *The RFF Reader*, 2<sup>nd</sup> ed., ed. by W.E. Oates, Washington, DC: Resources for the Future, 2005.

- —Also reprinted, with minor changes, as "An Institutional Home for Environmental Statistics" in *Policy Advice to the President*, Washington, DC: Resources for the Future, 2004.
- 100. "Capping Emissions: How Low Should We Go?" *Public Utilities Fortnightly*, December 2002 (with D. Burtraw and K. Palmer).
- 101. "Proposed Regulation of Multiple Pollutants in the Electricity Sector is Historic, but is it Sensible?" *Resources*, Summer 2002 (with D. Burtraw and K. Palmer).
- 102. "A Cooperative Approach for Measuring Direct-Use Damages: The 1992 Avila Beach (CA) Oil Spill," *International Oil Spill Conference Proceedings* 1995(1): 327-31 (with R.W. Dunford and K.E. Mathews).
- 103. "NRDA Case Study: The Arthur Kill Oil Spill," *International Oil Spill Conference Proceedings* 1993(1): 711-16 (with W.H. Desvousges, R.W. Dunford, and K.E. Mathews.

# Other Papers

- 104. "Comments on OMB Circular A-4, 'Regulatory Analysis' (OMB-2022-0014)," Working Paper, 2023.
- 105. "Cap-and-Trade for Free-Market Environmentalists," Paper Prepared for the Workshop on "Tough Questions for Free Market Environmentalism," Property and Environment Research Center (PERC), July 2010.
- 106. "Quality Adjustment for Spatially-Delineated Public Goods: Theory and Application to Cost-of-Living Indices in LA," Resources for the Future Discussion Paper 02-10, March 2002. Revised, 2005.
- 107. "Augmented Cost-of-Living Indices for Public Goods: US Air Quality, 1971-2003," paper presented at conference on index numbers and productivity measurement, Vancouver.
- 108. "Adding Environmental Services to an Economy's Scorecard," RFF Issue Brief 02-09, 2002 (with V.K. Smith).
- 109. "Estimating Recreational Use Levels with Periodic Counts," TER Working Paper No. T-9602, Triangle Economic Research, Durham, NC, 1996.
- 110. "Images of Generation: Animal Oeconomy and Prosperity in Doctors Quesnay and Mandeville." Paper presented at the International Conference for the Tercentenary of the Birth of François Quesnay, Versailles, France, 1994 (with N. de Marchi).
- 111. "Using CV to Measure Nonuse Damages: An Assessment of Validity and Reliability. Recommendations to the NOAA Contingent Valuation Panel." Research Triangle Institute, 1992 (with W.H. Desvousges, R.W. Dunford, F.R. Johnson, K.N. Wilson, and K.J. Stetler).

#### **Research Grants & Contracts**

- "The Long-Term Evolution of Inequality: Poverty, Pollution, and Human Capital," Washington Center for Equitable Growth. PI (with R. Walsh). 2020. \$61k.
- "The Intellectual Origins of Carbon Pricing," Alliance for Market Solutions. PI. 2019. \$50k.
- "Carbon Taxation and Induced Innovation." Alliance for Market Solutions. PI (with co-investigator Y. Liu). 2019. \$38k.
- "How are Public Goods Capitalized? A New Perspective on the Benefit and New Views," Lincoln Institute of Land Policy. PI (with K. Mangum). 2014. \$45k.
- "Pollution and Long-Run Determinants of Social, Demographic, and Economic Characteristics," GSU Atlanta Census Research Data Center seed grant. PI. 2014. \$13k.
- "Education Tax Exemptions," Fiscal Research Center. PI. 2014-6. \$24k.
- "People and Places: Understanding the Complex Challenges of Cities and Developing Effective Solutions," Georgia State University research grant. PI (with D. Sjoquist and D. Oakley). 2012. \$33k.
- "Consumers' Progress: The History of Applied Welfare Economics." National Science Foundation (Science, Technology, and Society). Pl. 2008. \$63k.
- "Can Panel-based Internet Surveys be Trusted for Determining Willingness to Pay?" Environmental Protection Agency. Co-investigator with D. Burtraw, T.A. Cameron, D. Evans, and A. Krupnick. 2007. \$255k, 3 years.
- "Can Panel-based Internet Surveys be Trusted?" National Science Foundation (Methodology, Measurement, and Statistics). Co-PI with A. Krupnick, with co-investigators D. Burtraw, T.A. Cameron, and D. Evans. 2007. \$68k.
- "Measuring Progress: The History of Applied Welfare Economics." Georgia State University Research Initiation Grant. PI. 2007. \$10k.
- "How 'Smart' is the Split-Rate Tax?" Lincoln Institute of Land Policy. PI. 2006. \$40k.
- "Environmental Gentrification." Environmental Protection Agency/Industrial Economics. 2006. PI. \$10k.
- "Valuation of Regional Ecological Responses to Acidification and Techniques for Transferring Estimates." EPA Star grant. Co-Investigator with D. Burtraw, A. Krupnick, and J. Siikamäki. 2005. \$679k, 3 years.
- "Conservation Voted: What is the American Electorate Revealing?" Lincoln Institute of Land Policy. PI, with W.E. Oates, J. Sanchirico, and R.P. Walsh. 2005. \$90k, 2 years.
- "Ecological Values of Preserving Land for Smart Growth." Doris Duke Foundation and Island Press. PI. 2004. \$25k.

- "Environmental Gentrification: Environmental Justice and Sorting." National Science Foundation (economics). PI with N. Flores and R.P. Walsh. 2003. \$345k, 3 years.
- "Multi-Pollutant Policies for the Electricity Sector and Environmental Quality in the Empire State." New York State Energy Research and Development Authority (NYSERDA). Co-Investigator, with D. Burtraw, K. Palmer, and J.-S. Shih. 2003. \$233k, 2 years.

# **Teaching**

# Courses Taught

Principles of Microeconomics (undergraduate)
Environmental & Natural Resource Economics (undergraduate)
History of Economic Thought (undergraduate)
History of Land Economics and Policy (undergraduate)
Advanced Microeconomic Theory I (PhD)
History of Economic Thought (masters/PhD)
Environmental & Natural Resource Economics (PhD)

## Student Advising

PhD Supervisor (first placement): B. Andrew Chupp (Illinois State U., 2009), E. Mark Curtis (Wake Forest U., 2014), Allyson Emblom-Hooe, John Gomez (EIEE, 2023), Alexander Gordan (ECS 2022), Taha Kasim (Furman U., 2016), Yaqin Liu (Duke U. postdoc, 2019), Christopher Mothorpe (Col. of Charleston, 2014), Siyu Pan (Oberlin Col. 2020), Golnoush Rahimzadeh (U. of Sydney postdoc, 2021), Cody Reinhardt (U of West Florida, 2019), Dongkyu Won (Korea Elec. Power Co., 2014).

PhD Committee Member: E. Andreyeva (2016), A. Balthrop (2012), A. Chatterjee (2019), A. Cooray, B. Datta (2017), J. Ding, F. Farhidi (2018), V. Fleurimond (2015), G. Gao (2015), E. Gooch (2014), M. Hanauer (2011), W. Holmes (2010), S. Jacobson (2010), E. Johnson (U. of Colorado, 2008), Sharad KC, I. Kochi (2006), M. Lawson (U. of Colorado, 2009), Z. Li (2024), B. Liu (2017), H. Martin (2015), X. Meng (2022), R. Mickey (2015), J.-J. Miranda (2012), I. Navarro (2008), Q. Qiu (2017), S. Tang (2019), C. Tompson, M. Tsang (2016).

Jury Member: B. Parent (U. Paris-Saclay, 2024).

*MA/MS/MPP Thesis Advisor*: G. Bhalla (2006), M. Klovers (2006), N. Lavery (2006), L. Mehta (2006), Y. Okazaki (2006), B. Smith (2021).

#### **Professional Activities**

## Policy Consulting and Service

- Environmental Defense Fund (EDF), chair, economics advisory council, 2024—member, 2022-2024
- US Dept. of Justice. Served as expert on various cases related to urban amenities, property rights, and real estate 2010-2012, 2020-2024.
- Member, US Environmental Protection Agency (EPA) Science Advisory Board, economics review panel, 2020.
- Xcel Energy (sub to W.H. Desvousges & Assoc.), 2015-16.
- US EPA, review of economic guidance for environmental justice issues, 2012.
- US EPA, review of handbook on measuring benefits and cost of land cleanup and reuse, 2010.
- US EPA, environmental justice analysis for RIAs, 2010.
- City of Atlanta Sustainable Brownfields Project advisory committee, 2007-8.
- World Bank, "Economic Instruments for the Environment in a Decentralized System," 2007.
- Trust for Public Lands, "What Value Does a City Receive from its Park System?" 2005.

## Other Professional Service

- Chair, GSU Council for the Progress of Cities, 2012-14 (member 2011-16).
- Treasurer, History of Economics Society, 2015-20.
- Reviewer for numerous journals and research foundations.
- Review Committee, Best Article Prize, Assoc. Environmental & Resource Econ., 2009-12.
- Review Committee, Best Article Prize, History of Economics Society, 2004-6, 2010-11.
- Review Committee, Krutilla Fellowship, Resources for the Future, 2009-17.
- Review Committee, Harvey Fellowship, Mustard Seed Foundation, 1998-2010, 2019.

### Community outreach and service

- Various leadership positions at North Avenue Presbyterian Church (deacon, elder, treasurer, finance chair), 2009-11, 2014-20.
- Foundation for Economic Education, FEEcon, 2017
- Bastiat Society (Charleston, SC) & Columbia Economics Club (Columbia, SC), "Markets for Public Goods: How Citizens Win when Cities Compete," 2010.

- Keynote speaker, American Academy of Environmental Engineers annual meeting, "Environmental Economics," 2008.
- Debate on Climate Change Policy, sponsored by the Greenville, Spartanburg, and Green chambers of commerce and hosted by Congressman Bob Inglis, 2007.
- Institute for Christian Studies, Instructor, "Wealth, Politics, & Christianity," 2003, 2005.

# Media Coverage

Atlanta Journal-Constitution, Financial Times, fivethirtyeight.com, Le Monde, NPR's "Market-place," Resources Radio (podcast), Smith & Marx Walk into a Bar (podcast), VoxEU, Wall Street Journal, WGN, Wired.

# Academic Conference, Workshop, and Invited Seminar Presentations

## 2024

Consortium of Christian Studies Centers'
Theological Collaborative, Durham, NC
Cornell Univ. (Dyson)
History of Economics Society meetings
Triangle Econometrics Conference
UC Santa Barbara

### 2023

Assoc. of Environmental & Resource Economists (AERE) fall workshop
ASSA meetings (HES session), New Orleans
Duke University History of Political Economy
(HOPE) workshop
Yale University panel on 50<sup>th</sup> anniversary of "Is
Growth Obsolete?"

### 2022

Environmental Defense Fund History of Recent Economics workshop, Lausanne Plenary, Society for Benefit-Cost Analysis Keynote lecture, Camp Resources

### 2021

Arizona State University (PPE)
ASU/Templeton Conference on Faith and Science, economics panel
LSE (Grantham Inst.)

## 2020

College of Charleston Georgetown University (economics) History of Economics Society meetings National Bureau of Economic Research (NBER), spring Environmental & Energy Economics meetings (co-organizer) University of Chicago (EPIC)

#### <u>2019</u>

iSEE Congress on "Sustainability Justice,"
Champaign, IL
Property and Environment Research Center
(PERC) workshop on "Financing Outdoor
Recreation" (organizer), Bozeman, MT
University of Indiana (O'Neil)
University of Kentucky (Econ)

#### 2018

A. Blank Foundation retreat on "Paying to Play:
Funding Outdoor Recreation"
Clemson University (Econ)
Notre Dame University (Keough)
PERC Workshop on "Distributional Effects of
Environmental Markets"
PERC summer workshop
University of Alabama (Econ)
University of Houston (Econ)
World Congress of Env'l & Resource Economists, Gothenburg
Yale University (Env'l Studies)

#### 2017

ASSA meetings (ACE session), Chicago American Enterprise Institute Duke University HOPE workshop Heartland Environmental Conference, panel on the urban environment, UIUC

IUPUI Consortium for the Study of Religion, Ethics, & Politics -- environmental justice

Marquette University

PERC summer workshop

Resources for the Future (RFF) conference on the legacy of John Krutilla

UC-Santa Barbara (Econ)

#### 2016

Arizona State U. Environmental Economics Workshop

PERC workshop on "Bringing Free-Market Environmentalism to the Urban Environment," Atlanta (co-organizer)

Cornell Univ. (Dyson)

Duke U. HOPE Conference on "Keeping it Applied."

History of Economics Society (HES) Meetings, Durham, NC.

### 2015

History of Economics Society (HES) Meetings, East Lansing, MI

Kraks Fond workshop, Univ. of Copenhagen NBER Summer Institute

PERC Forum on The Future of Free-Market Environmentalism, Bozeman, MT

PERC summer workshop

#### 2014

Agence Nationale de la Recherche conference on "Cross-disciplinary Research Ventures in Post-war American Social Science," NYU

Duke University, Allen Starling Johnson, Jr. Lecture, Center for Christianity & Scholarship, Dept. of Econ., Ctr for the History of Political Economy, & Nicholas School of the Env.

Duke University, HOPE workshop

Univ. of Illinois Urbana-Champaign (Econ)

Univ. of South Carolina (Econ)

Workshop on Non-Market Valuation (GREQAM/AMSE, Aix-en-Provence, France) Yale University (Env'l. Studies)

2012

Camp Resources luncheon address on History of Environmental Economics Georgia Technical Institute (Dept. of city and regional planning)

HES Meetings, Vancouver

GMU Law & Economics Center / PERC conference on environmental federalism, Cleveland National Tax Association Meetings, Tampa North American Regional Science Council / Urban Economics Assoc. meetings, Atlanta

## 2012

European Assoc. of Environmental & Resource Economists (EAERE) annual meeting, Prague NBER Environmental & Energy Economics

Summer Institute (co-organizer) Triangle Environmental Economics workshop

(NCSU/RTI/Duke) Washington University in St. Louis (Olin Busi-

Washington University in St. Louis (Olin Business School)

#### 2011

AERE annual meeting, Seattle
NBER joint Public-Environmental Economics
meetings, Stanford Univ.
University of Kentucky (Economics)

#### 2010

Clemson University (Economics)

Duke Univ., panelist "The Uses of Economics: Past and Future," A Celebration of the 40<sup>th</sup> Anniversary of the journal *History of Political Economy* & the editorship of C. Goodwin.

Harvard University (Kennedy School)

Liberty Fund/PERC conference, "The Paradox of Environmental Policy," Big Sky, MT

PERC workshop, "Tough Questions for Free Market Environmentalism," Bozeman, MT Resources for the Future

US EPA workshop, "Assessing Environmental Justice Implications of Environmental Regulations"

University of Maryland (Economics) University of Wisconsin (AAE)

#### 2009

ASSA Meetings (HES session), San Francisco Arizona State University (Economics) GSU Summer School in Public Economics NBER Summer Institute PERC summer workshop US EPA Workshop, Benefits of Reducing Hazardous Air Pollutants, Washington, DC University of Georgia (AAE)

## 2008

ASSA Meetings, New Orleans

CU Workshop on Environmental Economics European Science Foundation's annual conference on Public Goods, Public Projects, and Externalities (PGPPE), Paris

PERC Lone Mountain Forum, "Markets for Housing and Pollution: Implications for Environmental Justice," Big Sky, MT (organizer)

Southern Economic Association Meetings, Washington, DC

University of Pittsburgh (Economics) University of Wyoming (Economics)

#### 2007

Duke HOPE Conference, "Keeping Faith: Religious Belief and Political Economy" (co-organizer)

HES Meetings, Fairfax, VA

Liberty Fund Conference, "Rights, Responsibilities, and Freedom: The Contributions of Armen A. Alchian," Emigrant, MT

Lincoln Institute of Land Policy

Montana State University (Economics)

PERC summer workshop

Triangle Resource and Environmental Economics Workshop

University of Central Florida (Economics) US DoD, Southeast Regional Partnership for

Planning & Sustainability workshop, Atlanta Wildlife Habitat Council conference, "Restoring Greenspace: Ecological Reuse of Contaminated Properties," Atlanta

#### 2006

ASSA Meetings (AERE Session), Boston Duke University (Nicholas School)

Economics of Conservation Easements workshop, Lincoln Inst. of Land Policy

EPA—National Center for Environmental Economics

Georgia State University (Economics)

HES Meetings, Grinnell, IA

RFF/EPA Conference, "Practical Measurement of Ecosystem Services"

Southern Economic Association Meetings (2x), Charleston, SC Rice University (Economics)

University (Economics)
University of Wisconsin (REULE)

#### 2005

ASSA Meetings (AERE Session), Philadelphia George Mason Institute for Preservation of the History of Economic Thought

Duke HOPE Conference, "The History of 20<sup>th</sup> Century Demand Theory"

NSF Biocomplexity Conference, Santa Fe Southern Economic Association Meetings, Washington, DC

University of Maryland (Public Policy)

#### 2004

AERE Workshop, Estes Park, CO CU Workshop on Environmental Economics Duke History of Political Economy Workshop EPA Workshop on "Valuation of Ecological Benefits", Washington, DC

EPA—National Center for Environmental Economics

HES meetings, Toronto

Conference on Index Number Theory and the Measurement of Prices & Productivity, Vancouver

Research Triangle Environmental Workshop Resources for the Future University of Maryland (AREC)

### 2003

"Camp Resources" panel CU Workshop on Environmental Economics HES Meetings, Durham, NC Research Triangle Environmental Workshop Western Economic Assoc. Meetings, Denver

#### 2002

Baylor University (Economics)
Bureau of Labor Statistics
Camp Resources
DOE—Electricity Working Group
Duke History of Political Economy Workshop
Rice University (Economics)
World Congress of Environmental Economists
(2x), Santa Barbara, CA

# 2001

Duke University (Nicholas School)
Eastern Carolina University (Economics)
Oberlin College (Economics)
Research Triangle Institute
Resources for the Future
Scripps College
University of Alabama (Economics)
University of Tennessee (Economics)

### 2000

ASSA Meetings (Econometrics Society Session), Boston
American Agricultural Economics Association Meetings, Tampa Bay, FL
Camp Resources
Duke History of Political Economy Workshop
Duke HOPE Conference on "The Age of Economic Measurement"

## Before 2000

Camp Resources, 1999, 1997, 1993
Duke History of Political Economy Workshop, 1996
HES Meetings, Greensboro, NC, 1999, and Charleston, SC, 1997
Hotelling Triangle Econometrics Conf., 1999
INET Conference for the Tercentenary of the Birth of François Quesnay, Versailles, 1994.