Jay P. Shimshack

Frank Batten School of Leadership and Public Policy 235 McCormick Road, Garrett Hall University of Virginia Charlottesville, VA 22904-4493 Office: 434.243.7318 Fax: 434.243.2318 jay.shimshack@virginia.edu www.jayshimshack.com

FIELDS

Fields: Regulation, Environmental Economics, Corporate Social Behavior, Applied Microeconomics

Specializations: Compliance; Law and Economics of Environmental Monitoring and Enforcement; Choice of Environmental Policy Instruments; Economics of Corporate Social Responsibility; Information and Advisories; Benefits and Costs of Environmental and Health Policy.

EMPLOYMENT

University of Virginia. Associate Professor of Public Policy & Economics Frank Batten School of Leadership and Public Policy.	2014 – present
Tulane University. Associate & Assistant Professor of Economics. Department of Economics.	2008 - 2014
Tufts University. Assistant Professor of Economics. Department of Economics.	2002 - 2008

OTHER PROFESSIONAL APPOINTMENTS

Editori	al Council, J. of the Association of Environmental & Resource Economics.	2014 - present		
Co-edi	tor, Journal of Environmental Economics and Management.	2014 - 2017		
Editori	al Council, Journal of Environmental Economics and Management.	2009 - 2013		
Directo	or of Graduate Studies, Tulane University Department of Economics.	2012 - 2014		
-	m Director, Program for Responsible Regulation, Center for Public Policy lane Murphy Institute	2011 - 2014		
	g Professor of Business Econ. & Public Policy, University of Michigan. b Institute for Sustainable Enterprise, Ross School of Business.	2009 - 2010		
Visitin	g Academic Researcher. UC Santa Barbara. Donald Bren School.	2004 - 2005		
EDUCATION				
Ph.D.	University of California, Berkeley Agricultural and Resource Economics	2002		
M.S.	University of California, Berkeley Agricultural and Resource Economics	2000		
B.S.	Cornell University, College of Agricultural and Life Sciences Business Marketing and Management	1995		

JOURNAL ARTICLES & CHAPTERS IN BOOKS

- "Enforcement spillovers: Lessons from strategic interactions in regulation and product markets," w/ M. Evans and S. Gilpatric. *Journal of Law and Economics (JLE)*. Forthcoming, accepted 2018.
- "Disaster preparedness and disaster response: Evidence from sales of emergency supplies before and after hurricanes," w/ T. Beatty and R. Volpe. *Journal of the Association of Environmental and Resource Economics (JAERE)*. Forthcoming, accepted 2018.
- "Monitoring, Enforcement and the Choice of Environmental Policy Instruments," w/ M. Cohen. Forthcoming, in <u>Policy Instruments in Environmental Law</u>, Edward Elgar (Ken Richards and Josephine van Zeben, eds. Edward Elgar, forthcoming 2018).
- "Quantitatively measuring deterrence: empirical tools for assessing the impact of environmental monitoring and enforcement actions." in <u>Compliance and Enforcement of Environmental Law</u> (Paddock, Markell, Bryner, eds). Edward Elgar. (May 2017): Chapter 17.
- "Valuing Marine Diversity in the Gulf of Mexico: Evidence from the Proposed Boundary Expansion of the Flower Garden Banks National Marine Sanctuary," w/ S. Stefanski. *Marine Resource Economics (MRE).* 31(2) (2016): 211-232.
- "Environmental Disclosure: Evidence from Newsweek's Green Companies Ranking," w/ T. Lyon. *Business and Society (BAS).* 54(5) (2015): 632-675.
- "The Economics of Environmental Monitoring and Enforcement: A Review," Annual Review of Resource Economics (ARRE). 6 (2014): 339–60.
- "Information Disclosure," in <u>Environmental and Natural Resource Economics</u> J Whitehead and T Haab, editors. Greenwood Publishers. ABC-CLIO. (March 2014).
- "Air Pollution and Children's Health: a Cohort Analysis," w/ Timothy Beatty. *Journal of Environmental Economics and Management* (JEEM). 7(1) (2014): 39-57.
- "Information Programs." in <u>Encyclopedia of Energy</u>, <u>Natural Resource</u>, and <u>Environmental</u> <u>Economics</u>. J Shogren, editor. Elsevier. 3 (April 2013): 169-173.
- "Economic Perspectives on Corporate Social Responsibility," w/ Markus Kitzmueller. Journal of Economic Literature (JEL). 50(1) (March 2012): 51-84. REPRINTED in Economics of Corporate Social Responsibility, ed. McWilliams. Edward Elgar. January 2015.
- "Absolute Humidity, Temperature, and Influenza Mortality: 30 Years of County-Level Evidence from the United States," w/ Alan Barreca. *American Journal of Epidemiology*. 176 (2012): S114-S122.
- "School Buses, Diesel Emissions, and Respiratory Health," w/ Timothy Beatty. *Journal of Health Economics (JHE)* 30(5) (2011): 987-999.
- "The Effectiveness of Environmental Monitoring and Enforcement: A Review of the Empirical Evidence," w/W, Gray. *Review of Environmental Econ. and Policy (REEP)*. 5(1) (2011): 3-24. REPRINTED in Enforcement of Environmental Law, edited by Ludwig Krämer. The International Library of Law and the Environment, Edward Elgar, 2016.
- "Mercury Advisories and Household Health Trade-offs," w/ M.B. Ward. *Journal of Health Economics (JHE)* 29(5) (2010): 674-685.
- "The Impact of Climate Change Information: New Evidence from the Stock Market," w/ Timothy Beatty. *B.E. Journals of Economic Analysis and Policy* (*Contributions*). 10:1 (2010): Art. 105.

- "Public & Private Enforcement: Substitutes or Complements?" w/ C. Langpap." *Journal of Environmental Economics and Management (JEEM)* 59(3) (2010): 235-249.
- "Mandatory Information Disclosure in the Electricity Industry," w/ M. Delmas and M. Montes. *Economic Inquiry (ECIN)* 48(2) (2010): 483-498.
- "Enforcement and Over-compliance," with M.B. Ward. *Journal of Environmental Economics and Management (JEEM)* 55(1) (2008): 90-105. REPRINTED in <u>Corporate Sustainability</u>, eds. Diermeier, Lyon, and Dowell. Sage, London, England. 2014.
- "Curbside Recycling in the Presence of Alternatives." with T.K.M. Beatty and P. Berck. *Economic Inquiry (ECIN)* 45(4) (2007): 739-755.
- "Mercury Advisories: Information, Education, and Fish Consumption" with M.B. Ward and T.K.M. Beatty. *Journal of Environmental Economics and Management* (JEEM) 53(2) (2007): 158-179.
- "Regulator Reputation, Enforcement, and Environmental Compliance" with M.B. Ward. Journal of Environmental Economics and Management (JEEM) 50(3) (2005):519-540. REPRINTED in Making Law Work: Environmental Compliance & Sustainable Development, eds. Zaelke, Kaniaru, and Kružíková. Cameron May, London, England. Ch. 4. 2005.
- "The Effects of the Private-Label Invasion in Food Industries," with M.B. Ward, J. M. Perloff, and J.M. Harris. *American Journal of Agricultural Economics (AJAE)* 84(4) (2002): 961-973.

PUBLISHED (SHORT) BOOKS

"Environmental Enforcement and Compliance: Lessons from Pollution, Safety, and Tax Settings," w/James Alm. Published as a short BOOK in the *Foundations and Trends in*

Microeconomics series, Boston: Now Publishers Inc. (2014). Published as an article in the *Foundations and Trends in Microeconomics* Journal. 10 (2014): 209-274. REPRINTED in Environmental Taxation and the Law (Janet Milne, editor). Edward Elgar. September 2017.

PAPERS IN PROGRESS

- "Costly sanctions and the treatment of frequent violators in regulatory settings," w/ M. B. Ward.
- "Industrial facilities and cancer clusters in China: A village-level analysis," w/X. Zhang and H. Yin.
- "Environmental justice in developing countries: Nationwide evidence from toxic water pollution in Mexico." w/ L. Chakraborti.
- "Does Mandatory Labeling of Outfall Points influence Pollution and Compliance? Evidence from a natural experiment in Ohio," w/ X. Liu.
- "Air pollution, infant morbidity, and infant mortality: Evidence from 15 years of births and deaths in Hong Kong" w/ D. Lin and S. Liu.
- "The Public Resource Management Game," w/ J. LaFrance and M. Watts.
- "Citizen Complaints, Regulator Behavior, and Air Pollution: Evidence from Texas," W/M. Evans.

"The Accuracy of Self-Reported Pollution Data," w/ L. Chakraborti.

"ESG Metrics: Linking Environmental Metrics and Financial Performance?"

PUBLISHED CONGRESSIONAL TESTIMONY & GOVERNMENT REPORTS

- "The Performance of Clean Water Act Monitoring and Enforcement," *Testimony before the U.S. House of Representatives Committee on Transportation and Infrastructure*. Oct. 15, 2009.
- "Pilot Comparative Analysis of Monitoring and Enforcement Impact Measures" *State-of-Science White Paper Prepared for the Environmental Protection Agency's Office of Enforcement and Compliance Assurance*. 40pp. June 2009.
- "Monitoring, Enforcement, and Environmental Compliance: A User's Guide," with Wayne Gray. State-of-Science White Paper Prepared for the Environmental Protection Agency's Office of Enforcement and Compliance Assurance. 39pp. Public version: 18pp. January 2009.
- "Monitoring, Enforcement, and Environmental Compliance: A Multiple Sector Analysis," *State-of-Science White Paper Prepared for the Environmental Protection Agency's Office of Enforcement and Compliance Assurance*. 60pp. September 2008.
- "Monitoring, Enforcement, and Environmental Compliance: Metrics and Model Calibration," *State*of-Science White Paper Prepared for the Environmental Protection Agency's Office of Enforcement and Compliance Assurance. 24pp. July 2008.
- "Monitoring, Enforcement, and Environmental Compliance: Understanding Specific and General Deterrence," *State-of-Science White Paper Prepared for the EPA's Office of Research and Development and Office of Enforcement and Compliance Assurance*. 47 pp. Oct. 2007.

POLICY COMMENTARIES & OUTREACH

- "Informing the Controversy over Clean Water Act Enforcement." UVa Global Water Initiative Blog (July 13, 2018). Online: <u>https://blogs.darden.virginia.edu/globalwater/2018/07/03/informing-the-</u> <u>controversy-over-clean-water-act-enforcement/</u>
- "Do investors care about green ratings?" w/ Lyon. Alliance for Research on Corporate Sustainability (Oct 25, 2014). Online: <u>http://corporate-sustainability.org/do investors care about green ratings/</u>
- "Environmental Monitoring and Enforcement in the United States: Empirical Evidence from the Economics Literature," with W. Gray. *Int'l Network for Enviro. Compliance and Enforcement* (2011). Online: <u>http://www.inece.org/conference/9/papers/GrayShimshack_US_FINAL.pdf</u>
- "Compliance and Deterrence in Environmental and Natural Resource Contexts," *Remarks before the NOAA National Enforcement Summit* (August 3, 2010). Online: <u>http://noaaenforcementsummit2010.ecr.gov/pdf/JayShimshackRemarks.pdf</u>.
- "Improving Clean Water Act Enforcement," *Resources for the Future (RFF) Weekly Policy Commentary* (Jan. 8, 2010). Online: <u>http://www.rff.org/Publications/WPC/Pages/Improving-Clean-Water-Act-Enforcement.aspx</u>.
- "Mercury Advisories for Commercial Fish," *RFF Weekly Policy Commentary* (May 5, 2008). Online: http://www.rff.org/Publications/WPC/Pages/08_05_05_Mercury_Fish_Shimshack.aspx. Reprinted in http://www.rff.org/Publications/WPC/Pages/08_05_05_Mercury_Fish_Shimshack.aspx. Reprinted in http://www.rff.org/Publications/WPC/Pages/08_05_05_Mercury_Fish_Shimshack.aspx. Reprinted in https://www.rff.org/Publications/WPC/Pages/08_05_05_Mercury_Fish_Shimshack.aspx. Reprinted in https://www.rff.org/Publications/WPC/Pages/08_05_05_Mercury_Fish_Shimshack.aspx. Reprinted in https://www.rff.org/Publications/WPC/Pages/08_05_05_05_05 Mercury_Fish_Shimshack.aspx. Reprinted in https://www.rff.org/Publications/WPC/Pages/08_05_05_05 Mercury_Fish_Shimshack.aspx. Reprinted in https://www.rff.org/Publications/WPC/Pages/08_05 Mercury_Fish_Shimshack.aspx. Washington, and Public Health Policy, eds. Parry and Day. Resources for the Future, Washington, DC, USA. Ch. 91, pgs. 192-193. 2010.
- "Price, Promotion, and Differentiation Effects of the Private-Label Invasion," with Michael B. Ward, Jeffrey M. Perloff, and J. Michael Harris. <u>Ag. and Res. Economics Update</u>. (5:6) July/Aug 2002.

PUBLISHED TEACHING (CASE) MATERIALS

"The Economics of Corporate Social Responsibility." w/ P. Debaere. *Technical Business Case*. Darden Business Publishing. Ref No. UVA-GEM-0143. (10 August 2016): 7 pages.

PUBLISHED BOOK REVIEWS

"Review of <u>Full Disclosure: The Perils and Promise of Transparency</u> by Fung et al.," *Political Science Quarterly* 122(4) (Winter 2008): 705-706.

GRANTS & CONTRACTS

- UVa Environmental Resilience Institute, Interdisciplinary Co-Lab Grant Program. "Surface Water Quality in the United States: Data, Methods, and Causes." Co-PI. 2019.
- UVa Environmental Resilience Institute, Rapid Response Grant Program. "Natural Disasters and Price Gouging: Evidence from Gasoline Sales before and after US Hurricanes." PI. 2018.
- US Department of Agriculture (USDA) Agriculture and Food Research Initiative (AFRI) Grant. "Quantitatively evaluating food safety monitoring and enforcement tools." Co-PI. 2018-2021.
- UVa Bankard Fund for Political Economy. "Does mandatory labeling of outfall points influence pollution and compliance?" PI. 2017-2018.
- UBS Asset Management (Americas), Inc. Environmental, Social, Governance Research. PI. 2016.
- UVa Bankard Fund for Political Economy. "The Effectiveness of Pollution Self-Reporting as Regulatory Policy: Evidence from the Clean Water Act." PI. 2015.
- Tulane Murphy Institute Seed Grant. "Enforcement and Environmental Compliance," PI. 2010.
- Tulane University COR Summer Research Award, "Recidivism, Enforcement, and Environmental Compliance," PI. 2009.
- Tulane Public Service Planning Grant, "Economics Public Service Planning," Co-PI. 2009.
- US Environmental Protection Agency (USEPA), Office of Research and Development, "Pilot Comparative Analysis of Monitoring and Enforcement Impact Measures," PI. 2008-2009.
- US Environmental Protection Agency (USEPA), Office of Research, "Measurement of General and Specific Deterrent Impacts of Compliance Monitoring and Enforcement," PI. 2008.
- US Environmental Protection Agency (USEPA), Office of Research and Development, "Compliance and Deterrence Research," PI. 2007.
- *Tufts University Summer Faculty Research Award*, "Mandatory Information Disclosure in the Electric Utility Industry," PI. 2007.
- Tufts University Faculty Research Award, "The Economics of Seafood Advisories," PI. 2005.
- National Institutes of Health (NIH): Graduate Training Grant. "Water and Health Training," Participant (Paul Kirshen and Beatrice Rogers, co-PIs), Participant. 2004.
- National Institutes of Health (NIH): Health, Environment and Economic Development. "The Quito Integrated Environment and Policy (QUIEP) Study", Participant (Jeffrey Griffiths, PI), 2003.

HONORS, AWARDS, ETC.

- Scientific Advisory Board, COMPLIANCE Project. The Economics of Climate Policy Compliance: Monitoring, Reporting, Verification & Enforcement. 2018-2020.
- *Leadership in Academic Matters, Faculty Development Program.* Selective professional development program supporting "those who have demonstrated leadership characteristics" at UVa. Fall 2017.
- Keynote Address, Latin American Environmental and Energy Economics workshop. September 25-26, 2015. Aguascalientes, Mexico.
- *Batten Excellence in Teaching Award*, Frank Batten School of Leadership and Public Policy, UVA. Awarded to one member of the school for outstanding contributions to teaching. Awarded 2015.
- *Lawrence Schloss Economics Prize*, Tulane University. Awarded to one member of the university community for outstanding contributions to economics (research). Awarded 2010.
- *Best Economics Paper*, American Agricultural Economics Association, Food Safety and Nutrition. "Mercury Advisories: Information, Education, & Fish Consumption." Awarded 2008.
- Undergraduate Initiative in Teaching (UNITE) Award, Tufts University. Awarded to one full-time junior faculty member in the College of A&S for superior teaching and advising. Awarded 2007.
- *Junior Faculty Research Fellowship*, Mellon Foundation and Tufts University. "Public Policy, Economic Incentives, and the Environment." Awarded Spring 2005.

National Merit Scholar, Cornell University. Awarded 1991-1995.

INTERNATIONAL SHORT COURSES / LECTURE SERIES

- *BHP Billiton Visiting Professorship.* "Conducting and Publishing Applied Economics Research," Sept 29 Oct 6, 2017. University of Western Australia. Perth, Australia.
- Shanghai Jiao Tong, Antai College of Econ and Management, Graduate Summer Forum in Economics, "Conducting and Publishing Applied Economics Research," July 3-7, 2017. Shanghai, China.
- Uruguay National Agency for Research and Innovation, Linkages to Distinguished International Researchers Program, "The economics of environmental monitoring and enforcement: Results, challenges, and policy lessons." October 17-19, 2016. Montevideo, Uruguay.
- Shanghai Jiao Tong, Antai College of Economics and Management, Graduate Summer Forum in Economics, "Frontiers in Environmental Economics and Policy," July 3-4, 2014. Shanghai, China.

SELECTED MEDIA CITATIONS

Atlantic, AOL News, Boston Globe, Futurity, Huffington Post, Le Monde, NPR, New York Times (Economix), Newsweek, Seafood Source, Seattle Times, Slate, UVA Today, Vox, Washington Post

SELECTED POLICY ENGAGEMENT: RESEARCH DISSEMINATION

Memorandum of Understanding, US Environmental Protection Agency and UVa2015-presentMemorandum of Understanding, USDA Food Safety Information Service and UVa2016-present

SELECTED POLICY ENGAGEMENT: PANELS AND PRESENTATIONS

UVA Bicentennial Sustainability Leadership Summit. October 29, 2018. "Interdisciplinary

Sustainability Research."

- UVa Wahoos for Sustainability. Earth Week lunches. April 21, 2018. Charlottesville, VA. Short research overview.
- US FDA "Quantitatively evaluating monitoring and enforcement activities at federal agencies." January 9, 2018. White Oak, Md. FDA Policy briefing.
- *UVa Law School.* "Discrimination of Natural Disasters." October 30, 2017. Charlottesville, VA. Panel Discussion.
- US EPA and Environmental Council of the States (ECOS), "Reporting and Transparency as Compliance Tools," October 24, 2017. EPA/ECOS Sponsored Webinar.
- USDA Food Safety and Inspection Service, "Quantitatively Evaluating FSIS Monitoring and Enforcement Tools." September 20, 2017. Washington, DC.
- University of Michigan. Social Movements and Private Environmental Governance. "Information Disclosure Programs." May 4-6, 2017. Ann Arbor, MI.
- *Harvard Law School.* Animal Welfare Act at 50 conference. Panel Moderator. "Animal Welfare Act Enforcement." December 2, 2016. Cambridge, MA.
- US EPA and OHIO EPA "Does Mandatory Labeling of Outfall Points influence Pollution and Compliance? Evidence from Ohio," January 14, 2016. EPA Sponsored Webinar.
- US EPA, "The Accuracy of Self-Reported Pollution Data: Evidence from the Clean Water Act," October 29, 2015. Washington, DC.
- US EPA, "Does Mandatory Labeling of Outfall Points influence Pollution and Compliance?" October 28, 2015. Washington, DC.
- University of Virginia Datapalooza. Research Overview. September 18, 2015. Charlottesville, VA.
- Harvard Business School and Univ of Maryland, Research on Effective Government: Inspection and Compliance Workshop, "Effective Enforcement." June 1, 2015. Washington, DC.
- US FDA, Risk Communication Advisory Committee, "Risk Communication for Fish Consumption," November 3, 2014. Washington, DC.
- USDA Economic Research Service, AAEA, Economic Analysis and Food Safety: The Food Safety Modernization Act, "Monitoring and Enforcement: Lessons from Environmental, Health, Safety, and Tax Compliance." Aug. 7, 2013. Washington, DC.
- *Murphy Institute*, Reflections on Responsible Regulation Conference, "Reflections on Responsible Regulation." March 1, 2013. New Orleans, LA.
- University of Heidelberg, German Federal Ministry of Education and Research, Infinum Workshop on Regulation by Environmental Information, "Environmental Information Disclosure," February 8-9, 2013. Heidelberg, Germany.
- US EPA, GW Law, Berkeley Law, Berkeley Goldman School, Environmental Law Institute, Next Generation Environmental Compliance Workshop, "The Accuracy of Self-Reported Pollution Data," December 11-12, 2012. Washington, DC.
- US EPA and Resources for the Future, Greenhouse Gas Reporting Program Workshop, Working

Group Participant. October 12, 2012. Washington, DC.

- US EPA, National Center for Environmental Research, Information Disclosure Workshop, "Economic Perspectives on Environmental Information Disclosure," January 18, 2011. Washington, DC.
- *NOAA*, National Enforcement Summit, "Compliance and Deterrence in Environmental and Natural Resource Contexts," August 3, 2010. Washington, DC.
- US House of Representatives, Committee on Transportation and Infrastructure. "The Performance of Clean Water Act Monitoring and Enforcement," Oct. 15, 2009. Washington, DC.
- *The National Press Club*, "Corporate Transparency and Accountability: The Role of Information Disclosure," Feb 6, 2009. Washington, DC.
- US EPA, Office of Enforcement and Compliance Assurance, "Monitoring, Enforcement, and Environ. Compliance: Metrics and Model Calibration," October 23-24, 2008. Washington, DC.
- Australian Agricultural and Resource Economics Society, "School Buses, Diesel Emissions, and Respiratory Health." June 19, 2008. Canberra, ACT, Australia.
- *National Environmental Partnership Summit*, "Practical Measures and Models: Environmental Behavior and Results," May 21, 2008. Baltimore, MD.
- US EPA, Office of Enforcement and Compliance Assurance, "Monitoring, Enforcement, & Environmental Compliance: the State of Science," Dec 18-19, 2007. Washington, DC.
- Harvard Mossavar-Rahmani Center for Business & Government. "Information Provision in the Electric Utility Industry," October 19, 2006. Cambridge, MA.
- Yale School of Forestry Center for Business & Environment. "Information Provision in Environmental Policy: An Economist's Perspective" Sept. 27, 2006. New Haven, CT.
- American Agricultural Economics Association Symposium. "What Do We Know About Seafood Advisories?" July 25, 2005. Providence, RI.
- National Academies of Science Institute of Medicine (IOM), "The Economics of Seafood Advisories" April 11, 2005. Washington, DC.

SELECTED RESEARCH CONFERENCE PRESENTATIONS

- Association of Environmental and Resource Economists: Sessions at the American Economic Association (AEA) Annual Meetings. Research Presentations. 2018 (Philadelphia); 2017 (Chicago); 2015 (Boston); 2012 (Chicago); 2010 (Atlanta); 2008 (New Orleans); 2007 (Chicago).
- Association for Public Policy Analysis and Management (APPAM) Fall Research Conference. Research presentation. 2017 (Chicago); 2016 (Washington DC); 2015 (Miami);
- Southern Economic Association (SEA) Annual Meetings. Research Presentation. 2016 (Washington, DC); 2015 (New Orleans); 2012 (New Orleans); 2004 (New Orleans).
- *Canadian Resource and Environmental Economics (CREE) Annual Conference*. Research Presentation. October 1-2, 2016. Banff, Alberta, Canada.
- *European Association of Environmental and Resource Economists (EAERE) Annual Meeting.* Research Presentation. June 22-25, 2016. Zurich, Switzerland.

- Association of Environmental and Resource Economists (AERE) Annual Meeting. Research Presentation. 2016 (Breckenridge); 2015 (San Diego); 2013 (Banff); 2012 (Asheville); 2011 (Seattle); 2008 (Health and Env Workshop, Berkeley).
- Heartland Environmental and Resource Economics Workshop. Research Presentation. 2013 (Urbana), 2009 (Urbana).
- National Bureau of Economic Research (NBER) Summer Institute or Spring Meetings. Research Presentation or Short Presentation. 2013 (Cambridge); 2007 2005, 2004, 2003.
- *Informing Green Markets Conference*. Research Presentation. Ross School of Business. June 2-4, 2011. Ann Arbor, MI.
- International Workshop on the Law and Economics of Environmental Sanctioning. Research Presentation. September 21-22, 2010. Leuven, Belgium.
- World Congress of Environmental and Resource Economists. Research Presentation. 2010 (Montreal). 2006 (Kyoto); 2002 (Monterey).
- Alliance for Research on Corporate Sustainability: Workshop on Corporate Sustainability Data. Workshop Participant. January 7, 2010. Washington, DC.
- Association of Environmental and Resource Economists: Sessions at the American Agricultural Economics Assoc. Annual Meetings. 2009 (Milwaukee); 2006 (Long Beach); 2005 (Providence).
- *American Marketing Association: Marketing and Public Policy Conference.* Research Presentation. May 28-30, 2009. Washington, DC.
- Society for Risk Analysis: Annual Meeting. Research Presentation. December 7-10, 2008. Boston, MA.
- University of Colorado Environmental and Resource Economics Workshop. Research Presentation. September 19-20, 2008 (Vail), 2007 (Vail).
- Occasional California Workshop on Environmental Economics. Research Presentation. Santa Barbara 2006, 2005, 2003, 2001.
- Western Economics Association Meetings. Research Presentation. July 5-8, 2005. San Francisco, CA.
- Northeast Agricultural & Resource Economics Association Conference. Research Presentation. June 20-23, 2004. Halifax, Nova Scotia.

INVITED RESEARCH SEMINARS

SELECTED EARLIER RESEARCH SEMINARS (many multiple visits)

Columbia University, CIDE Mexico City, Duke University / NC State University / RTI, Georgia State University, Harvard University, Hong Kong U of Science and Technology, Indiana University, Iowa State University, Johns Hopkins University, Louisiana State University, Mississippi State University, Northern Illinois U, Rand Corporation, Occidental College, Oregon State University, Resources for the Future, Tulane University, Tufts University, U of British Columbia, UC Berkeley, UC Davis, UC Energy Institute, UC San Diego, UC Santa Barbara, U of Calgary, U of Chicago, U of Connecticut, U of Guelph, U of Maryland, U of Massachusetts, U of Michigan, U of Minnesota, U of Montevideo, U of North Dakota, U of Virginia, U of Washington, U Western Australia, U Western Ontario, USDA Economics Research Service, USEPA National Center for Environmental Economics, USFTC Bureau of Economics, Vanderbilt University, Wellesley College, Williams College, Yale University

SELECTED PROFESSIONAL SERVICE

Blog co-editor, "Global Water Blog," UVa Global Water Initiative. 2018 - present.

- Ad hoc Manuscript Reviewer (many multiples): Agricultural and Resource Econ Review (ARER), American Economic Journal: Policy (AEJ-P), American Econ Review (AER), American Journal of Agricultural Econ (AJAE), B.E. Journals in Econ Analysis and Policy (BEJEAP), Business and Society (BAS), Canadian Journal of Agricultural Econ (CJAE), Contemporary Econ Policy (COEP), Ecological Econ (ECOLEC), Economic Inquiry (ECIN), Energy Policy (JEPO), Environment and Resource Economics (ERE), Environmental Management, Environmental Sciences, International Review of Law and Econ (IRLE), Journal of the Association of Env & Res Econ (JAERE), Journal of Econ Behavior and Organization (JEBO), Journal of Econ and Management Strategy (JEMS), Journal of Empirical Legal Studies (JELS), Journal of Environmental Econ and Management (JEEM), Journal of Environmental Management (JEM), Journal of Health Economics (JHE), Journal of Human Resources (JHR), Journal of Law and Econ (JLE), Journal of Law Econ and Org (JELO), Journal of Legal Studies (JLS), Journal of Management Studies (JMS), Journal of Policy Analysis and Management (JPAM), Journal of Political Econ (JPE), Journal of Public Econ (JPUBE), Journal of Wine Econ, Land Econ, Organization and the Environment, Regional Studies (CRES), Regulation and Governance, Resource & Energy Econ (REE), Review of Environmental Econ and Policy (REEP), SCIENCE, Southern Economic Journal (SEJ), American Agricultural Economics Association (AAEA), American Marketing Association (AMA), Assoc. of Environmental and Resource Economists (AERE), European Association of Environmental and Resource Economists (EAERE), World Congress of Environmental and Resource Economists, McGraw-Hill, W.W. Norton & Company.
- Ad hoc Proposal Reviewer: MA Fisheries Recovery Commission, National Oceanic and Atmospheric Administration (NOAA), National Science Foundation (NSF), Sea Grant, Sloan Foundation, USEPA National Center for Environmental Economics (NCEE), USEPA National Priorities.

SELECTED UNIVERSITY SERVICE

INA Detter School Equilty Deconsciption of Committees (5) Chain	2015 10
UVA Batten School, Faculty Reappointments Committees (5), Chair	2015-19
UVA, Univ. Committee on Sustainability (Teaching/Research Subcommittee)	2016-19
UVA, Dean's reappointment committee	2017-18
UVA, Bankard Fund Review Committee (2 years)	2017-18
UVA Batten School, Ad Hoc Promotion & Tenure Committees (4)	2015-18
UVA Batten School, Executive Committee, Elected Member	2016-17
UVA Batten School, Tenured Appointments Search Committee (3)	2015-16
UVA Batten School, Health Economics Search Committee. Member	2015-16
UVA, Univ. Committee on Sustainability, Teaching and Research Subcommittee Member	2015-16
UVA, Univ. President's Ad Hoc Group on University Climate and Culture,	2015-16
Working Group on Prevention of Sexual Violence, Member & Subcommittee Chair	
UVA Batten School, Teaching Innovator Personnel Search Committee, Chair	2014-15
UVA Batten School, Core Lecturer Personnel Search Committee, Chair	2014-15
Tulane Law School and Tulane Murphy Institute, Appointments Committee	2013-14
Tulane Economics, Director of Graduate Studies	2012-14
Tulane Law School, Payson Center Steering Committee	2012-14
Tulane School of Liberal Arts, Environmental Studies Committee	2010-14
Tulane Economics, Awards Committee	2009-13
Tulane University, Task Force for Environmental Research	2011-12
Tulane Economics, Search Committee	2010-11
Tulane School of Liberal Arts, Strategic Planning Committee	2008-09
Tulane Economics, Seminar Coordinator	2008-09
Tufts Interdisciplinary Water (WSSS) Graduate Program, Steering Committee	2006-08
Tufts Environmental Studies, Executive Committee	2005-08

COURSES SUMMARY

- Economics of Public Policy II; University of Virginia Frank Batten School. 10 sections 2015-19. Median Overall Instructor Rating: 5.0/5.0; Mean Overall Instructor Rating: 4.7/5.0.
- Tri-Sector Leadership Program; University of Virginia Darden, Law, and Batten. Fall 2017. No Evaluations.
- Benefit-Cost Analysis; University of Virginia Frank Batten School. 3 sections Spring 2016-2018. Median Overall Instructor Rating: 5.0/5.0; Mean Overall Instructor Rating: 4.6/5.0.
- PhD Research Methods; Tulane University; Spring 2014. Median Overall Instructor Rating: 5.0/5.0; Mean Overall Instructor Rating: 4.8/5.0
- Environmental and Natural Resource Economics; Tulane University; 8 semesters 2010-14. Median Overall Instructor Rating: 5.0/5.0; Mean Overall Instructor Rating: 4.9/5.0
- Public Service Learning; Tulane University; Problem-Based Service Learning for Enviro. Econ. Fall 2010; Spring 2011; Fall 2011; Spring 2012; Fall 2012; Spring 2013. No Evaluations.
- Introduction to Microeconomics; Tulane University; Fall 2011 (2 sections). Median Overall Instructor Rating: 5.0/5.0; Mean Overall Instructor Rating: 4.7/5.0
- The (Law and) Economics of Compliance and Enforcement; Tulane University; Spring 2011. Median Overall Instructor Rating: 5.0/5.0; Mean Overall Instructor Rating: 4.7/5.0
- Topics in Environmental Economics; Tulane University; 3 semesters 2009 2013. Median Overall Instructor Rating: 5.0/5.0; Mean Overall Instructor Rating: 4.9/5.0
- The Environment and Public Policy; Tulane University; Fall 2008. Median Overall Instructor Rating: 5.0/5.0; Mean Overall Instructor Rating: 5.0/5.0
- Economic Statistics; Tulane University; Fall 2008. Median Overall Instructor Rating: 5.0/5.0; Mean Overall Instructor Rating: 4.6/5.0
- Environmental Economics and Policy; Tufts University; 10 semesters 2002-2008. Median Overall Instructor Rating: 5.0/5.0; Mean Overall Instructor Rating: 4.7/5.0
- Topics in Environmental Economics; Tufts University; 5 semesters 2003-2008. Median Overall Instructor Rating: 5.0/5.0; Mean Overall Instructor Rating: 4.9/5.0
- Statistics; Tufts University; 4 semesters 2003-2008. Median Overall Instructor Rating: 5.0/5.0; Mean Overall Instructor Rating: 4.6/5.0
- Graduate Econometrics; UC Berkeley Graduate Student Grader. Spring 2002.