

## **Paul J. Ferraro**

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### **EDUCATION**

BA (Biology and History), Duke University, 1986-1990

MS, Duke University, 1992-1994

PhD, Cornell University, 1997-2001

Dissertation: *Constructing Markets for Ecosystem Services: essays in conservation contracting*

### **ACADEMIC POSITIONS**

**Bloomberg Distinguished Professor**, Carey Business School, Johns Hopkins University, 2015-present. [50% appointment]

**Bloomberg Distinguished Professor**, Department of Environmental Health & Engineering, a joint department of the Bloomberg School of Public Health & Whiting School of Engineering, Johns Hopkins University, 2015-present. [50% appointment]

**Director**, Environmental Program Innovations Collaborative ([EPIC](#)), 2017-present

**Co-Director**, Center for Behavioral and Experimental Agri-Environmental Research ([CBEAR](#)), 2014-present (a USDA Center of Excellence)

**Visiting Scholar**, U.S. Department of Agriculture, 2019-20

**Humanitas Visiting Professorship in Sustainability Studies**, University of Cambridge, 2015-2016

**Regents' Professor**, Department of Economics, Andrew Young School of Policy Studies, Georgia State University, 2001 – 2015

**Research Associate/Fellow**, 3ie (International Initiative for Impact Evaluations), 2020-present; Research Fellow, RWI - Leibniz Institute for Economic Research Network, 2018-present; Affiliate, Ideas42, 2016-present; The Environment for Development Initiative, 2012 – present.

### **AWARDS AND HONORS**

National Association of Conservation Districts 2021 Friend of Conservation Award (Honorable Mention for CBEAR); Web of Knowledge Highly Cited Researcher, 2018, 2019 (top 1% of scholars by citations in field); National Socio-Environmental Synthesis Center Distinguished Scholar-Lecturer, 2017; Rockefeller Foundation Bellagio Fellow, 2016; Provost's Faculty

Fellow Award, 2013; National Academy of Sciences Cozzarelli Prize, 2012 (for article of "outstanding scientific excellence and originality" published in the *Proceedings of the National Academy of Sciences*); Fulbright Scholar (Costa Rica), 2011-2012; Fulbright Scholar (Costa Rica), 2011-2012; Research Associate, The Environment for Development Initiative, 2012 – present; Outstanding Faculty Achievement Award, Georgia State University, 2010; World Wildlife Fund Senior Science Fellow, 2006-present; Kathryn Fuller Science for Nature Fund Visiting Scientist, 2007-2010; Zayed International Prize for the Environment, Scientific and Technological Achievement in Environment (jointly awarded to authors of *Millennium Ecosystem Assessment*); Resources for the Future Joseph Fisher Fellow, 2000; Institute for the Study of World Politics Fellow, 1999; United States Environmental Protection Agency STAR Fellow, 1997-1999; United States Agency for International Development Research Fellowship, 1992-1994; William Lazar Foundation International Environmental Leadership Award, 1992; Center for International Studies Graduate Award for International Research, 1992; William T. Laprade Prize for Outstanding Honors Thesis, 1990; Duke University Senior Leadership Award, 1990; National Merit Commended Scholar, Garden State Scholar, and Colgate Scholar, 1986

### **ADVISORY APPOINTMENTS**

Commissioner, State Children's Environmental Health and Protection Advisory Council to Maryland's General Assembly, 2021- 2024  
U.S. EPA Evidence-Based Compliance Assurance Working Group, 2021 – present.  
Scientific and Technical Advisory Committee, Bluewater Baltimore, 2017-present  
Scientific Committee, Community of Practice, Forests and Livelihoods: Assessment, Research, and Engagement (FLARE) network, 2015 – present  
Scientific Advisory Board, Experimental Evidence on Public Policies to Improve Environmental Performance of Latin American and Caribbean Firms, Interamerican Development Bank, 2021-present  
Associate Editor, *Elements of Sustainability: Science, Policy, Practice* (Cambridge University Press)  
Editorial Board, *Conservation Letters*, 2013 – present  
Senior Editor, *Environmental Evidence*, 2012-present  
Advisory Board, Collaboration for Environmental Evidence, 2009 – present  
Advisory Board, Conservation Strategy Fund, 2009 – present (winner of 2012 MacArthur Award for Creative and Effective Institutions)  
Advisory Board, Evidence on Consumer Demand Reduction Interventions (University of Cambridge), 2018-2021  
Review Panel, Decision, Risk and Management Sciences, National Science Foundation, 2017-19  
Executive Committee, Johns Hopkins Environment, Energy, Sustainability & Health Institute (E<sup>2</sup>SHI), 2015-2019  
Editorial Board, *Land Economics*, 2012 – 2018

Advisory Board, Center for the Management of Ecological Wealth, Resources for the Future, 2012 – 2016

Ad Hoc Editor, *Proceedings of the National Academy of Sciences*, 2014 – 2015, 2021

Behavioral Policy Working Group: Energy and Environment. White House Social and Behavioral Science Team & the Behavioral Science and Policy Association, 2016

Board of Directors, Association of Environmental and Resource Economists, 2010–2012

Editorial Board, *Conservation Biology*, 2010–2012 (Handling Editor, 2007– 2010)

Scientific and Technical Advisory Panel - Global Environment Facility (GEF)/United Nations Environmental Programme, 2006– 2009 (one of five science advisors; ~70 days per year)

## **PRACTICE**

Grazing Permit Retirement Auction in the Charles M. Russell National Wildlife Refuge (5/08-9/09), National Wildlife Federation/World Wildlife Fund, Montana; Payments for Avoided Ecosystem Degradation in Nudo del Azuay, Ecuador, Fundación Cordillera Tropical and CIFOR (7/08-5/09); Program Evaluation of Institute for Family Centered Services' In-home Treatment Service for at-risk Youth. Maryland and Virginia (4/06-3/08); Payments for Environmental Services, Sustainable Agriculture and Natural Resources Management (SANREM) Collaborative Research Support Program (9/06-10/07); International Panel to Evaluate Costa Rica's Programa de Pagos de Servicios Ambientales y Proyecto Ecomercados. Ministerio de Ambiente y Energía, Costa Rica (9/05); Ukraine-American Policy and International Coordination Work Group and Ukraine Environmentally Sound Business Development Project. For USAID/Bureau for Europe and the New Independent States. (1/96 – 12/96); Economic Factors Affecting the Conservation or Depletion of Biodiversity, and A Framework for Affecting Household Behavior to Promote Biodiversity Conservation: field applications. For USAID/Africa Bureau (10/95 – 9/96); Pesticide Use and Pest Management in Madagascar: sub-sector and programmatic environmental assessment. For USAID/Africa Bureau and USAID/Madagascar (8/95 – 9/95); Trade in Biodiversity for Environmental Management. For USAID/Madagascar (6/94 – 11/94); Environmental Valuation of a Development and Conservation Project. For World Bank/Duke University (3/91 – 6/91; 1/92); Alternatives to Destruction: steps towards the sustainable use of the Malagasy rain forest. Funded by the Rhode Island Zoological Society, the Biodiversity Support Program (World Wildlife Fund, the Nature Conservancy, and the World Resources Institute), and the Rainforest Alliance. (8/91 – 12/96); Man and the Malagasy Rain Forest: an integrated conservation/sustained development project. Funded by the UNESCO Man and the Biosphere Program. (6/89 – 7/89; 8/90 – 3/91).

*Provide pro bono advice to more than four dozen non-profit and governmental groups.*

## **TEACHING**

**University Courses:** Field Experiments (MBA, MS); Causal Inference (PhD); Environmental and Natural Resources Economics (PhD); Environmental Economics and Policy (Masters);

Engineering Economics (Undergraduate); Environmental and Natural Resource Economics (Undergraduate); Introduction to Microeconomics (Undergraduate); Mathematics for Economists (PhD); Fact or Fiction? Evaluating Evidence in Global Policy Debates (First-year Undergraduate Seminar); Guest lectures in over two dozen courses.

**Short Courses:** Behavioral Science and Evidence-based Program Design Training Modules for Natural Resource Conservation Service's Conservation Planning Bootcamp (US Department of Agriculture); Recent Advances in Program and Policy Evaluation (Invited annual pre-conference workshop for Association of Environmental and Resource Economists); Advances in Behavioral Economics and Causal Inference (National Socio-environmental Synthesis Center); Advances in Evaluating the Environmental and Social Impacts of Environmental Programs (Latin American and Caribbean Environmental Economics Program); Advances in Impact Evaluation and Causal Inference (two times at annual conference of Society for Conservation Biology & once at University of Queensland); Payments for Environmental Services (University of Copenhagen); Impact Evaluation (Latin American and Caribbean Environmental Economics Program); Behavioral Economics: implications for environmental program design and benefit-cost analysis (US Environmental Protection Agency).

**PUBLICATIONS: SCHOLARLY JOURNALS** [\* student; % post-doc]

*[Pre-print publications can be found on my website under Publications]*

110. [Behavioral Biases among Producers: Experimental evidence of anchoring in procurement auctions.](#) Ferraro, PJ, K Messer, P Shukla<sup>%</sup>, C Weigel<sup>%</sup>. Forthcoming. *Review of Economics and Statistics*.

109. [A Reassessment of the Potential for Loss-framed Incentive Contracts to Increase Productivity: A meta-analysis and real-effort experiment.](#) Ferraro, PJ, JD Tracy<sup>\*</sup>. Forthcoming. *Experimental Economics*.

108. **Lottery Incentives and Resource Management: Evidence from the Agricultural Data Reporting Incentive Program (AgDRIP).** Meiselman<sup>%</sup>, B., C Weigel<sup>%</sup>, PJ Ferraro, M. Masters, K Messer, O. Savchenko, J Suter. Forthcoming. *Environmental and Resource Economics*.

107. [Synthesizing Evidence in Sustainability Science Through Harmonized Experiments: Community monitoring in common pool resources.](#) Ferraro, PJ, Agrawal, A. 2021. *Proceedings of the National Academy of Sciences* 118 (29) e2106489118 [Video](#)

106. [Community-based Monitoring to Facilitate Water Management by Local Institutions in Costa Rica.](#) Bernedo, M<sup>\*</sup>, Alpízar, F, PJ Ferraro. 2021. *Proceedings of the National Academy of Sciences* 118 (29) e2015177118.

105. [Adoption of Community Monitoring Improves Common Pool Resource Management across Contexts.](#) Slough, T. et al. 2021. *Proceedings of the National Academy of Sciences*. 118 (29) e2015367118
104. [Reimagining Safe Drinking Water on the Basis of Twenty-first-century Science.](#) Ferraro, PJ, C Prasse. 2021. *Nature Sustainability*.
103. [Causal Assumptions and Causal Inference in Ecological Experiments.](#) 2021. Kimmel, K<sup>%</sup>, L Dee [corr. auth], M Avolio, PJ Ferraro [corr. auth]. *Trends in Ecology & Evolution*.
102. [A Story Induces Greater Environmental Contributions than Scientific Information among Political Liberals but not Conservatives.](#) Byerly, H [corr. auth], PJ Ferraro [corr. auth], T Li, K Messer, C Weigel<sup>%</sup>. 2021. *One Earth* 4: P545-552. [Infographic](#)
101. [Conservation Outreach that Acknowledges Human Contributions to Climate Change does not Inhibit Action by U.S. farmers: Evidence from a large randomized controlled trial embedded in a federal program on soil health.](#) Ferraro, PJ, J Fooks, R Iovanna, J Larson, B Meiselman<sup>%</sup>, M. Kecinski, K Messer, M Wilson. 2021. *PLoS One*.
100. [Using a Randomized Controlled Trial to Develop Conservation Strategies on Rented Farmlands.](#) Weigel, C<sup>%</sup>, S. Harden, Y Masuda, P Ranjan, C Wardropper, PJ Ferraro, L Prokopy, S Reddy. 2021. *Conservation Letters*.
99. [Time and Risk Preferences of Individuals, Married Couples and Unrelated Pairs.](#) Bernedo, M<sup>\*</sup>, Alpízar, F, PJ Ferraro. 2021. *Journal of Behavioral and Experimental Economics*.
98. [Private Costs of Carbon Emissions Abatement by Limiting Beef Consumption and Vehicle Use in the United States.](#) 2022. McFadden, B., PJ Ferraro, K Messer. *PLoS One*.
97. [Applying a “Fail-fast” Approach to Conservation in US Agriculture.](#) Wardropper, C et al. 2022. *Conservation Science and Practice*.
96. [Reducing Demand for Overexploited Wildlife Products: Lessons from systematic reviews from outside conservation science.](#) MacFarlane, D. M Hurlstone, U Ecker, PJ Ferraro, S van der Linden, A Wan, D Veríssimo, G Burgess, F Chen, W Hall, G Hollands, W Sutherland. 2022. *Conservation Science and Practice*.
95. [Making More Effective Use of Behavioural Science in Conservation Interventions.](#) Balmford, A, Bradbury, R. et al. 2021. *Biological Conservation*.
94. [Biodiversity Conservation as a Promising Frontier for Behavioural Science.](#) Nielsen, K. S., Marteau, T. et al. 2021. *Nature Human Behaviour*.
93. [Rented Farmland: The Missing Piece of the Nutrient Management Puzzle in the Upper Mississippi River Basin?](#) Masuda, Y, S Harden, P Ranjan, C Wardropper, C Weigel, PJ Ferraro, S Reddy, L Prokopy. 2021. *Journal of Soil and Water Conservation*.

92. [Paying Americans to Take the Vaccine – Would it help or backfire?](#) Robertson, C, D Scheitrum, A Schaefer, T Malone, B McFadden, PJ Ferraro, K Messer. 2021. *Journal of Law and the Biosciences*.
91. [The Problem of Feral Hogs and the Challenges of Providing a Weak-link Public Good.](#) Ellis, S, M Masters, K Messer, C Weigel, PJ Ferraro. 2021. *Applied Economic Perspectives and Policy* 43(3): 985–1002.
90. [Conditional Cash Transfers to Alleviate Poverty also Reduced Deforestation in Indonesia.](#) Ferraro, PJ, R. Simorangkir\*. 2020. *Science Advances* 6 [Infographic](#) and [Top Scientific Breakthrough of 2020](#)
89. [Is there a Replicability Crisis on the Horizon for Environmental and Resource Economics?](#) Ferraro, PJ, P Shukla%. 2020. *Review of Environmental Economics and Policy* 14(2)
88. [The Effect of Peer Comparisons on Polluters: A randomized field experiment among wastewater dischargers.](#) Earnhart, D, PJ Ferraro [corr auth]. 2020. *Environmental and Resource Economics*.
87. [Conservation Behavior and Effects of Economic and Environmental Message Frames.](#) Reddy, S, C Wardropper, C Weigel%, Y Masuda, S Harden, P Ranjan, J Getson, L Esman, PJ Ferraro, L Prokopy. 2020. *Conservation Letters*.
86. [Causal Effect of Impervious Cover on Annual Flood Magnitude for the United States.](#) Blum, A%, PJ Ferraro, S Archfield, K Ryberg. 2020. *Geophysical Research Letters*. [Press release](#)  
- One of top 10% most downloaded articles in 2020 at GRL.
85. [The Environmental Effects of Poverty Programs and the Poverty Effects of Environmental Programs: the missing RCTs.](#) Alpizar, F, PJ Ferraro [corr auth]. 2020. *World Development* 127.
84. [Challenges in Recruiting U.S. Farmers for Policy-Relevant Economic Field Experiments.](#) Weigel, C%, LA Paul, PJ Ferraro, KD Messer. 2020. *Applied Economic Perspectives and Policy* 42
83. [The Impacts of Climate Science and Capacity Building in a Randomized Adaptation Project.](#) Alpizar, F, M Bernedo\*, PJ Ferraro [corr auth], B Meiselman%. 2019. *Nature Climate Change* 9: 587–591. Accompanying [News & Views](#) piece, “The Limits of Capacity Building” and [Behind the Paper](#) blog.
82. [Aligning Evidence Generation and Use across Health, Development and Environment.](#) 2019. Tallis, H., et al. *Current Opinion on Environmental Sustainability* 39.
81. [The Behavioural Effect of Electronic Home Energy Reports: Evidence from a randomised field trial in the United States.](#) Henry, M\*, PJ Ferraro, A Kontoleon. 2019. *Energy Policy* 132: 1256-1261.

80. [\*\*A Field Experiment to Estimate the Effects of Anchoring and Framing on Residents' Willingness to Purchase Water Runoff Management Technologies.\*\*](#) Li, T, J Fooks, K Messer, and PJ Ferraro [corr auth]. 2019. *Resource and Energy Economics*.
79. [\*\*Behavioral and Experimental Agri-environmental Research: Methodological Challenges, Literature Gaps, and Recommendations.\*\*](#) Palm-Forster, L, PJ Ferraro, N Janusch, C Vossler, KD Messer. 2019. *Environmental and Resource Economics* 73.
78. [\*\*Causal Inference in Coupled Natural Human Systems.\*\*](#) Ferraro, PJ, J Sanchirico, M Smith. 2019. *Proceedings of the National Academy of Sciences* 116: 5311-5318. [Press Release](#)
77. [\*\*Nudging Pro-environmental Behavior: Evidence and opportunities.\*\*](#) Byerly, H, A Balmford, PJ Ferraro, W Hammond, E Palchak, S Polasky, T Ricketts, A Schwartz, B Fisher. 2018. *Frontiers in Ecology and the Environment*
76. [\*\*Priorities for Protected Area Research.\*\*](#) Dudley, N., M. Hockings, S. Stolton, et al. 2018. *PARKS (International Journal of Protected Areas and Conservation)* 24: 35-50.
75. [\*\*Projecting the Performance of Conservation Interventions.\*\*](#) Law, EA, PJ Ferraro, P Arcese, BA Bryan, K Davis, A Gordon, MH Holden, G Iacona, R Marcos Martinez, C McAlpine, J Rhodes, JS Sze, KA Wilson. 2017 *Biological Conservation* 215: 142-151.
74. [\*\*Applying Behavioral Insights to Improve Water Security.\*\*](#) Ferraro, PJ, KD Messer, S Wu. 2017. *Choices*, Quarter 4.
73. [\*\*A Cautionary Tale on Using Panel Data Estimators to Measure Program Impacts.\*\*](#) Wichman, C., PJ Ferraro. 2017. *Economic Letters* 151: 82-90.
72. [\*\*Behavioral Science Tools for Energy and Environmental Policy.\*\*](#) Yoeli, E. et al. 2017. *Behavioral Science and Policy* 3(1), 69–79.
71. [\*\*Panel Data Designs and Estimators as Substitutes for Randomized Controlled Trials in the Evaluation of Public Programs.\*\*](#) Ferraro, PJ, JJ Miranda\*. 2017. *Journal of the Association of Environmental and Resource Economists* 4:281-317.
70. [\*\*Addressing Participant Inattention in Federal Programs: A Field Experiment with the Conservation Reserve Program.\*\*](#) Wallander, S., PJ Ferraro, N Higgins. 2017. *American Journal of Agricultural Economics* 99(4): 914-931.
69. [\*\*Emerging Evidence on the Effectiveness of Tropical Forest Conservation.\*\*](#) Börner, J, K Baylis, E Corbera, D Essine-de-Blas, PJ Ferraro, J Honey-Rosés, R Lapeyre, M Persson, S Wunder. 2016. *PLoS One*. [Introductory article to special issue]
68. [\*\*Impacts of Community Forest Management on Human Economic Well-being in Madagascar.\*\*](#) Rasolofson, R, PJ Ferraro, G Ruta, M Rasamoelina, J Jones, H Larsen. 2016. *Conservation Letters*.

67. [Improving Credibility and Transparency of Conservation Impact Evaluations through the Partial Identification Approach](#). McConnachie, M, C Romero, PJ Ferraro, B van Wilgen. 2016. *Conservation Biology* 30: 371-381.
66. [Using Counterfactuals to Evaluate the Cost-effectiveness of Controlling Biological Invasions](#). McConnachie, M, B van Wilgen, PJ Ferraro, AT Forsyth, DM Richardson, M Gaertner, RM Cowling. 2016. *Ecological Applications* 26: 475-483.
65. [Mainstreaming Impact Evaluation in Nature Conservation](#). Baylis, K, J Honey-Rosés, J Borner, E Corbera, PJ Ferraro, A Pfaff, P Davies, D de Blas, R Lapeyre, S Pagiola, M Persson, S Wunder. 2016. *Conservation Letters* 9: 58-64.
64. [Estimating the Impacts of Conservation on Ecosystem Services by Integrating Modeling and Evaluation](#). Ferraro, PJ, M Hanauer\*, D Miteva, J Nelson, S Pattanayak, C Nolte, K Sims. 2015. *Proceedings of the National Academy of Sciences* 112: 7420-7425.
63. [Through what Mechanisms Do Protected Areas Affect Environmental and Social Outcomes?](#) Ferraro, PJ, M Hanauer\*. 2015. Invited article for *Special Issue for the 350<sup>th</sup> Anniversary of the Philosophical Transactions of the Royal Society* 370.
62. [Measuring the Difference Made by Conservation Initiatives: Protected areas and their environmental and social impacts](#). Ferraro, PJ, R Pressey. 2015. Introduction to *Special Issue for the 350<sup>th</sup> Anniversary of the Philosophical Transactions of the Royal Society* 370.
61. [Making Parks Make a Difference: Poor alignment of planning, management, and policy with protected-area impact, and ways forward](#). Pressey, R, P Visconti, PJ Ferraro. 2015. Invited article for *Special Issue for the 350<sup>th</sup> Anniversary of the Philosophical Transactions of the Royal Society* 370.
60. [Do Payments Pay Off? Evidence from participation in Costa Rica's PES program](#). Arriagada, R, EO Sills, PJ Ferraro, S Pattanayak. 2015. *PLoS One*
59. [Effectiveness of Community Forest Management at Reducing Deforestation in Madagascar](#). Rasolofson, R, PJ Ferraro, C Jenkins, J Jones. 2015. *Biological Conservation* 184: 271-277.
58. [Estimating the Effect of Plantations on Pine Invasions in Protected Areas: A case study from South Africa](#). McConnachie, MM, BW van Wilgen, DM Richardson, PJ Ferraro, A Forsyth. 2015. *Journal of Applied Ecology* 52: 110-118.
57. [Quantifying Causal Mechanisms to Determine How Protected Areas Affect Poverty through Changes in Ecosystem Services and Infrastructure](#). Ferraro, PJ, M Hanauer\*. 2014. *Proceedings of the National Academy of Sciences* 111:4332-4337. Accompanying *Perspective* piece by A. Agrawal, "Matching and mechanisms in protected area and poverty alleviation research"



56. [Are Voters More Likely to Contribute to Other Public Goods? Evidence from a Large-Scale Randomized Policy Experiment.](#) Bolsen, T, PJ Ferraro, JJ Miranda\*. 2014. *The American Journal of Political Science* 58(1): 17-30.
55. [The Performance of Non-experimental Designs in the Evaluation of Environmental Policy: a design-replication study using a large-scale randomized experiment as a benchmark.](#) Ferraro, PJ, J Miranda\*. 2014. *Journal of Economic Behavior and Organization* 107: 344-365.
54. [Advances in Measuring the Environmental and Social Impacts of Environmental Programs.](#) Ferraro, PJ, MM Hanauer\*. 2014. *Annual Review of Environment and Resources* 39: 495-517.
53. [Working Together: A Call for Inclusive Conservation.](#) Tallis, H et al. 2014. *Nature* 515: 27-28.
52. [The Persistent Impacts of Norm-based Messaging and their Implications for Water Conservation.](#) Bernedo, M\*, PJ Ferraro [corr auth], M Price. 2014. *Journal of Consumer Policy* (Special Issue "Behavioural Economics, Environmental Policy and the Consumer," eds. L Reisch & C Sunstein) 37(3): 437-452.
51. [Moving Rio Forward and Avoiding 10 More Years with Little Evidence for Effective Conservation Policy.](#) Fisher, B, A Balmford, PJ Ferraro, L Glew, M Mascia, R Naidoo, T Ricketts. 2014. *Conservation Biology* 28(3): 880-882.
50. [Using Non-Pecuniary Strategies to Influence Behavior: evidence from a large-scale field experiment.](#) Ferraro, PJ, M Price. 2013. *The Review of Economics and Statistics* 95(1): 64-73.
49. [Heterogeneous treatment effects and mechanisms in information-based environmental policies: Evidence from a large-scale field experiment.](#) Ferraro, PJ, JJ Miranda\*. 2013. *Resource and Energy Economics* 35: 356-379.
- Top five most highly cited papers in *REE* during 2014-2016
48. [More Strictly Protected Areas are not Necessarily More Protective.](#) Ferraro, PJ, M Hanauer\*, D Miteva, G. Canavire-Bacareza, S Pattanayak, and K Sims. 2013 *Environmental Research Letters* 8: 02511.
47. [The Effects of Protected Area Systems on Ecosystem Restoration: a quasi-experimental design to estimate the impact of Costa Rica's protected area system on forest regrowth.](#) Andam\*, KS, PJ Ferraro [corr auth], M Hanauer\*. 2013. *Conservation Letters* 6(5): 317-323.
46. [Social Dimensions of Procurement Auctions for Environmental Service Contracts: Evaluating tradeoffs between cost-effectiveness and participation by the poor in rural Tanzania.](#) Jindal, J Kerr, PJ Ferraro, B Swallow. 2013. *Land Use Policy* 31: 71-80.

45. [Forest Figures: Ecosystem services valuation and policy evaluation in developing countries](#). Ferraro, PJ, K Lawlor, K Mullan, SK Pattanayak. 2012. *Review of Environmental Economics and Policy* 6(1): 20-44.
44. [Do Payments for Environmental Services Reduce Deforestation? A farm-level evaluation from Costa Rica](#). Arriagada, R, PJ Ferraro, S Pattanayak, R, E Sills, S Cordero. 2012. *Land Economics* 88: 382-399. Among [top](#) 10 cited articles published in *Land Economics*
43. [Evaluation of Biodiversity Policy Instruments: What works and what doesn't?](#) Miteva, D, SK Pattanayak, PJ Ferraro. 2012. *Oxford Review of Economic Policy* 28(6): 69-92.
42. [The Today and Tomorrow of Kids: time preferences and educational outcomes of children](#). Castillo, M, PJ Ferraro, J Jordan, R Petrie. 2011. *Journal of Public Economics* 95: 1377-1385.  
[Reprinted in *Field Experiments*, J. List & A. Samak (eds). The International Library of Critical Writings in Economics. Edward Elgar]
41. [Conditions Associated with Protected Area Success in Conservation and Poverty Reduction](#). Ferraro, PJ, M Hanauer\*, KE Sims. 2011. *Proceedings of the National Academy of Sciences* 108(34): 13913-13918.  
[2011 Cozzarelli Prize. Selected from over 3,800 articles as article of "outstanding scientific excellence and originality" published in *Proceedings of the National Academy of Sciences*]
40. [Persistence of Treatment Effects with Norm-based Policy Instruments: evidence from a randomized environmental policy experiment](#). Ferraro, PJ, JJ Miranda\*, M Price. 2011. *American Economic Review: papers and proceedings* 101(3): 318–22.
39. [The Future of Payments for Environmental Services](#). Ferraro, PJ. 2011. Invited article, *Conservation Biology (25<sup>th</sup> Anniversary Issue)* 25: 1134-1138.
38. [Protecting Ecosystems and Alleviating Poverty with Parks and Reserves: 'win-win' or tradeoffs?](#) Ferraro, PJ and M Hanauer\*. 2011. *Environmental and Resource Economics* 48:269–28.
37. [Protected Areas Reduced Poverty in Costa Rica and Thailand](#). Andam, KS\*, PJ Ferraro [corr auth], KE Sims [corr auth], A Healy, and MB Holland. 2010. *Proceedings of the National Academy of Sciences* 107(22): 9996-10001. (Andam, Ferraro & Sims share senior authorship)
36. [Show Me the Money: do payments supply ecosystem services in developing countries?](#) Pattanayak, SK, S Wunder and PJ Ferraro. 2010. *Review of Environmental Economics and Policy* 4(2): 254-274.
35. [The Source and Significance of Confusion in Public Goods Experiments](#). Ferraro, PJ and C Vossler. 2010. *B.E. Journal of Economic Analysis & Policy* 10(1), Article 53.
34. [Know Thyself: competence and self-awareness](#). Ferraro, PJ. 2010. *Atlantic Economic Journal* 38(2): 183-196.

33. [Experimental Tests of Ricardian Equivalence with Nondistortionary versus Distortionary Taxes](#). Adjji, A\*, J Alm, and PJ Ferraro. 2009. *Economics Bulletin* 29(4): 2556-2572.
32. [Park Location Affects Forest Protection: land characteristics cause differences in park impacts across Costa Rica](#). Pfaff, A, J Robalino, GA Sanchez-Azofeifa, KS Andam\*, and PJ Ferraro. 2009. *The B.E. Journal of Economic Analysis & Policy* 9(2), Article 5.
31. [A Revealed Preference Approach to Estimating Supply Curves for Ecosystem Services: use auctions to set payments for soil erosion control in Indonesia](#). Jack, BK, B Leimona\*, and PJ Ferraro. 2009. *Conservation Biology* 23(3): 359-367.
30. [A Global Review of Incentive Payments for Sea Turtle Conservation](#). Ferraro, PJ and H Gjertsen. 2009. *Chelonian Conservation and Biology* 8(1): 48-56.
29. [One Hundred Questions of Importance to the Conservation of Global Biological Diversity](#). Sutherland, WJ, et al. 2009. *Conservation Biology* 23(3): 557-567.
28. [Regional Review of Payments for Watershed Services: Sub-Saharan Africa](#). Ferraro, PJ. 2009. *Journal of Sustainable Forestry* 28(3): 525-550.
27. [Combining Qualitative and Quantitative Methods to Evaluate Participation in Costa Rica's Program of Payments for Environmental Services](#). Arriagada, R, EO Sills, SK Pattanayak, and PJ Ferraro. 2009. *Journal of Sustainable Forestry* 28(3): 343-367.
26. [Counterfactual Thinking and Impact Evaluation in Environmental Policy](#). Ferraro, PJ. 2009. In Special Issue on Environmental Program and Policy Evaluation, M. Birnbaum & P. Mickwitz (Eds.). *New Directions for Evaluation* 122: 75-84.
25. [Measuring the Effectiveness of Protected Area Networks in Reducing Deforestation](#). Andam, KS, PJ Ferraro [corr auth], A Pfaff, GA Sanchez-Azofeifa, and J Robalino. 2008. *Proceedings of the National Academy of Sciences* 105(42): 16089-16094. (Andam & Ferraro share senior authorship)
24. [Asymmetric Information and Contract Design for Payments for Environmental Services](#). Ferraro, PJ. 2008. *Ecological Economics* 65(4): 810-821.
23. [Ecosystem Services and Economic Theory: Integration for policy-relevant research](#). Fisher, B, K Turner, A Balmford, R Brouwer, R Costanza, R de Groot, S Farber, P Ferraro, R Green, D Hadley, J Harlow, P Jefferiss, C Kirby, P Morling, S Mowatt, R Naidoo, J Paavola, B Strassburg, D Yu, M Zijlstra. 2008. *Ecological Applications* 18(8): 2050-2067.
22. [The Effectiveness of Listing under the U.S. Endangered Species Act: An econometric analysis using matching methods](#). Ferraro, PJ, C McIntosh and M Ospina\*. 2007. *Journal of Environmental Economics and Management* 54(3): 245-261.
21. [Cultural Diversity, Discrimination and Economic Outcomes: an experimental analysis](#). Ferraro, PJ and RG Cummings. 2007. *Economic Inquiry* 45(2): 217-232.

20. [Voluntary Development of Environmental Management Systems: Motivations and regulatory implications.](#) Uchida, T\* and PJ Ferraro. 2007. *Journal of Regulatory Economics* 32: 37-65.
19. [Stock Market Reactions to Information Disclosure: new evidence from Japan's Pollutant Release and Transfer Register.](#) Ferraro, PJ and T Uchida\*. 2007. *Environmental Economics and Policy Studies* 8: 159-171.
18. **Response to Hockley et al.: The merit of economic and biological measures in conservation planning.** Naidoo, R, A Balmford, PJ Ferraro, S Polasky, T Ricketts and M Rouget. 2007. *Trends in Ecology and Evolution* 22(6): 287-288.
17. [Integrating Economic Costs into Conservation Planning.](#) Naidoo, R, A Balmford, PJ Ferraro, S Polasky, T Ricketts and M Rouget. 2006. *Trends in Ecology and Evolution* 21(2): 681-687.
16. [Money for Nothing? A call for empirical evaluation of biodiversity conservation investments.](#) Ferraro, PJ and SK Pattanayak. 2006. *PLoS Biology* 4(4): 482-488.
15. [Do Economists Recognize an Opportunity Cost When They See One? A dismal performance from the dismal science.](#) Ferraro, PJ and LO Taylor. 2005. *B.E. Journal of Economic Analysis & Policy* (Contributions) 4(1), Article 7. [one of ten most downloaded articles at BE Press in 2005]
14. **Corruption and Conservation: the need for empirical analyses.** Ferraro, PJ. 2005. *Oryx – The International Journal of Conservation* 39: 257-259. [Invited by the editor]
13. [Price Premiums for Eco-friendly Commodities: Are 'green' markets the best way to protect endangered ecosystems?](#) Ferraro, PJ, T Uchida\* and JM Conrad. 2005. *Environmental and Resource Economics* 32(3): 419-438.
12. [Protecting Forests and Biodiversity: are investments in eco-friendly production activities the best way to protect endangered ecosystems and enhance rural livelihoods?](#) Ferraro, PJ and RD Simpson. 2005. *Forests, Trees and Livelihoods* 15(2): 2-10.
11. **Cost-Effective Conservation When Eco-entrepreneurs have Market Power.** Ferraro, PJ and RD Simpson. 2005. *Environment and Development Economics* 10(5): 651-663.
10. [Targeting Conservation Investments in Heterogeneous Landscapes: A distance function approach and application to watershed management.](#) Ferraro, PJ. 2004. *American Journal of Agricultural Economics* 86(4): 905-918.
9. **Will Direct Payments Help Biodiversity? Response.** Ferraro, PJ and A Kiss. 2003. *Science* 299 (28 March): 1981-1982.
8. [Conservation Contracting in Heterogeneous Landscapes: An application to watershed protection with threshold constraints.](#) Ferraro, PJ. 2003. *Agricultural and Resource Economics Review* 32(1): 53-64.

7. [Detecting Other-regarding Behavior with Virtual Players](#). Ferraro, PJ, D Rondeau, and GL Poe. 2003. *The Journal of Economic Behavior and Organization* 51(1): 99-109.
6. [Assigning Priority to Environmental Policy Interventions in a Heterogeneous World](#). Ferraro, PJ. 2003. *Journal of Policy Analysis and Management* 22(1): 27-43.
5. [Direct Payments for Biodiversity Conservation](#). Ferraro, PJ, and A Kiss. 2002. *Science* 298: 1718-1719.
4. [Optimizing the Riparian Buffer: Harold Brook in the Skaneateles Lake Watershed, New York](#). Azzaino, Z, J Conrad and PJ Ferraro. 2002. *Land Economics* 78(4): 501-514.
3. [The Local Costs of Establishing Protected Areas in Low-income Nations: Ranomafana National Park, Madagascar](#). Ferraro, PJ. 2002. *Ecological Economics* 43(2-3): 261-275.
2. [The Cost-effectiveness of Conservation Performance Payments](#). Ferraro, PJ and RD Simpson. 2002. *Land Economics* 78(3): 339-353.

- Among [top](#) 25 cited articles published in *Land Economics*

1. [Global Habitat Protection: Limitations of development interventions and a role for conservation performance payments](#). Ferraro, PJ. 2001. *Conservation Biology* 15(4): 990-1000.

[Reprinted in special issue for International Year of Biodiversity: Conservation Social Science, April 2010, *Conservation Biology*]

#### **WORKING PAPERS AND IN PROGRESS STUDIES**

1. [Exposure-enhanced goods and technology disadoption](#). Alpízar, F, M Bernedo\*, PJ Ferraro, B Meiselman%. Working paper.
2. [Input efficiency as a solution to externalities: A randomized controlled trial](#). Alpízar, F, M Bernedo\*, PJ Ferraro. Working paper.
3. **Climate adaptation in developing countries when households heavily discount the future**. Alpízar, F., Bernedo, M\*, R. Cremades, PJ Ferraro. Working paper.
4. **Stories and messengers to drive behavior change aimed at averting health threats from wildfires**. Aminpour, P., J Helgeson, PJ Ferraro. Working paper.
5. **Protecting nature for its own sake or for humans? Evidence from a randomized controlled trial on conservation framing for collective action**. Aminpour, P, Ferraro, PJ, G Waterfield, Micheli, F. In progress.
6. [Do the effects of social nudges persist? Theory and evidence from 38 natural field experiments](#). Brandon, A., Ferraro, PJ, J. List, R. Metcalfe. M Price, F Rundhammer. Working paper.

7. **Clarifying the effect of biodiversity on productivity in natural ecosystems with longitudinal data and new methods for causal inference.** Dee, L, PJ Ferraro, C Severen, et al. Working paper.
8. **Social comparisons and water polluters: a replication and extension.** Earnhart, D, PJ Ferraro. In progress.
9. [A certainty effect for preference reversals under risk: Experiment and theory.](#) Feldman, P%, PJ Ferraro. Working paper.
10. **A closer look at experimentally elicited discount rates: an evaluation of methods using individual-level estimates.** Feldman, P%, Ferraro, PJ, C Weigel%, M Bernedo del Carpio. In progress.
11. **Nudging organizations: Evidence from two large-scale natural field experiments.** Ferraro, PJ, C Weigel%, D Earnhart, J Fan%, K Messer. Working paper.
12. **Barriers to applying insights from the behavioral sciences for sustainability.** Ferraro, PJ. In progress.
13. **Challenges to causal inference in adaptation and resilience studies.** Ferraro, PJ. In progress.
14. **Research practices and the credibility of empirical results in agricultural economics.** PJ Ferraro, P Shukla. Working paper.
15. **Priming, anchoring and the interaction effects of behavioral interventions among agricultural producers.** Ferraro, PJ, K Messer, C. Weigel. In progress.
16. **The effect of compliance assistance on compliance and discharges.** Ferraro, PJ, J Shimshack. In progress.
17. **Beyond adoption: Persistence in conservation practices on working farmlands.** Ferraro, PJ, L Paul, J Gao, K Messer. In progress
18. **Awareness about behavioral biases and applications of behavioral insights: implications for the behavioral sciences and public policy.** Ferraro, PJ, P. Shukla, JD Tracy\*, K Messer. In progress.
19. **A natural field experiment testing deterrence among third-party inspectors and their compliance with environmental rules.** Ferraro, PJ, B Meiselman%. In progress.
20. **Differences and similarities in university student and commercial farmer behaviors in a time preference elicitation experiment.** Ganguly, D., P. Feldman, M. Bernedo, PJ Ferraro, K Messer, C Weigel.
21. **A randomized experiment of peer comparisons' effects on water use for irrigation in US agriculture.** A. Hrozencik, J Suter, Ferraro, PJ, N. Hendricks. In progress.

22. **Harbingers of a replicability crisis in ecology and a proposal for action.** Kimmel, K, M Avolio, PJ Ferraro. Working paper.
23. **Supplemental Instruction in difficult college courses: a randomized controlled trial.** Manzella, J\*, PJ Ferraro. Working paper.
24. **Default starting values in the Conservation Reserve Program: an artefactual field experiment.** Paul, L. S Wallender, R Iovanna, K Messer, PJ Ferraro. In progress.
25. **Discount rates among U.S. agricultural producers.** Shartaj, M. Feldman, P%, PJ Ferraro, C Weigel%, M. Bernedo del Carpio. In progress.

### **SPECIAL ISSUES OF JOURNALS: EDITOR**

1. Applying Behavioral Science to Agriculture, Food and Agri-environmental Policy (with K. Messer & P. Shukla). 2023 (expected). Special Issue of *Food Policy*.
2. [Sustaining the Commons: Advancing Understanding of Common Pool Resource Management](#) (with A. Agrawal). 2021. Special Feature for *Proceedings of the National Academy of Sciences*.
3. [Measuring the Difference Made by Protected Areas: Methods, applications and implications for policy and practice](#) (with R. Pressey) 2015. *Special Issue for the 350<sup>th</sup> Anniversary of the Philosophical Transactions of the Royal Society B*.

### **PUBLICATIONS: REFEREED PROFESSIONAL/PRACTITIONER**

3. [Abordagens Analíticas na Avaliação de Impactos Reais de Programas de Conservação.](#) Sills, EO, S Pattanayak, PJ Ferraro, and K Algers. 2006. *Megadiversidade* 2(1-2): 39-49.
2. **Response to Comment by Peter C.H. Pritchard.** Ferraro, PJ. 2006. *Marine Turtle Newsletter* 111: 4-5.
1. [Guest Editorial: An Economist's Reflections on the 25th Annual Symposium for Sea Turtle Biology and Conservation: Empirical Program Evaluation and Direct Payments for Sea Turtle Conservation.](#) Ferraro, PJ. 2005. *Marine Turtle Newsletter* 109: 2-6.

### **PUBLICATIONS: BOOKS, MONOGRAPHS AND REPORTS**

19. [PROTOCOL: Residential energy efficiency interventions: An effectiveness systematic review.](#) Berretta, M, J Furgeson, C Zamawe, I Hamilton, Y Wu, PJ Ferraro, N Haddaway, J Eyers. 2021. *Campbell Systematic Reviews*, 17, e1205.
18. [Twenty questions about design behavior for sustainability.](#) 2019. Klotz, L. et al. A Report from the *Nature Sustainability* Expert Panel on 'Behavioral science for design'

17. [Incentives for climate mitigation in the land use sector: A mixed-methods systematic review of the effects of payment for environmental services \(PES\) on environmental and socio-economic outcomes in low- and middle-income countries.](#) 2019. Snilstveit, B, J Stevenson, L Langer, J, I Shemilt, J Eyers, PJ Ferraro. 3ie Systematic Review 44. London: International Initiative for Impact Evaluation (3ie).
16. [Amicus Curiae Brief of economists and law professors in support of respondents.](#) 2018. Weyerhaeuser Company vs US Fish and Wildlife Service, et al., Supreme Court of the United States, No. 17-71. 5 July 2018.
15. [Are payments for ecosystem services benefiting the ecosystems and people?](#) Ferraro, PJ. 2017. In *Effective Conservation Science: Data not Dogma*, P Kareiva, M Marvier, B Silliman (eds.). Oxford University Press, pp.159-166.
14. [Behavioral economics and climate change adaptation: insights from experimental economics on the role of risk and time preferences.](#) Bernedo, M, PJ Ferraro. 2016. In *The WSPC References of Natural Resources and Environmental Policy in the Era of Global Change: Experimental Economics*, Botelho and Pinto (eds), pp. 151-177.
13. [Do biodiversity policies work? The case for Conservation Evaluation 2.0.](#) Miteva, D, S Pattanayak and PJ Ferraro. 2014. In *Nature in the Balance: the economics of biodiversity*, edited by Dieter Helm and Cameron Hepburn. Oxford University Press.
12. [Economic instruments for nature conservation.](#) Barrett, CB, EH Bulte, PJ Ferraro and S Wunder. 2013. In *Key Topics in Conservation Biology 2*, edited by D MacDonald & K Willis. Wiley-Blackwell Publishing.
11. **Impact of the PSA Program on Land Use.** Sills, E., R. Arriagada, S. Pattanayak, P. Ferraro, L. Carrasco, E. Ortiz, S. Cordero, K. Caldwell, and K. S. Andam. 2009. In *Ecomarkets: Costa Rica's Experience with Payments for Environmental Services*, G. Platais, and S. Pagiola (Eds.). World Bank.
10. **Can Public Goods Experiments Inform Policy? Interpreting results in the presence of confused subjects.** Cotten, S, PJ Ferraro and CA Vossler. 2008. In *Environmental Economics, Experimental Methods*, edited by T. Cherry, S. Kroll and J. Shogren. Routledge, pp.194-211.
9. **Experimental approaches to understanding inter-cultural conflict over resources.** Ferraro, PJ and RG Cummings. 2007. In *Using Experimental Methods in Environmental and Resource Economics*, edited by J. List. Edward Elgar, pp. 137-160.
8. **Economics of Biodiversity Conservation in Developing Countries.** Albers, HJ and PJ Ferraro. 2006. In *Economic Development and Environmental Sustainability: new policy options*, edited by M Toman and R Lopez. Oxford University Press, NY.
7. **Cost-effective Conservation: A review of what works to preserve biodiversity.** Ferraro, PJ and RD Simpson. 2006. In *Resources for the Future Reader in Environmental Policy and Resource Management*, 2<sup>nd</sup> edition, edited by WE Oates. Resources for the Future Press,



Washington DC. Reprinted from 2001 article in *Resources* 143: 17-20.

**6. Integrating Biophysical and Economic Information to Guide Land Conservation Investments.** Ferraro, PJ. 2006. In *Economics and Contemporary Land Use Policy: Development and Conservation at the Rural-Urban Fringe*, edited by R Johnson and S Swallow. Resources for the Future Press, Washington, D.C., pp.267-290.

**5. Contributing author to *Ecosystems and human well-being: policy responses, Findings of the Responses Working Group of the Millennium Ecosystem Assessment*** (2005, Cambridge University Press). The *Millennium Ecosystem Assessment* was a four-year, \$21 million undertaking intended to produce a comprehensive view of the state and management of the planet's ecological resources. Ferraro, PJ.

**4. Bearing the Costs of Human-wildlife Conflict: the challenges of compensation schemes.** Nyhus, PJ, SA Osofsky, PJ Ferraro, H Fischer and F Madden. 2005. In *People and Wildlife: Conflict or Coexistence?* edited by R Woodroffe, S Thirgood & A Rabinowitz. Cambridge University Press, Cambridge, U.K.

**3. Reconciling the Long-term Conservation Needs of Large Mammals and Local Communities: conservation performance payments.** Ferraro, PJ. 2001. In *Terrestrial Ecoregions of the Indo-Pacific: a conservation assessment*, eds., E Wikramanayake, E Dinerstein, and CJ Loucks. Washington, D.C.: Island Press, pp. 185-187.

**2. Introduction: Changing perspectives on agricultural intensification, economic development and the environment.** Lee, DR, PJ Ferraro, and CB Barrett. 2000. In *Tradeoffs or Synergies? Agricultural Intensification, Economic Development and the Environment in Developing Countries*, DR Lee and CB Barrett (eds.). Wallingford, UK: CAB International, pp. 1-16.

**1. Compensation and Economic Incentives: Reducing pressures on protected areas.** Ferraro, PJ and RA Kramer. 1997. In *Last Stand: protected areas and the defense of tropical biodiversity*, R Kramer, C van Schaik, and J Johnson (eds.). New York: Oxford University Press, pp. 187-211.

## **PUBLICATIONS: OP-EDS AND OTHER NON-REFEREED**

33. [Test and Adapt: speeding up climate change adaptation is a tall order](#). Ferraro, PJ. 2019. Behind the Paper Blog, Behavioural and Social Sciences at Nature Research, July (socialsciences.nature.com)

32. [A Better Way to Fight Climate Change](#). Ferraro, PJ. 2019. Op-Ed, Bloomberg View, January.

31. [Start Preparing for the Next Hurricane Harvey](#). Ferraro, PJ. 2017. Op-Ed, Bloomberg View, August.

30. [Can behavioral change support water conservation? Examples from the US, Colombia and Costa Rica.](#) Ferraro, PJ and JJ Miranda. 2017. World Bank Blog Series “Small changes, big impacts: applying #behavioralscience into development. March.
29. **America isn’t that Divided on the Environment.** Ferraro, PJ. 2017. Op-Ed, Bloomberg View, January.
28. **The Free Market Case for Climate Science.** Ferraro, PJ. 2016. Op-Ed, Bloomberg View, December.
27. **When conservation efforts end up using more water.** Ferraro, PJ. 2016. Op-Ed, Bloomberg View, 2 August
26. [CBEAR Behavioral Insights Briefs no. 1 - 10](#) [co-authored with other CBEAR staff]
25. **Comment on Gibbs et al. (Science, January 2015).** Claudia Romero, Francis Putz, Arild Angelsen, Jan Börner, Merlin Hanauer, Matt McConnachie, Subhrendu Pattanayak, Erin Sills, Sven Wunder, Paul Ferraro. 26 May, 2015
24. **More Nudging, Less Shoving on the Road to Sustainability.** Ferraro, PJ. 2014. SNAP.is/Magazine.
23. **Those Who Vote are Also More Likely to Contribute to Other Public Goods.** Bolsen, T, PJ Ferraro, M Miranda. 2014. London School of Economics and Political Science, American Politics and Policy Blog. January 13.
22. **Nature & Prosperity: the evidence we still need & the right questions to ask.** Ferraro, PJ. 2013. SNAP.is/Magazine. October 9.
21. **Results of the GEF Biodiversity Portfolio Monitoring and Learning Review Mission, India: Enhancing outcomes and impact through improved understanding of protected area management effectiveness.** Zimsky, M, J Cavelier, PJ Ferraro, A Joshi, P Krishnan, J Mee, N Sekhran. 2012. Global Environment Facility-Secretariat, Washington, DC.
20. **Experimental project designs in the Global Environment Facility: designing projects to create evidence and catalyze investments to secure global environmental benefits.** Ferraro, PJ. 2012. Scientific and Technical Advisory Panel (STAP) of the Global Environment Facility (GEF). Washington, DC.
19. **Results of the GEF Biodiversity Portfolio Monitoring and Learning Review Mission, Zambia: Enhancing outcomes and impact through improved understanding of protected area management effectiveness.** Zimsky, M, PJ Ferraro, F Mupemo, J Robinson, and N Sekhran. 2010. Global Environment Facility-Secretariat, Washington, DC.
18. **Taxing the other smoke: pollution.** Banzhaf, HS and PJ Ferraro. 2010. Op-ed article in the *Atlanta Journal Constitution*. 16 March.

17. **País que preserva o verde enriquece.** Ferraro, PJ. 2010. *Revista Galileu*. Popular article in July edition.

16. **Payments for Environmental Services and the Global Environment Facility: A STAP advisory document.** Wunder, S, S Wertz-Kanounnikoff, PJ Ferraro. 2010. Prepared on behalf of the Scientific and Technical Advisory Panel (STAP) of the Global Environment Facility (GEF). Washington, DC.

15. **Evaluating initiatives with direct conservation payments: econometric analysis of the Costa Rican Program of payments for environmental services.** Arriagada, R, EO Sills, SK Pattanayak, and PJ Ferraro. 2008. *Sylvanet* 21: 24-31.

14. **Payments for watershed services: the Bellagio Conversations.** Asquith, N, S Wunder et al. 2008. Fundación Natura Bolivia: Santa Cruz de la Sierra

13. **Protected areas and human well-being.** Ferraro, PJ. 2008. In *Economics and Conservation in the Tropics: A strategic dialogue*. Conservation Strategy Fund, Moore Foundation, Resources for the Future.

12. **Performance payments for sea turtle nest protection in low-income nations: a case study from Tanzania.** Ferraro, PJ. 2007. January, National Marine Fisheries Service, La Jolla, CA.

11. **Payments for watershed services: Regional synthesis.** Dillaha, T, PJ Ferraro, M Huang, D Southgate, S Upadhyaya, S Wunder. 2007. United States Agency for International Development PES Brief 7, pp 18.

10. **Are we getting what we paid for? The need for randomized environmental policy experiments in Georgia.** Ferraro, PJ. 2005. *Georgia Water Policy & Planning Center Working Paper #2005-022*. [from 2001-2006, I also wrote another seven papers for the Georgia Water Policy & Planning Center (see [www.h2opolicycenter.org](http://www.h2opolicycenter.org))]

9. **Evaluation of the World Bank – GEF Ecomarkets Project in Costa Rica.** Hartshorn, G, PJ Ferraro, and B Spergel. 2005. November, North Carolina State University.

8. **Direct payments to protect endangered ecosystems and experimental methods to estimate payment costs.** Ferraro, PJ. 2004. Prepared for the Twenty-First Biannual Workshop of the Economy and Environment Program for Southeast Asia (EEPSEA), Hanoi, May.

7. **Assigning priority to ecosystem restoration investments in Georgia's Chickasawhatchee Swamp.** Ferraro, PJ. 2004. *Georgia Water Policy & Planning Center Working Paper #2004-017*.

6. **Direct payments for biodiversity conservation.** Ferraro, PJ, and A Kiss. 2003. Reprinted in the *Himalayan Journal of Sciences*, 1(2) (August) [originally published in *Science*]

5. **Cost-effective targeting of riparian buffers in Georgia when water quality benefits are difficult to measure.** Ferraro, PJ. 2001. *Georgia Water Policy & Planning Center Working Paper #2001-005*.
4. **Water quality protection and the cost-effective targeting of riparian buffers in Georgia.** Ferraro, PJ. 2001. *Georgia Water Policy & Planning Center Working Paper #2001-004*.
3. **Conservation performance payments: efficient investments for ecoregion conservation?** Ferraro, PJ. 2001. *Sharing Across Boundaries* (A Publication of the Conservation Strategies Unit of World Wildlife Fund) 3: 3.
2. **Projets intégrés de conservation et de développement: un cadre pour promouvoir la conservation et la gestion des ressources naturelles.** Ferraro, PJ, with R Tshombe, R Mwinihali, and JA Hart. 1997. *Wildlife Conservation Society Working Paper No. 6*. Bronx, N.Y.: Wildlife Conservation Society, 1997.
1. **Invited review of “Introduction to Ecological Economics: with Gaylord Nelson, Herman Daly, and John Cobb, Jr.”** Parks, PJ and PJ Ferraro. 1994. *Society and Natural Resources* 7: 196-198.

### **FUNDED RESEARCH PROJECTS**

National Science Foundation, *Persistence of Field-scale Sustainable Agricultural Land Use Practices in Large-scale Landscape Evolution: A Data-driven Investigation*, co-PI (PI: Jing Gao, co-PI: K Messer), \$395,248, 2021-2023.

United States Department of Agriculture, *The Persistence of Cover Cropping in the U.S.*, co-PI (PI: K Messer), \$133,333, 2021-2023.

United States Department of Agriculture, *Center for Behavioral and Experimental Agri-Environmental and Risk Management Research (CBEAR)*, PI (w/K Messer), \$1,000,000, 2019-2023.

United States Department of Agriculture, *Conservation Communication Training Program for NRCS*, PI (Co-PI: M Masters, ASU, K Messer, UD), \$150,000, 2018-2019

National Science Foundation, *Planning Grant: Engineering Research Center for the Global Environment Nutrient Network (GEN-2)*, Co-PI (PI: S Grant, VATEch; Co-PIs: A Boehm, Stanford, J Gomez-Velez, NMT; L McNair, VATEch), \$100,000, 2018-2019.

The Nature Conservancy, *TNC Post-doctoral Scholar in Behavioral Economics*, PI, \$277,312, 2018-2020.

Evidence in Governance and Politics (EGAP)/UK Department for International Development, *Evidence about common approaches to facilitating climate change adaptation by local*

*institutions in water-scarce regions of Central America*, PI (Co-PIs, F. Alpizar, CATIE; M. Bernedo, UMD), \$291,685, 2017-2019

United States Department of Agriculture, *Understanding Agricultural Water Use Behavior through Randomized Controlled Trials*, Co-PI (PI: M Masters, ASU), \$499,724, 2017-2020 (NCE to 2021)

United States Department of Agriculture, *Behavioral Economics of Time Preferences, Risk Preferences and Agri-environmental Program Participation among U.S. Producers*, PI (Co-PIs: M Bernedo, UMD; K Messer, UDE), \$324,447, 2017-2019 (NCE 2021)

United States Department of Agriculture, *Practice Defaults and Enrollment in the Conservation Reserve Program*, Co-PI (PI: K Messer, UD), \$90,000, 2017-2019 (NCE 2021)

United States Department of Agriculture, *Applying Behavioral Economics to Improve USDA Agricultural Programs: Field Experiments in Nutrient Management and Water Quality Protection*, Co-PI (PI: M Masters, ASU; Co-PI: K Messer, UDE). \$499,386. 2016-2018 (NCE 2019)

United States Department of Agriculture, *Conference on Advancing Behavioral and Experimental Economics Methods and Applications to Sustainable Environmental and Agricultural Management*, Co-PI (PI: L Palm-Forster, UDE; Co-PI: K Messer, UDE, C Vossler, UTN). \$49,945. 2017.

Penn Foundation, *Inducing Behavioral Change among Residents to Improve the Environmental Quality of the Delaware River Watershed: A Behavioral Science Approach*, Co-PI (PI: K Messer, Univ of DE), \$126,000, 2016-2017

United States Department of Agriculture, *USDA Center for Behavioral and Experimental Agri-Environmental Policy Research (C-BEAR)*, PI (with K Messer). \$1,280,000. 2014-2017.

United States Department of Agriculture, *Field Experiments with Program Agencies*, PI, \$20,000. 2014-2016.

National Science Foundation, *Dynamics of Coupled Natural and Human Systems (CNH) Program, Enhancing Resilience of Coastal Ecosystems and Human Communities to Oceanographic Variability: Social and ecological feedbacks*, Co-PI (PI: F. Micheli, Stanford University), \$1,400,000. 2012-2017.

International Development Research Centre, *Agua para consumo humano, comunidades y cambio climático: Impactos esperados y adaptación en América Central*, Co-PI (PI: F. Alpizar, CATIE), \$1,501,770. 2012-2015.

World Wildlife Fund, *Northern Great Plains Ecoregion: incentives and evaluation*. PI, \$46,194. 2008-2010.

United Nations Environment Programme, *Scientific and Technical Advisor Panel*. PI, \$65,628. 2008-2009.

International Initiative for Impact Evaluation, Global Development Network, *The Impact of Energy Efficient Technology on Energy Consumption: a randomized experiment*. Proposal Preparation Grant, \$5,000, Co-PI (PI: K. Andam, World Bank). 2008.

United States Department of Agriculture, *Agricultural Water Policy for Georgia*, PI, \$129,215. 2006-2007.

National Science Foundation, Economics Program, *Private Provisions of Public Goods: Applying Matching Estimators to Evaluate 'Direct Payments' for Tropical Forest Conservation*, Co-PI (PI: E. Sills), \$31,051. 2005-2007.

National Oceanic and Atmospheric Administration (National Marine Fisheries Service). *Evaluating the Effectiveness and Efficiency of Sea Turtle Conservation*, PI, \$54,040, 2004-2006.

United States Department of Agriculture, *Agricultural Water Policy for Georgia*, PI, \$837,429, 2004-2005.

Georgia State University Research Foundation, *Research Instrumentation Grant*, Co-PI (PI: S. Laury), \$46,206, 2004.

Georgia State University Research Foundation, *Dynamics of Repeated Public Goods Games*, PI \$10,000, 2002-2003.

*Information about external funding received prior to 2001 available upon request (NY Water Resources Institute, Rainforest Alliance, William Lazar Foundation, Rhode Island Zoological Society, Biodiversity Support Program).*

### **INVITED SPEAKER**

2022: Chesapeake Bay Trust's *Behavior Change in Stewardship Practices: A Virtual Forum on the State of the Science and Water Quality Implications* (keynote); Georgia Tech University; Sawyer Seminar on Precision and Uncertainty in a World of Data (virtual); Mannheim Conference on Energy and the Environment (keynote); Inaugural Seminar for the Society for Conservation Biology's *Conservation Impact Evaluation and Implementation Science Seminar Series*; *The Eric J. Hanson Lecture*, University of Alberta.

2021: American Psychological Association Workshop *Putting the Science of Persuasion to Good Use*; Georgia State University; 2021 International Conference *Social sciences for pesticide policies* (keynote speaker), INRAE-Paris; Triangle Resource and Environmental Economics Seminar (Duke University, North Carolina State University, RTI International); World Trade Institute's Agile Innovation Series; ARC Centre of Excellence for Coral Reef Studies, James Cook University; University of Wyoming; CBEAR-USDA Economic Research Service 2021 Webinar Series; RARE BE.Hive Summit; Leibniz-Institut für Wirtschaftsforschung

(Essen); National Science Foundation Advisory Committee for Environmental Research and Education; Pew Charitable Trusts.

2020: Behavioral Science and Policy Association Annual Meeting (keynote speaker); Cambridge University; London School of Economics; Wageningen University; Tilburg University; Economic Research Service Seminar, US Department of Agriculture; *Nudging for Nature* Workshop, Cambridge Conservation Initiative; Field to Market's Cross-Sector Dialogue *The Human Element* (plenary speaker); JHU Environmental & Energy Systems/Policy Seminar; VU University Amsterdam; U.S. EPA Evidence-based Compliance Assurance Webinar Series (inaugural talk).

2019: Opening Talk at the US Forest Service Workshop on *Behavioral Economics Applications in Forest Service Research*; *Nature Sustainability* Panel on Behavioral Science and Engineering Design; LEEP International Excellence in Environmental and Resource Economics, University of Exeter (plenary speaker); "Looking Forward" Forests and Livelihoods: Assessment, Research, and Engagement (FLARE) Annual Conference, University of Michigan (plenary panelist); Annual Meeting of the Research Network on Economic Experiments for the Common Agricultural Policy, Osnabücker, Germany (keynote speaker); Annual Environmental and Natural Resource Conservation Workshop, Center for Environmental Economics (CNRS, SupAgro, INRA, University of Montpellier), Montpellier, France (keynote speaker); Workshop on "Evidence-Based Policy: From Rhetoric to Reality," Evidence-based Policy Commission; Johns Hopkins University Bay Area Alumni Gathering; Food Systems Symposium, Alliance for a Healthier World; Howard H. Baker Jr. Center's Distinguished Energy & Environmental Lecture, University of Tennessee; Edwin Way Teale Nature & Environment Lecture, University of Connecticut.

2018: National Academy of Sciences Sackler Colloquium on Economics, Environment and Sustainable Development; Inter-American Development Bank, Inaugural Speaker at Environmental and Natural Resources Research Seminar Series; The Nature Conservancy, Global Science Seminar; University of Minnesota, Department of Applied Economics; University of Minnesota, Department of Ecology and Evolutionary Biology; US Department of Agriculture, Economic Research Group; The World Bank, Environment and Natural Resources Global Practice Group; The Urban Ecology Collaborative; RWI Research Network Workshop on Deforestation and Energy Access (keynote speaker); Annual Conference of the Danish Environmental Economic Council (keynote speaker); 20<sup>th</sup> Annual BIOECON Conference (keynote speaker).

2017: Harvard University, University of Maryland, and University of Virginia's Workshop on Evaluating Innovative Approaches to Foster Environmental Compliance; International Network for Environmental Compliance and Enforcement's Workshop on Performance Measurement in Environmental Compliance and Enforcement; Engineers without Borders, Johns Hopkins University; Earth and Planetary Sciences, Johns Hopkins University; National Socio-environmental Synthesis Center (SESYNC); Kinship Foundation; Environmental Council of the States (ECOS) & the U.S. EPA Office of Enforcement and Compliance Assurance (OECA);

National Socio-environmental Synthesis Center (SESYNC)'s Cross-disciplinary Workshop on Causality; Scientific and Technical Advisory Committee, Chesapeake Bay Program.

2016: The Charles Jenner Memorial Lectureship, University of North Carolina-Chapel Hill; Institute Seminar in Political Economy, Johns Hopkins University; IGERT, Johns Hopkins University; Energy Systems and Policy Seminar, Johns Hopkins University; Inter-American Development Bank; U.S. Department of Agriculture; Board of Directors, National Association of Conservation Districts; University of Cambridge; University of Maryland; Resources for the Future; Baltimore School of the Arts; Behavioral Exchange 2016; NCEE, U.S. Environmental Protection Agency (2x); Princeton University.

2015: University of Florida; University of Queensland; University of Tennessee; Abel Wolman Lecture, Johns Hopkins University; University of Vermont; National Socio-Environmental Synthesis Center (SESYNC); AidData Workshop on Conservation Impacts of Foreign Aid; U.S. Department of Housing and Urban Development; AAEA Workshop on Applying Behavioral and Experimental Economics to Food and Agri-Environmental Issues (keynote speaker); University of Georgia's 2<sup>nd</sup> Annual Sustainability Science Symposium (keynote speaker); Cambridge University Conference on Conservation Science (keynote speaker); Australian Conference of Economists (keynote speaker).

2014: World Congress of Environmental and Resource Economists (invited panelist on field experiments with government agencies); Kinship Conservation Fellows Program; Johns Hopkins University; Bren School of Environmental Science & Management, UC-Santa Barbara; Voluntary Conservation under the ESA (invited panelist), Duke University; University of Michigan.

2013: Consultative Group on Biological Diversity; Oregon State University; Centro Agronómico Tropical de Investigación y Enseñanza; University of Wyoming; US Environmental Protection Agency; Purdue University; L'Institut de Ciència i Tecnologia Ambientals (keynote speaker); US Agency for International Development, Sustainable Conservation Approaches in Priority Ecosystems network (keynote speaker); American Evaluation Association (Invited Plenary Speaker).

2012: Centro Agronómico Tropical de Investigación y Enseñanza; La Selva Biological Station, Organization for Tropical Studies; Odum School of Ecology, University of Georgia; Toulouse School of Economics; Resources for the Future; Environment for Development network (keynote speaker); World Agroforestry Centre (keynote speaker, Science Week).

2011: University of North Carolina-Chapel Hill; Cornell University; Global Environment Facility; Inter-American Development Bank (Rural Development Division and Environment Division); Centro Agronómico Tropical de Investigación y Enseñanza; University of Michigan; Stanford University; Inter-American Development Bank (Climate Change Division); London School of Economics (keynote speaker).

2010: Cornell University; Center for International Forestry Research; University of California-Davis, Dept of Agricultural and Resource Economics; University of California-Davis, Dept of Environmental Science and Policy; Invited Panel, Tough Questions for Free Market



Environmentalism at the Property and Environment Research Center; University of North Carolina-Chapel Hill, Curriculum in Ecology and Environment; Duke University; University of North Carolina-Chapel Hill, Department of Public Policy; University of Illinois, Champaign-Urbana (keynote speaker); Global Environment Facility/World Bank; North Carolina State University

2009: Yale University; Fundación Cordillera Tropical (Ecuador); Global Environment Facility; Lincoln Institute of Land Policy; University of Florida; World Bank; International Fund for Agricultural Development; Annual Environmental Evaluator's Forum; University of Copenhagen; Global Environment Facility Council; Organization of Tropical Studies

2008: Environmental Protection Agency Expert Panel on Evaluating Partnership Programs; Moore Foundation Workshop on Economics and Conservation; University of Georgia, Warnell School Seminar Series; United Nations Environment Programme; World Bank Independent Evaluation Group/NORAD Evaluation Department Workshop on Evaluating REDD; University of Cambridge Global Assessment Workshop of 100 Questions of Greatest Importance to Conservation Policy and Practice; Georgia Water Wise Council; World Wildlife Fund Conservation Science Program Seminar Series; World Wildlife Fund Northern Great Plains Seminar Series

2007: Scientific Workshop on Payments/Rewards for Environmental Services; Bellagio Workshop on Payments for Watershed Services; University of Minnesota; Georgia State University, Nonprofit Group Seminar Series; Georgia State University, Child Policy Seminar Series; Annual Environmental Evaluator's Forum, Environmental Protection Agency; Virginia Tech; Harvard University, Frontiers in Sustainable Development Speaker Series

2006: Valuing Wild Nature Workshop (co-sponsored by English Nature and Royal Society for the Protection of Birds); US Agency for International Development's International Symposium on Biodiversity Conservation in Agriculture; World Wildlife Fund; Conservation International (two presentations); Kinship Conservation Fellows Symposium (Kinship Foundation); Joint Committee Meeting of the Georgia Senate Natural Resources and the Environment Committee and the Georgia Senate Agriculture and Consumer Affairs Committee; Duke University, NC State University, University of North Carolina and RTI International; Duke University, Nicholas Institute; University of California-Santa Barbara, Bren School of Environmental Studies; Scripps Institute for Oceanographic Research/University of California-San Diego; Evaluation Office, The Global Environment Facility

2005: Workshop on Payments for Environmental Services (PES) – Methods and design in developing and developed countries; Southwest Fisheries Science Center, U.S. National Marine

Fisheries Service; Scripps Institute for Oceanographic Research/University of California-San Diego

2004: Emory University; Davidson College

2002: North Carolina State University; Emory University

2001: Resources for the Future; The Nature Conservancy; World Wildlife Fund

**PRESENTATIONS AT PROFESSIONAL CONFERENCES (2000-present)**

2021: American Economic Association; Agricultural and Applied Economics Association; Ecological Society of America

2020: Association of Policy Analysis and Management; Association of Environmental and Resource Economists Annual Summer Conference

2019: Conference Workshop: Best Practices for Addressing the Replicability Crisis in Agricultural and Applied Economics, AAEA Annual Meeting

2017: Advances with Field Experiments, University of Chicago

2016: American Economic Association; Association of Environmental and Resource Economists; Advances with Field Experiments, University of Chicago; ACES (A Community on Ecosystem Services)

2014: World Congress of Environmental and Resource Economists; North American Congress for Conservation Biology

2013: Association of Environmental and Resource Economists Annual Summer Conference; International Congress for Conservation Biology; Association of Public Policy Analysis and Management

2012: North American Congress for Conservation Biology; Association for Public Policy Analysis and Management

2011: American Economic Association; Association of Environmental and Resource Economists Annual Summer Conference; Environmental Evaluators Network Forum; Southern Economics Association; Association for Public Policy Analysis and Management

2010: American Economic Association; Georgia Association of Water Professionals

2009: American Economic Association

2007: American Economic Association Annual; Association of Environmental and Resource Economists Conference on Valuation and Incentives for Ecosystem Services; American Agricultural Economics Association

2006: Society for Conservation Biology (two presentations); Economic Science Association; CAMP Resources Conference

2005: Annual Symposium on Sea Turtle Biology and Conservation; Conference on Experimental Public Economics; Experimental Economics and Public Policy; Association of Environmental and Resource Economists Conference on Natural Resources at Risk

2004: Annual CAMP Resources Conference; Economic Science Association, North American Regional Meeting; Southern Economics Association Annual Meeting;

2003: Rural Livelihoods, Forests and Biodiversity (co-sponsored by the Center for International Forestry Research (CIFOR), Germany's Ministry of Economic Cooperation and Development (BMZ), the German Foundation for International Development (DSE) and Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)); Economic Science Association, International Meeting (two presentations); Southern Economics Association Annual Meeting (three presentations); Conference on International Financing of Biodiversity Conservation in Developing Countries

2002: World Congress of Environmental and Resource Economists (two presentations); Land Use Policy Conference (sponsored by the Northeastern Agricultural and Resource Economics Association); Healthy Ecosystems, Healthy People: Linkages between Biodiversity, Ecosystem Health and Human Health; Society for Conservation Biology Annual Meeting; Southern Economics Association Annual Meeting;

2001: Northeastern Agricultural and Resource Economics Association; Southern Economics Association; Potencialidades de los sistemas silvo-pastoriles para la generación de servicios ambientales

2000: Economic Science Association; International Association for the Study of Common Property Annual Meeting

## **SUPERVISION OF DISSERTATIONS AND MASTERS THESES**

### Post-Doctoral Academic Mentor

Alizabeth Sanchez-Lopez, NIST PREP Postdoctoral Fellow, 2021-2023

Payam Aminpour, NIST PREP Postdoctoral Fellow, 2021-2023

Kaitlin Kimmel, Glenadore & Howard L. Pim Postdoctoral Fellow, 2020-2021

Annalise Blum, Glenadore & Howard L. Pim Postdoctoral Fellow, 2017-2019

Diogo Verissimo, David H. Smith Conservation Research Fellow, 2014-2017

Joe Maher, National Socio-environmental Synthesis (SYSENC) Fellow, 2016-2017

### Post-Doctoral Supervisor

Hannah Correia, 2022-2024

Paul Feldman, 2019-2022. Expected: Texas A&M

Pallavi Shukla, 2019-2022. Expected: Deakin University

Ben Meiselman, 2017-2020 Currently: Office of Tax Analysis, US Dept of Treasury

Collin Weigel, 2016-2020 Currently: California Air Resources Board

James Fan, 2017-2018 Currently: Naval Postgraduate School

Doctoral Thesis Committee Chair

*Essays on Human Behavior, Engineering and the Environment*, Marisa Henry. Awarded a Lee and Albert H. Halff Doctoral Award and Natalie M. Lorenz Givans Fellowship.

Currently: Data Scientist, Transit.

*Essays on Institutions and the Environment*, Rhita Simorangkir, December 2017. Currently: Monitoring, Evaluation and Learning Specialist, The Nature Conservancy.

*Essays on Behavior, Experimental Designs and the Environment*, Dustin Tracy, December 2017. Currently: Post-doctoral Fellow, Chapman University.

*Essays on Behavioral, Development and Urban Economics*, Maria Bernedo, May 2016.

Currently: Assistant Professor, Department of Economics, University of Maryland-Baltimore County

*Essays on Experimental and Quasi-experimental Policy Design and Evaluation*. Juan Jose Miranda Montero, August 2012. Awarded a University Fellow award. Currently:

Economics Unit, Sustainable Development Department, World Bank.

*Essays on the Evaluation of Environmental Programs*. Merlin Hanauer, May 2011.

Dissertation was awarded a GSU Dissertation Grant. Awarded two Outstanding Graduate Student Teaching Awards and the Blinksilver Award for Excellence in Economics.

Currently: Associate Professor, Sonoma State University.

*Essays on the Evaluation of Land Use Policy: The Effects of Regulatory Protection on Land Use and Social Welfare*, Kwaw Andam (PhD Public Policy). May 2008. Dissertation

was awarded a GSU Dissertation Grant, the Resources for the Future Joseph L. Fisher Fellow award, and the Southeast Evaluation Association Graduate Award. Currently: International Food Policy Research Institute (IFPRI).

*The Effect of Penalty Severity on Compliance Behavior*, Vid Adrison. December 2007.

Currently: Faculty of Economics, University of Indonesia, Jakarta, Indonesia.

*Voluntary Approaches to Environmental Protection*, Toshihiro Uchida. August 2004.

Dissertation was awarded a GSU Dissertation Grant, the Resources for the Future Joseph L. Fisher Fellow award, and the Southern Economics Association Graduate Award.

Currently: Professor, School of Economics, Chukyo University, Japan.

Doctoral Thesis Committee Member

Committee member on over three dozen dissertations (Georgia State University, Georgia Tech, James Cook University, Johns Hopkins University, Macquarie University, Michigan State University, Rhodes University, Toulouse School of Economics, University of Illinois-Champaign-Urbana, University of Michigan, University of Montpellier, University of Queensland, and Wageningen University in departments of Biology, Economics, Civil Engineering, Environmental Engineering, Environmental Sciences, Natural Resources, Public Policy). Committee Reader or External Reviewer on over a dozen dissertation committees.

Masters and Undergraduate Thesis Advisor

Advisor on over a dozen theses in economics, public health, and engineering (MA, MS, MHS, MEM).

**SERVICE ACTIVITIES INTERNAL TO THE UNIVERSITY**

Co-chair, Bloomberg Distinguished Professor Cluster Search Committee for “Sustainable Energy Transformations Cluster”; Member, Academic Board (and Academic Promotion and Tenure Committee), Carey Business School, 2020-present; Member, Whiting School of Engineering Faculty Senate, 2021-present; Co-chair, PhD Track in Environmental Sustainability, Resilience and Health, 2022-present; Member, Vice-Dean of Faculty and Research Search Committee, 2022; Member, Faculty Affairs Committee Department of Environmental Health and Engineering, 2017-2022; Member, Johns Hopkins Sustainability Leadership Council, 2019-present (Research Ambassador for “Sustainable Ecosystems & Resource Use”); Member, Senior Faculty Advisory and Evaluation Committee, Carey Business School, 2015-present; Member, Search Committee (Chair of Health Policy & Management), 2021-2022; Member, Member, Board of Trustees Public Interest Investment Advisory Committee, 2017-present; Member, President's Frontier Award Selection Committee, 2016-present; Chair, Carey Business School Econ Post-doc Search Committee, 2021-2022; Member, PhD Admissions Committee, 2016-present; Member, Catalyst and Discovery Award Selection Committee, 2015-2022; Chair, Carey Business School Econ Faculty Search Committee, 2019-2020; Chair, Carey Business School Econ Post-doc Search Committee, 2019-2020, 2021-2022; Member, Carey Business School Dean Search Committee, 2019; Member, Ad Hoc University Tenure Committee (Homewood), 2018-2019; Member, Internal Review Committee (Center for Leadership Education), 2018; Member, Johns Hopkins Center of Leadership Education External Review Committee, 2018; Co-chair, Faculty Classification Revision Committee, 2016-2018; Member, School Internal Research Grant Committee, 2016-present; Member, Departmental Student Awards Committee, 2016-2018; Member, Bloomberg School Evidence Workgroup, 2016-2020; Member, Faculty Recruiting Committee, Finance, 2016-18; Member, PhD Fellowship Committee, 2016-2020; Chair, Faculty Recruiting Committee, Economics (Assoc/Full Prof), 2014-15; Member, University Promotion and Tenure Advisory Panel, 2013-2015; Member, Faculty Recruiting Committee, School of Public Health (Assoc/Full Prof), 2014-15; Member, Faculty Member, PhD Graduate Admission Committee, Public Policy, 2010-2015; Member, Department of Economics' Undergraduate Program Committee, 2004-2015; Member, Associate Professor Evaluation Committee, 2013-2015; Chair, Faculty Recruiting Committee, Economics (Assistant Professor), 2013-14; Chair, Introduction to Economics Textbook Committee, 2013-14; Co-chair, Faculty Recruiting Committee, Criminology/Criminal Justice (Assoc/Full Professor), 2012-2013; Member, Selection Committee for 2012 Georgia State University Award for Global Engagement; Member, Department of Economics' Educational Policy Committees (Vice-Chair of Committee for

Environmental, Urban and Regional Economics; Economic Development; Experimental), 2001-2015; Member, Andrew Young School of Policy Studies Management Committee, 2010-2012; Member, Andrew Young School of Policy Studies' Dean Search Committee, 2010; Member, Provost's Committee to Evaluate University's Second Century Initiative Proposals, 2010, 2011; Co-chair, Faculty Recruiting Committee, Performance Management/Program Evaluation (Assoc/Full Professor), 2010-2012; Co-chair, Faculty Recruiting Committee, Education Policy (Full Professor), 2010-2011; Chair, Faculty Recruiting Committee, Policy Field Experiments (Assoc Professor), 2010-2012; Co-Chair, Focal Area of Excellence in Evidence-based Policy and Public Performance Management, 2009 (*co-wrote successful proposal for center of excellence in evidence-based policy*); Member, Ad Hoc Tenure Standards Review Committee, 2009; Member, Andrew Young School Dean Search Committee, 2008-2009; Member, Faculty Recruiting Committee, Econometrics (Assoc/Full Professor), 2008-2009; Member, Department of Economics Chairperson Selection Committee, 2009; Chair, Andrew Young School Ad Hoc Environmental Action Committee, 2008; Member, Andrew Young School of Policy Studies' Advisory Committee for Visiting Faculty program, 2008-2011; Member, Department of Economics Assistant Professor Performance Evaluation Committee, 2008; Member, GSU Senate Cultural Diversity Committee, 2004-2007; Member, GSU Senate Administrative and Support Unit Review Committee, 2004-2005; Member, GSU Senate Cultural Diversity Sub-committee, African-American Male Initiative, 2004-2007; Member, Search Committee for the Noah Langdale Chaired Professorship in the Department of Economics, 2004-2005; Member, Faculty Recruiting Committee, Environmental Economics (Asst/Assoc Professor), 2007-2008; Member, Faculty Recruiting Committee, Environmental Economics (Asst/Assoc Professor), 2005-2006; Member, Faculty Recruiting Committee, Environmental and Experimental Economics (Asst Professor), 2001-2002; Member, Faculty Recruiting Committee, Environmental and Experimental Economics (Assoc Research Professor), 2001-2002; Faculty Advisor, GSU Economics Club, 2004-2007; Faculty Advisor, GSU chapter of the Omicron Delta Epsilon Honors Society, 2004-2011; Coordinator, Department of Economics seminar series scheduling, 2003-2011; Department Liaison, Institutional Review Board protocols, 2007-2012. Department Captain, State Charitable Contributions Campaign, 2003 (97% participation rate); Third-Year Student Best Paper Panel, 2011; Mock Graduate Student Interviews, 2002-present); Annual Graduate Seminar on Giving a Good Presentation, 2009-2015; Received support to run a randomized experiment to test the effectiveness of early intervention and strength-based advising in improving undergraduate retention, progression and graduation in the Andrew Young School of Policy Studies, 2006-2008.

### **SERVICE ACTIVITIES IN ACADEMIC AND PROFESSIONAL ORGANIZATIONS**

#### Advisory Boards

Member, U.S. EPA Evidence-Based Compliance Assurance Working Group, 2021 – present;  
 Member, Scientific and Technical Advisory Committee, Bluewater Baltimore, 2017-present;  
 Scientific Advisory Board, Experimental Evidence on Public Policies to Improve Environmental

Performance of Latin American and Caribbean Firms, Interamerican Development Bank, 2021-present; Member, Scientific Committee, Community of Practice, Forests and Livelihoods: Assessment, Research, and Engagement (FLARE) network, 2015 – present; Selection Committee, Best Paper Prize of the Association of Behavioral Economics and Finance (ABEF), 2019; Member, Scientific and Technical Advisory Member, Behavioral Science and Policy Association Working Group on Energy & Environment, 2016-17; Behavioral Science and Policy Association Leadership Council, 2017-present; Member, Atlanta Regional Commission Technical Advisory Group (2009); Member, Advisory Group, Collaboration for Environmental Evidence (2009 – present); Member, Conservation Strategy Fund (2009-present); Member, Board of Directors, Association of Environmental and Resource Economists (2010-2012); Member, Center for the Management of Ecological Wealth, Resources for the Future, 2012-present; Member, Nomination Committee, Association of Environmental and Resource Economists, 2016-present; Member, Scientific and Technical Advisory Panel - Global Environment Facility (GEF)/United Nations Environmental Programme, 2006– 2009

#### Program Committees

Co-organizer, Symposium *Direct Payments as an Alternative Conservation Investment*, Society for Conservation Biology Annual Meeting, 2002; Member, Organizing and Host Committee for 2006 International Meetings of the Economic Science Association, 2006; Co-organizer, Symposium *How Do We Know It's Working? State-of-the-Art in Program Evaluation and Implications for Conservation Science and Policy*. Society for Conservation Biology Annual Meeting, 2006; Member, Program Advisory Group, Second Annual Environmental Evaluator's Networking Forum, 2007; Organizer, Workshop *Measuring the performance of protected area systems: challenges and opportunities*, Global Environment Facility, 2010; Program Committee, Inaugural Summer Conference of the Association of Environmental and Resource Economists, 2011; Organizer, Symposium *Causal Effects and Mechanisms of Protected Areas on Poverty*, North American Congress for Conservation Biology, 2012; Co-organizer, Conference on Behavioral & Experimental Agri-Environmental Research: Methodological Advancements & Applications to Policy, 2017; Reviewer, Annual Conference of Association of Environmental and Resource Economists, 2018-2022; Co-organizer and moderator, Workshop, Best Practices for Addressing the Replicability Crisis in Agricultural and Applied Economics, AAEA Annual Meeting, 2019; Co-organizer, CBEAR [Virtual Seminar Series](#), 2021-present; Co-organizer and co-host, US EPA & EPIC 10-part [Webinar Series](#) *Evidence-based Compliance Assurance*, 2020-21; Co-organizer and co-host, Conservation Impact Evaluation and Implementation Science Virtual [Seminar Series](#), 2022-present.

#### Chair of Program Sessions

Organizer/Chair, *Experimental Analyses of Inter-Ethnic and Inter-Racial Effects on Economic Behavior*, Southern Economic Association Annual Meeting, 2003; Organizer/Chair, *Learning and Group Dynamics*, Southern Economic Association Annual Meeting, 2004; Chair,

*Environmental Sociology*, Society for Conservation Biology Annual Meeting, 2006; Chair, *Corporate Environmental Behavior*, American Agricultural Economics Association, 2007; Chair, *Globally Important Conservation Policy Questions*, University of Cambridge Assessment of 100 Questions of Greatest Importance to Conservation Policy and Practice, 2008; Organizer/Chair, *Persistence of Behavioral Changes in the Environmental Context*, Agricultural & Applied Economics Association, 2021.

Moderator/Panelist/Discussant

Discussant, Economic Science Association International Meetings, 2000; Discussant, AERE Workshop Assessing and Managing Environmental and Public Health Risks, 2001; Discussant, Annual Meetings of the Southern Economics Association, 2001; Invited Panelist, Workshop on Integrated Ecosystem Management and Incentives for Biodiversity Conservation in Africa, 2002; Discussant, Southern Economics Association Meetings, 2002; Discussant, Southern Economic Association Annual Meeting, 2003; Invited Panelist, National Academy of Sciences and the U. S. National Committee of the International Union of Biological Sciences (IUBS) Workshop on Human Dimensions of Biodiversity, 2003; Discussant, Workshop on International Financing of Biodiversity Conservation in Developing Countries, 2003; Discussant, Southern Economic Association Annual Meeting, 2004 (2x); Discussant, Conference on Experimental Public Economics, 2005; Invited Panelist, NIH Fogarty International Cooperative Biodiversity Group (ICBG), 2005; Invited Panelist, Kinship Conservation Fellows Symposium, 2006; Invited Panelist, Workshop on Payments for Watershed Services: building on pilot experiences to mainstream a tool for sustainable conservation and development, 2007; Discussant, American Agricultural Economics Association Annual Meeting, 2007; Invited Panelist, Environmental Protection Agency Expert Panel on Evaluating Partnership Programs, 2008; Invited Panelist, World Bank Independent Evaluation Group/NORAD Evaluation Department Workshop on Evaluating REDD, 2008; Invited Panelist, Combining Environmental and Development Goals: strategies for moving forward, Joint Panel of American Economic Association/Association of Environmental & Resource Economists, 2010; Invited Panelist, Managing the Chesapeake Bay and its Complexity, Environmental Evaluators Network Forum, 2011; Discussant, Association for Public Policy Analysis and Management, 2012; Discussant, American Economic Association, 2015; Invited Panelist, Princeton E-Affiliates, Energy, Behavior and Climate Change, 2016; Moderator, Johns Hopkins University, Public Forum and Panel on Divestment, 2017; Moderator, Behavioral and Experimental Economics Insights for Agri-environmental Challenges, American Economic Association, 2018; Moderator, Panel on Big Data and Infrastructure Development in Africa, Mzuzah Convergence Conference, 2018; Member, *Nature Sustainability* Expert Panel on Behavioral Science for Design, 2019; Discussant, Session on Field experiments in Agriculture and the Environment, Agricultural & Applied Economics Association, 2021; Panelist, National Park Service Teton Behavioral Group, 2021; Panelist, Datacolada seminar series, 2021; Panelist, National Science Foundation Advisory Committee for



Environmental Research and Education, 2021; Panelist, Chesapeake Bay Trust, 2022; Panelist, Sawyer Seminar *For the Sake of the Climate: Meditations on Retooling the Economy*, 2022.

### Referee and Editing

National Science Foundation; National Institute of Health; Association of Environmental and Resource Economists Annual Conference Proposal Review Committee; BRIDGE Collaborative; Cambridge Conservation Initiative; Center for International Forestry Research; David H. Smith Conservation Research Fellowship; Ecosystem Services for Poverty Alleviation Fellow Program; Edward Elgar Publishing House; Global Environment Facility; U.S. Environmental Protection Agency, Office of Program Evaluation; Food and Agriculture Organization; Georgia Tech Water Resources Institute; United Nations Environment Programme; Blackwell Publishing; Island Press; Oxford University Press; Palgrave MacMillan Press; Routledge Press; Economy and Environment Program for Southeast Asia; Social Sciences and Humanities Research Council of Canada; Millennium Ecosystem Assessment; United States Department of Agriculture; Conservation International; Echoing Green Foundation; Land and Water Australia; Latin American and Caribbean Environmental Economics Program; Le Fonds Français pour l'Environnement Mondial; South Asian Network for Development and Environmental Economics; World Wildlife Fund Kathryn Fuller Science for Nature Fund Fellowship Program; University of Wyoming Agricultural Experiment Station; International Initiative for Impact Evaluation (3ie; referee and external advisor); *Agricultural and Resource Economics Review*; *Agroforestry Systems*; *American Economic Journal: Applied*; *American Economic Journal: Economic Policy*; *American Economic Review*; *American Journal of Agricultural Economics*; *Behavioral Science & Policy*; *Biodiversity and Conservation*; *Biological Conservation*; *Bioscience*; *Conservation Biology*; *Conservation Letters*; *Conservation Science & Practice*; *Ecological Economics*; *Ecology Letters*; *Ecology and Society*; *Economic Journal*; *Economic Inquiry*; *Economics Bulletin*; *Energy Policy*; *Environment and Development Economics*; *Environmental and Resource Economics*; *Environmental Conservation*; *Environmental Economics and Policy Studies*; *Environmental Evidence*; *Environmental Management*; *Environmental Research Letters*; *European Review of Agricultural Economics*; *Experimental Economics*; *Forest Policy and Economics*; *Forest Science*; *Frontiers in Ecology and the Environment*; *The Geographical Journal*; *Global Environmental Change*; *International Review of Environmental and Resource Economics*; *IEEE Transactions on Computers*; *Journal of the Association of Environmental and Resource Economists*; *Journal of Cultural Economics*; *Journal of Economic Behavior and Organization*; *Journal of Economic Psychology*; *Journal of Environment*; *Journal of Environmental Management*; *Journal of Environmental Economics and Management*; *Journal of Forestry Economics*; *Journal of Policy Analysis and Management*; *Journal of Public Economics*; *Journal of Soil and Water Conservation*; *Journal of Wildlife Management*; *Land Economics*; *Land Use Policy*; *Management Science*; *Nature*; *Nature Communications*; *Nature Energy*; *Nature Sustainability*; *Natural Resource Modeling*; *Oxford Encyclopedia of Environmental Economics*; *Oryx - The International Journal of Conservation*; *PLoS*

*Biology; PLoS One; Proceedings of the National Academy of Sciences; Public Finance Review; Resource and Energy Economics; Review of Agricultural Economics; The Review of Economics and Statistics; Review of Environmental Economics and Policy; Science Advances; Science; Social Science Quarterly; Society and Natural Resources; Southern Economic Journal; Water Economics and Policy; Water Resources Research; World Development.*

### **MEMBERSHIP IN PROFESSIONAL ASSOCIATIONS**

Association of Public Policy Analysis and Management; American Agricultural & Applied Economics Association; American Association for the Advancement of Science; American Economic Association; Association of Environmental and Resource Economists; Behavioral Science and Policy Association; Ecological Society of America; Economic Science Association; European Association of Environmental and Resource Economists; INFORMS; Society for Conservation Biology; Society for Open, Reliable, and Transparent Ecology and Evolutionary Biology; Soil & Water Conservation Society; Southern Economic Association.

### **LANGUAGES AND INTERNATIONAL WORK EXPERIENCE**

Intelligible (but not pretty) French, Malagasy and Spanish. Worked in: Australia, Costa Rica, Ecuador, Madagascar, Mexico, Tanzania, Ukraine, United States, Zaïre (Congo), Zambia.

### **MEDIA**

Interviewed by or research profiled by National Public Radio (2002, 2007, 2011), PRI-BBC *The World*, *The New York Times* (2006, 2007, 2017), *Los Angeles Times*, *Bloomberg View*, *Bloomberg News*, *Bloomberg Radio*, *New York Times Magazine*, *Nature* (2002, 2009, 2010), *The Guardian* (2018, 2020, 2022), *Science*, *New Scientist* (2005, 2007, 2020), *The Economist*, *Newsweek*, *Politico*, *Scientific American*, *CBS Moneywatch*, *Science News* (2010, 2020), *Thomson Reuters*, *Eos Magazine*, *Inside Climate News*, *VICE*, *Huffington Post*, *Anything But Dismal* video series, *Atlanta Journal Constitution*, *PLoS Biology*, *Newsday*, *Sydney Morning Herald*, *CJAD 800-Montreal*, *SciDev.net* (2002, 2010, 2014, 2015), *Science Newsline*, *Johns Hopkins Health Review*, *Anthropocene Magazine*, *Le Devoir*, *Conservation*, *Circle of Blue*, *World Conservation Magazine*, *Mother Jones*, *Ethical Corporation*, *Ecosystem Marketplace*, *Houston Daily Journal*, 南方周末 (*Southern Weekly*), *KCBS News Radio* (San Francisco), *Revista Galileu*, *Gadget*, *Greenbiz*, *Greenwire news*, *Inside Higher Ed*, *The Australian Broadcasting Corporation*, *de Volkskrant* (Dutch newspaper), *Vista Verde News – Natur & Tiere*, *International Ecotourism Monthly*, *Environmental Research Web* (2008, 2010), *Mongabay* (2014, 2017), *Nature World News*, *Science20*, *Science Newsline*, *RedOrbit*, *Georgia State Magazine* (2003, 2006, 2009), *Nachrichten aus der Wissenschaft – Aktuelles aus Forschung und Technik*, *Sustainable Development Update*, *The Signal*, *Tangents*, *WRES* (Boston), *WRAS* (Atlanta), *Technology.org* and *Radioline*.

### **LOCAL COMMUNITY**

Decatur Education Foundation/City of Decatur Schools Volunteer of the Year Award, 2011; Phoenix School Volunteer of the Year Award, 2007; Member and Chair, Charter System

5.22 *Ferraro*

School Leadership Team (Winnona Park Elementary School; Renfore Middle School), 2008-2012, 2014-2015.