

Jonathan Baert Wiener

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Education

- 1987 J.D. *cum laude*, **Harvard Law School**, 1987. Editor, Harvard Law Review, vols. 99-100 (including Co-Chair, Harvard Law Review Centennial, 1987). Best Brief Award, Harvard Defenders Moot Court. Second place, Williston Contracts Competition. Best Individual Speaker, U.S.-Ireland Challenge Debate, 1985 (debate between the national champion teams from the two countries). Assistant Coach, 1985 National Debate Champions.
- 1984 A.B. *magna cum laude* in Economics, **Harvard College**, 1984. Honors Thesis: "The Impact of Unions on the Pace and Extent of Technological Change in Newspaper Printing," selected as one of three theses published in annual department journal. Member of two-person college debate team ranked 2nd in nation, 1983-84.

Judicial Clerkships

- 1988-89 Law clerk to the **Hon. Stephen G. Breyer**, U.S. Court of Appeals, First Circuit.
- 1987-88 Law clerk to the **Hon. Jack B. Weinstein**, Chief Judge, U.S. District Court, Eastern District of New York. Special attention to Agent Orange cases.

Professional Experience

- 2002- **University Fellow**, Resources for the Future (RFF), Washington DC.
- 2000- **Faculty Director, Duke Center for Environmental Solutions.**
- 1994- **Professor of Law, Duke Law School; Professor of Environmental Policy, Nicholas School of the Environment & Earth Sciences** (Associate Professor, 1994-98; Professor since 1999). Courses taught: Environmental Law, Risk Regulation, Global Environmental Law, Mass Torts, Property Law.
- 1999 **Visiting Professor, Harvard Law School.** Courses taught: Environmental Law, Risk Regulation & Its Reform.

- 1994-95 **Harvard Group on Risk Management Reform.** Helped organize group and draft report for blue-ribbon panel assembled to propose reforms of the federal health, safety and environmental regulatory system (see report citation in "Publications" below).
- 1993 **White House Office of National Service / Corporation for National & Community Service,** Washington DC. **Chair, Environment Working Group.** Aide to CEO of the new National Service agency; developed environmental component of the new "Americorps" national service program.
- 1992-93 **Council of Economic Advisers,** Executive Office of the President, Washington DC. **Senior Staff Economist/Attorney,** reporting to CEA Chair Michael Boskin and Member David Bradford, and then to Chair Laura Tyson and Members Joseph Stiglitz and Alan Blinder. Responsible for the portfolio of Environment, Natural Resources, and Health & Safety issues, including climate change, global forests, resource subsidies, regulation and risk assessment, biotechnology, market-based incentives for environmental protection. Drafted sections on "Risk" and "Pricing Natural Resources" in 1993 Economic Report of the President. Helped direct "Forests for the Future Initiative," launching innovative conservation partnerships with eight countries in 1992-93. Co-wrote memo analyzing, and recommending that the President sign, water reform legislation enacted in 1992. Member of U.S. delegation to Climate Change Convention negotiations and IPCC meetings. Helped draft Executive Order 12866 (President Clinton's regulatory review order, issued Sept. 1993), Administration's Climate Change Action Plan (issued Oct. 1993), Superfund reform proposal (1993), Northwest forests plan (1993), and international forests conservation strategy (1993).
- 1992 **Office of Science and Technology Policy,** Executive Office of the President, Washington DC. **Policy Counsel.** Special assignment focusing on run-up to UNCED "Earth Summit" held in Rio de Janeiro. Helped develop "Forests for the Future Initiative" (FFI). Attended Rio Earth Summit in June 1992 to advance FFI. Helped develop draft Executive Order on risk assessment (drafted but not issued, 1992). Drafted "Scope" policy statement on risk-based regulation of biotechnology (1992).
- 1989-91 **U.S. Department of Justice, Environment & Natural Resources Division,** Washington DC. **Special Assistant to the Assistant Attorney General** (Richard B. Stewart). Helped conceive, draft and advocate the "comprehensive approach" to climate change policy, which was then incorporated in U.S. policy and in turn in the international Climate Change Convention. Member of U.S. delegation to international Climate Change Convention negotiations and IPCC meetings. Developed and advanced policy approaches on issues including market-based incentives for environmental protection, global climate change, global forests, voluntary disclosure of environmental violations, national energy strategy, biodiversity, biotechnology. Assisted in research and strategy for complex litigation; successfully argued cases in U.S. Courts of Appeals.
- 1988-89 **Hazardous Air Pollutant Strategy Group,** Washington DC. Project rapporteur for bipartisan group chaired by Paul Portney (Resources for the Future) and John Graham (Harvard), aimed at consensus advice to EPA on regulation under sec. 112 of the Clean Air Act.

- 1985-88 **American Law Institute (ALI) Project on Enterprise Liability for Injuries.** Research assistant to Harvard Law Profs. Paul Weiler and David Rosenberg. Analyzed econometrics literature on the success of OSHA regulations, compensating wage differentials, and workers' compensation systems in preventing workplace injuries.
- 1982-84 **National Bureau of Economic Research (NBER),** Cambridge MA. Researched and edited for Harvard labor economists Richard Freeman and James Medoff's book, What Do Unions Do? (1984), and Medoff's article on "skills mismatches" in Brookings Papers on Economic Activity (1983). Assisted on studies of unionism, skills shortages, employment projection methodologies.
- 1981 **The Hudson Institute,** Croton-on-Hudson NY. Researched and wrote portions of a long-range study of U.S. energy markets for an architectural-engineering client.

Publications and Papers

Reconstructing Climate Policy: Beyond Kyoto (Washington DC: American Enterprise Institute Press, forthcoming 2003) (with Richard B. Stewart) (185 pp.).

“Whose Precaution After All ? A Comment on the Comparison and Evolution of Risk Regulatory Systems,” -- Duke Journal of International and Comparative Law -- (forthcoming 2003) (36 pp.).

“Convergence, Divergence, and Complexity in US and European Risk Regulation,” in Norman Vig & Michael Faure, eds., Green Giants: Environmental Policies of the United States and the European Union (Cambridge MA: MIT Press, forthcoming 2003) (30 pp.).

“The Ecological Origins of Environmental Legislation, – Environment Law Reporter – (forthcoming 2003) (with A. Dan Tarlock) (20 pp.).

“Making Markets for Global Forests Conservation,” in Jason Shogren & Randall Lutter, eds., Painting the White House Green: Environmental Economics in the White House (Washington DC: RFF Press, forthcoming 2003) (20 pp.).

“Comparing Precaution in the United States and Europe,” 5 Journal of Risk Research 317-349 (2002) (with Michael D. Rogers); earlier version available as Working Paper 2001-01, Duke Center for Environmental Solutions (revised 26 April 2002) (available at <http://www.env.duke.edu/solutions/publications.html>).

“Precaution in a Multirisk World,” in Dennis Paustenbach, ed., Human and Ecological Risk Assessment: Theory and Practice 1509-1531 (New York: John Wiley & Sons, 2002). Reprinted in John S. Applegate, ed., Environmental Risk, a volume in The International Library of Essays in Environmental Law (London: Ashgate Publishing, 2004).

“Designing Global Climate Regulation,” in Stephen Schneider, Armin Rosencranz & John-O Niles, eds., Climate Change Policy (Washington DC: Island Press, 2002); earlier version available as Working Paper 2001-02, Duke Center for Environmental Solutions (available at

<http://www.env.duke.edu/solutions/publications.html>) (34 pp.).

“Reconstructing Climate Policy: The Paths Ahead,” in Carlo Carraro, ed., Governing the Global Environment 417-422 (Cheltenham: Edward Elgar, 2003) (with Richard B. Stewart); earlier version available as Policy Matters 01-23, AEI-Brookings Joint Center for Regulatory Studies (August 2001) (available at http://www.aei.brookings.org/publications/policy/policy_01_23.asp) (6 pp.).

“Sustainable Governance,” in John Martin Gillroy & Joe Bowersox, eds., The Moral Austerity of Environmental Decisionmaking 131-144 (Durham: Duke University Press, 2002).

“Hormesis and the Radical Moderation of Law,” 20 Human & Experimental Toxicology 162-164 (2001); also appeared in 9 Biological Effects of Low Level Exposures (BELLE) Newsletter no. 2, pp.40-42 (January 2001) (symposium issue).

“Something Borrowed for Something Blue: Legal Transplants and the Evolution of Global Environmental Law,” 27 Ecology Law Quarterly 1295-1371 (2001).

“Regulatory Improvement Legislation: Judicial Review of Provisions Regarding Risk Assessment and Cost-Benefit Analysis,” 11 Duke Env'tl Law & Policy Forum 89-138 (2000) (co-author of report of twelve-member expert panel) (available at <http://www.law.duke.edu/journals/delpf/>).

“Policy Design for International Greenhouse Gas Control,” Climate Issues Brief No. 6, Resources for the Future (RFF), Washington DC (July 2000) (available at http://www.rff.org/issue_briefs/PDF_files/ccbrf6_rev.pdf), reprinted in Climate Change Economics and Policy: An RFF Anthology 205-215 (Michael A. Toman, ed., 2001).

“Toward Sustainable Governance,” Policy Matters 00-8, AEI-Brookings Joint Center on Regulatory Studies (June 2000) (available at http://www.aei.brookings.org/publications/policy/policy_00_08.asp).

“From Sustainable Development to Sustainable Governance,” paper presented at the 5th Colloquium on Environmental Law & Institutions, Duke University (draft of 4/24/2000 available at <http://www.law.duke.edu/news/colloquium5papers.html>).

“Global Environmental Regulation: Instrument Choice in Legal Context,” 108 Yale Law Journal 677-800 (1999).

“On the Political Economy of Global Environmental Regulation,” 87 Georgetown Law Journal 749-794 (1999). Reprinted in Carlo Carraro, ed., Governing the Global Environment 153-198 (Cheltenham: Edward Elgar, 2003).

“Foreword: The Puzzle of Environmental Politics.” 9 Duke Env'tl Law & Policy Forum 1-7 (1998) (with Frank B. Cross) (available at <http://www.law.duke.edu/journals/delpf/>).

"Managing the Iatrogenic Risks of Risk Management," 9 Risk: Health Safety & Environment 39-82 (1998) (available at <http://www.fplc.edu/risk/vol9/winter/Wiener.pdf>).

"Risk in the Republic," 8 Duke Env'tl Law & Policy Forum 1-21 (1997) (available at <http://www.law.duke.edu/journals/delpf/>).

"Global Trade in Greenhouse Gas Control: Market Merits and Critics' Concerns," Resources (RFF magazine) Issue No. 129 (Fall 1997), pp.13-16; reprinted in Wallace E. Oates, ed., The RFF Reader in Environmental and Resource Management (Resources for the Future 1999), pp.243-247.

"Designing Global Climate Policy: Efficient Markets vs. Political Markets," Policy Study No. 143, Center for the Study of American Business (CSAB), Washington University at St. Louis (December 1997) (available at <http://csab.wustl.edu>).

"Designing Markets for International Greenhouse Gas Control," RFF Weathervane, October 1997, reprinted in The Weathervane Guide to Climate Policy: An RFF Reader (Raymond J. Kopp & Jennifer B. Thatcher, eds., 2000).

"Beyond the Balance of Nature," 7 Duke Env'tl Law & Policy Forum 1-24 (1996) (available at <http://www.law.duke.edu/journals/delpf/>).

Legal Issues Presented by a Pilot International Greenhouse Gas (GHG) Trading System, United Nations Conference on Trade and Development (UNCTAD), Geneva, November 1996 (with Richard B. Stewart and Philippe Sands) (57 pp.).

Joint Implementation, Transaction Costs, and Climate Change, Organisation for Economic Cooperation and Development (OECD), Environment Directorate, OCDE/GE(96)173, Paris, November 1996 (with Daniel J. Dudek) (available at <http://www.oecd.org/pdf/M00007000/M00007875.pdf>) (59 pp.).

Risk vs. Risk: Tradeoffs in Protecting Health and the Environment (Harvard University Press, 1995) (with John D. Graham) (337 pp.). Japanese translation: Showado Press, 1999.

"Law and the New Ecology: Evolution, Categories and Consequences," 22 Ecology Law Quarterly 325-357 (1995). This article was selected by a national panel of environmental law faculty as one of the 13 best environmental law articles of 1995 (out of over 400 entries), and reprinted in 27 Land Use and Environment Law Review (1996)).

Book Review, *Joint Implementation to Curb Climate Change: Legal and Economic Aspects*, O. Kuik, P. Peters and N. Schrijver, eds., 4 Review of European Community and International Environmental Law (RECIEL) no. 2, at 207 (London, Spring 1995).

"Reforming Risk Regulation: Achieving More Protection at Less Cost," Report of the Harvard Group on Risk Management Reform, 1 Human and Ecological Risk Assessment 183-206 (1995) (co-drafted report of expert panel, with John D. Graham).

"Promoting Market-Based Performance Incentives in Regulatory Reform," testimony before Committee on Governmental Affairs, U.S. Senate, March 8, 1995.

"Structuring Incentives for Risk-Superior Environmental Performance," paper for the President's Council on Sustainable Development, Eco-Efficiency Task Force, Economics Cluster, February

16, 1995.

"Forum: Reforming Superfund," 11 Issues in Science and Technology no. 1 (Fall 1994), p. 8.

"Solving the Precautionary Paradox: Policy Approaches to Improve Measurement of Greenhouse Gas Sources and Sinks," in J. van Ham et al., eds., Non-CO2 Greenhouse Gases (Dordrecht Netherlands: Kluwer Academic Publishers, 1994), pp. 527-531.

"Technology-Based versus Market-Based Approaches," in Philippe Sands, ed., Greening International Law (The New Press, 1994) (with Daniel J. Dudek and Richard B. Stewart), pp.182-209.

"The Comprehensive Approach to Global Climate Policy: Issues of Design and Practicality," 9 Ariz. J. Int'l & Compar. L. 83-113 (symposium issue) (1992) (with Richard B. Stewart).

"Environmental Policy for Eastern Europe: Technology-Based versus Market-Based Approaches," 17 Colum. J. Env't'l L. 1-52 (1992) (with Daniel J. Dudek and Richard B. Stewart).

"The Comprehensive Approach, Greenhouse Taxes, and Informal Emissions Trading," in Climate Change: Designing a Practical Tax System (OECD, Paris, 1992).

"The Climate Change Convention," in The Role of Law in the 1992 United Nations Conference on Environment and Development (American Bar Association, Division for Public Services, Washington DC, 1992).

"A Comprehensive Approach to Climate Change," 1 American Enterprise no. 6, pp. 75-80 (November-December 1990) (with Richard B. Stewart).

"Of Sailing Ships and Seeking Facts: Brief Reflections on Magistrates and the Federal Rules of Civil Procedure," 62 St. John's L. Rev. 429-442 (1988) (with Jack B. Weinstein).

Harvard Law Review Centennial Album (1987) (editor).

"Essays Commemorating the 100th Anniversary of the Harvard Law Review," 100 Harv. L. Rev. No. 4 (1987) (Issue Editor).

"Developments in the Law of Toxic Waste Litigation: Bankruptcy and Insurance Issues," 99 Harv. L. Rev. 1573-1601 (1986) (law review note).

"The Impact of Unions on Technological Change in Newspaper Printing," Harvard College Economist (1984).

Government Reports (principal drafter)

"Report of the Environment Working Group to the Corporation for National and Community Service" (December 1993).

"Forests for the Future: Launching Initial Partnerships" (January 1993).

"Risks to Health, Safety and the Environment" and "Ownership and Pricing of Natural Resources," in Council of Economic Advisers, Economic Report of the President 203-212, 212-223 (1993).

Office of Science and Technology Policy, "Exercise of Federal Oversight Within the Scope of Statutory Authority: Planned Introductions of Biotechnology Products Into the Environment," 57 Federal Register 6753-6762 (February 27, 1992).

Interagency Task Force on the Comprehensive Approach, A Comprehensive Approach to Addressing Potential Climate Change (U.S. Dept. of Justice, February 1991).

Seminars, Lectures and Presentations

"The US, the EU, and Precaution," Third Transatlantic Dialogue on Precaution, organized by the Duke Center for Environmental Solutions, the European Policy Centre, the European Commission, the US Mission to the EU, and the German Marshall Fund (Berlin, Germany, June 20-21, 2003) (speaker and conference co-organizer)

"Reconstructing Climate Policy," Duke University (May 12, 2003) (speaker and conference organizer)

"Risk Analysis under Federal Law," Harvard School of Public Health course on "Analyzing Regulations" (Washington DC, May 9, 2003)

"Risk Analysis and Regulatory Policy," Foundation for American Communications (Atlanta GA, February 18, 2003)

"Comparing Precaution in the United States and Europe," Sanford Institute of Public Policy, Duke University (Durham NC, January 13, 2002)

"Judicial Review of Risk Science in the U.S. and Europe: The Case of Antibiotics in Animal Feed," annual meeting of the Society for Risk Analysis (New Orleans LA, December 10, 2002)

"International Experience with Competing Regulatory Approaches," discussant on session on "Leaded Gasoline," Resources for the Future (Washington DC, December 5-6, 2002)

"Dealing with Disasters: Prediction, Prevention and Response," The Second Annual Duke Environmental Leadership Forum (Durham NC, November 19-21, 2002) (conference co-organizer)

"The Malaria-DDT Dilemma: Science, Policy and Law" (Duke University, Durham NC, November 7, 2002) (conference co-organizer)

"Comparing Precaution in the US and Europe," Second Transatlantic Dialogue on Precaution – The Reality of Precaution: Comparing Approaches to Risk and Regulation, organized by the Duke Center for Environmental Solutions, the European Commission, and the German Marshall Fund

(Airlie House, Warrenton VA, June 14-15, 2002) (speaker and conference co-organizer)

“Risk Analysis under Federal Law,” Harvard School of Public Health course on “Analyzing Regulations” (Washington DC, May 10, 2002)

“Precaution,” Vanderbilt University School of Law (Nashville TN, April 4, 2002)

“Reconstructing Climate Policy,” University of Colorado Law School (Boulder CO, March 1, 2002)

“Comparing Precaution in the US and Europe: Evaluating the Conventional Wisdom,” First Dialogue on Precaution – “The US, the EU, and Precaution,” organized by the European Commission, the US Mission to the EU, and the German Marshall Fund, with the European Policy Centre and the Duke Center for Environmental Solutions (Bruges/Brugge, Belgium, January 11-12, 2002) (speaker and conference co-organizer)

“Prudent Precaution in an Interconnected World,” Society for Risk Analysis annual meeting (Seattle WA, December 4, 2001)

“Better Ways to Decide American Trucking,” Society for Risk Analysis annual meeting (Seattle WA, December 3, 2001)

“The Next Generation of Environmental Policy,” guest lecture, graduate seminar on American Environmental Policy (Prof. Richard Andrews) (Chapel Hill NC, November 14, 2001)

“Explaining U.S. Approaches to International Treaties,” Conference on U.S. Approaches to International Treaties, NYU Law School (New York, September 29, 2001)

“Climate Policy – Do We Need a New Approach?” Workshop jointly organized by the Fondazione Eni Enrico Mattei, Stanford University, and Venice International University (Venice, September 6-8, 2001) (conference co-organizer, session moderator, and speaker)

“Managing Risk in the Changing Global Environment,” The Duke Environmental Leadership Forum (Durham NC, September 5, 2001) (conference co-organizer and speaker)

“The Reality of Precaution: Comparing National Approaches to Risk and Regulation,” presentation to the Group of Policy Advisers, Office of the President, European Commission (Brussels, June 7, 2001)

“Institutionalizing Science and Economics in the Regulatory Process,” Kennedy School Policy Workshop on The Role of Science and Economics in Setting Environmental Standards (Washington DC, May 31, 2001)

“Measuring the Impacts of Regulation,” Annual Conference of the Health Effects Institute (HEI) (Washington DC, April 29, 2001)

“Global Climate Policy,” Alumni Reunion, Nicholas School of the Environment & Earth Sciences, Duke University (Durham NC, April 21, 2001)

“Regulatory Analysis under Federal Law,” Harvard School of Public Health course on “Analyzing Regulations” (Washington DC, April 6, 2001)

“Mad Cows and Murderers: Comparing Precaution in the U.S. and Europe,” Environmental Institutions Seminar Series, Duke University (Durham NC, February 14, 2001)

“Something Borrowed for Something Blue: Legal Transplants in Global Environmental Law,” Georgetown Law School (Washington DC, November 17, 2000)

“Comparing Precaution in the U.S. and Europe,” Cornell Law School (Ithaca NY, November 10, 2000)

“Right to Know – How Far Does It Go?” at the Harvard Conference on the Internet & Society (Cambridge MA, June 1, 2000) (video available at <<http://www.is2k.harvard.edu/home.htm>>, click on “Schedule” and then scroll down to entry for June 1 at 3:00pm)

“From Sustainable Development to Sustainable Governance,” at “Sustainable Governance: The Institutional Side of Sustainable Development,” The Fifth Annual Colloquium on Environmental Law & Institutions, Duke University (Durham NC, April 27-28, 2000) (also conference director)

“Regulatory Analysis under Federal Law,” Harvard School of Public Health course on “Analyzing Regulations” (Boston MA, March 31, 2000)

“Climate Change and the Changing Future of Environmental Law,” conference on Environment 2000 – New Issues for a New Century, Boalt Hall School of Law, University of California at Berkeley (Berkeley CA, Feb. 26, 2000)

“Uncertainty and Precaution in a Multi-Risk World,” American Association for the Advancement of Science (AAAS) annual meeting (Washington DC, February 19, 2000)

“The Precautionary Principle: An Academic Perspective,” The Toxicology Forum (Washington DC, February 9, 2000)

Discussant on paper by Cass R. Sunstein, “Is the Clean Air Act Constitutional?” at the AEI-Brookings Joint Center on Regulatory Studies (Washington DC, October 4, 1999)

“International Emissions Trading,” workshop of government, industry, and environmental organizations, sponsored by the Electric Power Research Institute (EPRI) (Washington DC, September 23, 1999)

“Making Markets for Global Forests Conservation,” conference on Painting the White House Green, University of Wyoming (Laramie WY, September 9, 1999)

“Precaution, Countervailing Risk, and Optimal Analysis,” conference on “The Precautionary Principle: Refine It or Replace It?” Hotel Washington (Washington DC, June 3-4, 1999)

“Global Markets for Global Commons: Will Property Rights Protect the Planet?” The Fourth Annual Cummings Colloquium on Environmental Law, Duke University (Durham NC, April 30 &

May 1, 1999) (conference director)

“How International Tradeable Allowance Systems Differ from National Tradeable Allowance Systems,” Harvard Institute for International Development (HIID) program on “Economic Instruments for Greenhouse Gas Abatement – Training in Flexible Mechanisms for Kazakhstan” (Cambridge MA, April 29, 1999)

“Sustainable Governance,” The John D. MacArthur Lecture in Environmental Policy and Law, Bucknell University (Lewisburg PA, April 19, 1999) (annual invited lecture sponsored by the MacArthur Foundation)

“Benefit-Cost Analysis under Federal Law,” Harvard School of Public Health course on “Analyzing Regulations” (Boston MA, April 9, 1999)

“Global Environmental Regulation: Instrument Choice in Legal Context,” Environmental Law Seminar, Harvard Law School (Cambridge MA, March 1, 1999)

“The Precautionary Principle in the Climate Change Negotiations,” Mercatus Center Retreat for Congressional Staff (Annapolis MD, January 30, 1999)

“Risk Analysis and Law,” Harvard Center for Risk Analysis course on “Analyzing Regulations” (Rosslyn VA, January 8, 1999)

“Relation of Risk Legislation to Existing Statutes,” conference on Risk Analysis and Judicial Review (Washington DC, December 17, 1998)

U.S.-Japan Experts Workshop on Climate Change Policy, Resources for the Future (RFF) (Washington DC, October 19-20, 1998) (one of six U.S. experts invited to participate in a two-year series of meetings on global climate policy with experts from Japan)

“Prices vs. Quantities: The Impact of the Legal System,” National Bureau of Economic Research (NBER) / Yale Center on Global Change, Workshop on Design of Climate Change Policy Instruments and Institutions (Snowmass CO, August 13-14, 1998)

“Choosing Regulatory Instruments for Global Environmental Protection,” Stanford Law School & Institute for International Studies (Stanford CA, May 7, 1998)

“Choosing Regulatory Instruments for Global Environmental Protection,” Duke Law School (Durham NC, April 28, 1998)

“Benefit-Cost Analysis in Federal Law,” Harvard School of Public Health course on “Analyzing Regulations” (Boston MA, April 3, 1998)

“The Rents of Nature: Special Interests and the Puzzle of Environmental Legislation,” the Third Annual Cummings Colloquium on Environmental Law, Duke University (Durham NC, March 26-27, 1998) (conference director)

“Designing a Legal Regime for International Greenhouse Gas Emissions Control,” National

Bureau of Economic Research (NBER) / Yale Center on Global Change, Workshop on International Emissions Trading Systems (Snowmass CO, August 13-14, 1997)

“Benefit-Cost Analysis: Legal Aspects and Status of Federal Legislation,” Harvard School of Public Health course on “Analyzing Regulations” (Boston MA, March 27, 1997)

“Risks of Regulation: Iatrogenesis or Externalities?” Risk Assessment and Policy Association (RAPA), First Biennial Conference (Alexandria VA, March 6-7, 1997)

Hewlett Colloquium Distinguished Visitor, Washington University at St. Louis (February 6-7, 1997) (delivered lectures and conducted meetings with faculty and students to assist in the university’s development of a new multidisciplinary curriculum in environmental studies)

“Creating Global Green Markets,” School of Law, Washington University at St. Louis (St. Louis MO, February 6, 1997)

“Law and the New Ecology,” Doctoral Seminar on Environmental Policy, School of Public Health, University of North Carolina (Chapel Hill NC, January 22, 1997)

“Risk in the Republic: Comparative Risk Analysis and Public Policy,” the Second Annual Cummings Colloquium on Environmental Law, Duke University (Durham NC, November 15-16, 1996) (conference director)

“Legal Issues in Creating an International Greenhouse Gas Allowance Trading System,” The Offsets Forum, Center for Clean Air Policy (Washington DC, June 13, 1996)

“Economic Analysis and Environmental Decisionmaking,” conference at Resources for the Future (Washington DC, June 13, 1996) (panel member and discussant on “EPA’s Automobile Inspection & Maintenance Rule” by Todd Ramsden)

“Beyond the Balance of Nature: Environmental Law Faces the New Ecology,” the First Annual Cummings Colloquium on Environmental Law, Duke University (Durham NC, April 18, 1996) (conference director)

“Conflict and Cooperation in Environmental Management,” Nicholas School of the Environment Alumni College, Duke University (Durham NC, April 12, 1996)

“Judicial and Executive Review of Agency Risk Assessments,” annual conference of the National Association of Environmental Professionals, Nicholas School of the Environment, Duke University (Durham NC, March 29, 1996)

“Risk-Risk Tradeoffs,” Decision Theory Workshop, Fuqua School of Business, Duke University (Durham NC, March 27, 1996)

“Risk-Risk Tradeoffs,” Society for Risk Analysis, Research Triangle Chapter (Research Triangle Park, NC, Feb. 22, 1996)

“Risk-Risk Tradeoffs,” Environmental Sciences Seminar Series, School of Public Health,

University of North Carolina (Chapel Hill NC, Feb. 2, 1996)

"On Bureaucratic Discretion and Regulatory Reform" (discussant on paper by John DiIulio), Conference on Reviving Regulatory Reform, American Enterprise Institute (Washington DC, Jan. 17, 1996)

"The End of Nature -- and It's About Time," Program on Science, Technology, and Human Values, Duke University (Durham NC, Nov. 9, 1995)

"Toward an Effective Global Forests Agreement," First Open Meeting of the Human Dimensions of Global Environmental Change Community (Duke University, Durham NC, June 1, 1995) (also chaired the conference panel on "Deforestation")

"Environmental Legislation in the 104th Congress," Duke Law School Dedication Celebration Seminar Series (Durham NC, April 7, 1995)

"Risk Tradeoffs in the Regulatory Reform Legislation," at symposium on Weighing the Risks, sponsored by the Harvard Center for Risk Analysis (Washington DC, March 31, 1995)

"Promoting Market-Based Performance Incentives in Regulatory Reform," testimony before Committee on Governmental Affairs, U.S. Senate, March 8, 1995.

"Structuring Incentives for Risk-Superior Environmental Performance," President's Council on Sustainable Development, Eco-Efficiency Task Force, Economics Cluster (Washington DC, February 16, 1995)

"Future Directions in Environmental Regulation," Second Annual Conference on the Environment, the Economy and World Trade, sponsored by the Research Triangle World Trade Center (Durham NC, November 16, 1994).

"Environmental Regulation of Biotechnology: Risk, Politics and Nature," Risk and Decision Sciences Seminar, Harvard School of Public Health (Boston MA, October 21, 1994).

"Risk Tradeoffs in Protecting the Global Environment," Environmental Law and Policy Research Seminar, Harvard Law School (Cambridge MA, October 20, 1994).

"Financial Resources for International Environmental Protection," New York University School of Law symposium on Greening International Law (New York, October 7, 1994).

"Reflections on the Climate Change Negotiations: Past Record and Future Prospects," Environmental Law and Policy Study Group, Center for World Environment and Sustainable Development (Research Triangle Park, NC, January 26, 1994)

"Implementation of Market-Based Approaches to Environmental Protection: Monitoring and Enforcement Issues for Transferable Carbon Permits" (discussant of paper by Tietenberg & Victor), annual meeting of the American Economics Association (Boston, January 5, 1994)

"New Ways to Fund Citizen Action: National Service," address at national staff meeting of the

- Public Interest Research Groups (PIRGs) (Denver, December 9, 1993)
- "Workshop on National Service and Environment," ACTION office (Denver, December 9, 1993)
- "Workshop on National Service and Environment," 26 Federal Plaza (New York, November 30, 1993)
- "Workshop on National Service and Environment," ACTION office (Seattle, November 19, 1993)
- "The National Perspective," Presidio Workshop on Youth Service (San Francisco, November 18, 1993)
- "Workshop on National Service and Environment," ACTION office (San Francisco, November 17, 1993)
- "Workshop on National Service and Environment," Volunteer & Information Agency (New Orleans, November 5, 1993)
- "Volunteering and Environmental Careers," National Environmental Careers Conference (Tampa, October 23, 1993)
- "Workshop on National Service and Environment," National Environmental Careers Conference (Tampa, October 22, 1993)
- "Beyond the Classroom: National Service and the Environment," Environmental Grantmakers Association, annual meeting (Tucson AZ, October 16, 1993)
- "Mission, Vision and Strategy: Opportunities for Seniors in National Service and Environment," keynote address to Environmental Alliance for Senior Involvement, first annual Leadership Conference (Bethesda MD, September 10, 1993)
- "National Service and Environment," briefing for the Council on Foundations (Washington, September 9, 1993)
- "Risk Roulette: Gambling with Human Health and the Environment," Harvard Center for Risk Analysis, Annual Advisory Board Meeting (Boston, June 2, 1993)
- "The Road from Rio: Environmental Economics in International Policy," National Bureau of Economic Research (NBER) Summer Institute, Environmental Economics Workshop (Cambridge, August 12, 1992)
- "Risk Tradeoffs in Global Environmental Policy," National Forensics Institute, The American University (Washington, July 21, 1992)
- "Regulatory Policy for Biotechnology," U.S. Interagency Regulatory Colloquium (Washington, June 23, 1992)
- "Efficient Environmental Protection: Tax Instruments," Massachusetts Institute of Technology

(MIT) Center for Energy & Environmental Policy Research, 1992 New Developments Workshop (Cambridge, April 30, 1992)

"Bargaining Issues in the Climate Change Negotiations," energy policy seminar, Kennedy School of Government, Harvard University (Cambridge, November 25, 1991)

"Practical Implications of Pending International Conferences: Transboundary Pollution, CFC Abatement, and Global Climate Change," American Bar Assn./California Bar Assn./L.A. Bar Assn. International Environmental Law Symposium (Los Angeles, November 12, 1991)

"International Environmental Regulation," Federal Bar Assn. Annual Meeting & Convention (Washington, September 27, 1991)

"Economic and Environmental Advantages of a Comprehensive Approach to Climate Change," Briefing for Netherlands Environment Minister Hans Alders (Washington, July 25, 1991)

"Matching Policy to Science: the Comprehensive Approach to Climate Change," Marine Policy Center, Woods Hole Oceanographic Institute (Woods Hole MA, July 12, 1991)

"Policy Responses to Global Change," Western Economics Assn. (WEA) Int'l, 66th Annual Conference (Seattle, July 2, 1991)

"The Comprehensive Approach, Greenhouse Taxes, and Informal Emissions Trading," Organization for Economic Cooperation & Development (OECD) Experts' Workshop (Paris, June 26-27, 1991)

"Implementing Incentives for Environmental Protection," Air & Waste Management Assn. Annual Meeting (Vancouver, June 20, 1991)

"Risk Tradeoffs in Global Environmental Policy," Harvard Center for Risk Analysis, Annual Advisory Board Meeting (Boston, June 19, 1991)

"Legal Design and Climate Change," American Bar Assn. Standing Committee on Environmental Law Annual Meeting and Council on Environmental Quality (CEQ) Roundtable on "The Role of Law in the 1992 UNCED" (Airlie House, Virginia, May 18, 1991)

"Law and the Global Environment: Comprehensive and Market-Based Approaches to Global Environmental Change," University of Wisconsin School of Law, International Law Society Conference (Madison, April 12, 1991)

"A Comprehensive Approach to Addressing Potential Climate Change," Domestic Policy Council, Global Change Strategy Group (Washington, November 28, 1990)

"Overview of the Judicial System and the Courts," Washington Campus (Washington, June 13, 1990)

"International Environmental Law and Sustainable Development," National Assn. of Environmental Law Societies (NAELS) Annual Conference, Tulane Law School (New Orleans,

February 2, 1990)

National & Community Service

- 1995- **“Duke Law School: Dedicated to Durham.”** Founder and director of twice-annual community service event in which hundreds of Duke Law students, faculty and staff work at projects across the Durham area, such as painting shelters, cleaning schools, restoring riverways, creating literacy training materials, and visiting ill children. “DTD” is held for incoming students each August, and school-wide each April. Supported by annual operating grant from LEXIS-NEXIS since 1998.
- 1994-98 **North Carolina Commission on National & Community Service**, Raleigh NC. Appointed by Governor as member ex officio of state commission established to promote service statewide and to allocate “Americorps” and “Learn & Serve” grants from federal Corporation for National Service.
- 1994-98 **Campus Outreach Opportunity League (COOL)**, Washington DC. Board Member. COOL is a national nonprofit that provides a network of assistance and training to support campus-based community service programs.
- 1993 **Corporation for National & Community Service / White House Office of National Service**, Washington D.C. Chair, Environment Working Group. Assisted CEO Eli Segal (Assistant to the President for National Service), Executive Vice President Shirley Sagawa, Senior Adviser Susan Stroud, and CNCS staff in developing the environmental component of the new "Americorps" national service program, articulating environmental priorities and grant selection criteria, developing training and technical assistance programs, and linking with the environmental community. Held regional workshops in six cities to gather insights from community-based organizations, local environmental groups, experts and federal agencies. Spoke at environmental conferences to publicize national service opportunities.
- 1992 **"D.C. Servathon,"** Washington DC. Member of Steering Committee. Helped organize city's first annual servathon, in which volunteers perform service projects all across the metropolitan area, held in May 1992. D.C. Servathon '92 drew 1100 volunteers, who performed over 80 service projects throughout the area.
- 1989-91 **"Boston Servathon / City Year for a Day,"** Boston MA. Citizen Founder, 1989-91; Steering Committee, 1989. Helped organize Boston's first annual servathon. The event engaged 500 volunteers to work at 43 projects in 1989; by 1998 it had grown to engage over 10,000 volunteers working at over 400 projects. Service projects include repairing shelters, painting halfway houses, rehabilitating urban gardens, visiting the homebound, assisting Special Olympics. The event also raises funds for **"City Year,"** Boston's innovative year-round youth service corps.
- 1989 **"Class Act,"** Boston MA. Founded and organized the first Harvard-Radcliffe Reunion community service event in June 1989, drawing 150 reunion volunteers to perform 11 service projects across the Boston area. Service projects included renovating shelters,

sorting food for the homeless, cleaning urban gardens, and yardwork at a home for disturbed youth. "Class Act" is now an annual Harvard-Radcliffe Reunion event.

Professional Activities

Faculty Director, Center for Environmental Solutions, Duke University (university-wide multidisciplinary research center), 2000-present.

Director, Colloquia on Environmental Law & Institutions, Law School and Nicholas School of the Environment, Duke University, 1995-present (annual conference) (titled "Cumings Colloquia" during 1996-99).

Coordinator, Seminar Series on Environmental Institutions, Duke University, 1999-present (biweekly faculty workshop series).

Other Duke activities:

Law School:

Appointments Committee, 1999-2002.

Appointments Subcommittee on International & Comparative Law, 2001-02.

Campaign Planning Committee, 1996-98.

Curriculum Committee, 2002-present.

Journals & Electronic Publishing Committee, 2000-present.

Planning Committee (Chair), 1994-96.

Project Advisory Committee, 2002-present.

Nicholas School:

Search Committee, Nicholas Chair in Environmental Economics, 2000-present.

Sanford Institute of Public Policy:

Search Committee, International Institutions position, 2001-02.

University-wide:

Academic Council (university faculty governance body), 1995-96.

Center for European Studies, Advisory Committee, 2001-present.

Center for International Studies, Advisory Committee, 1994-1997, 2000-present.

Micro-Incentives Research Center, board member, 2000-present.

Provost's Task Force on the Future of the Nicholas School, 2000.

Provost's Task Force on a Duke office in Washington DC, Spring 2001-present.

Provost's Economics Initiative, Advisory Committee, 1999-2000.

Social Sciences Planning Group, 1999-2000.

Editorial Board, Risk Analysis: An International Journal (the journal of the Society for Risk Analysis (SRA)), 1998-present.

Society for Risk Analysis (SRA):

Councilor (elected member of SRA's governing body), 2001-2004.

Chair, Chapters & Sections Committee, 2001-present.

Risk Science & Law Specialty Group: Executive Committee, 2000-present.

Nominating Committee member, 1998.

Research Triangle Chapter: President, 1998. Past President, 1999.
Member of SRA, 1995-present.

Venice International University: Committee on Environment, and Program in Analysis & Governance for Sustainable Development, 2001-present

Advisory Committee, Harvard Center for Risk Analysis, Harvard School of Public Health, 1990-present.

Advisory Board, Center for the Study and Improvement of Regulation, Carnegie Mellon University, 2001-present.

Faculty Advisory Board, Georgetown International Environmental Law Review, 1992-99.

Co-chair, Harvard Debate Centennial, 1992.

Co-chair, Harvard Law Review Centennial, 1987.

Member, American Law & Economics Association (ALEA), 1996-present

Member, Risk Assessment and Policy Association (RAPA), 1996-present

Term Member, Council on Foreign Relations (CFR), 1995-2000

Admitted to the Bar, District of Columbia, 1991

Admitted to the Bar, Massachusetts, 1988

Honors

University Fellow, Resources for the Future (RFF), Washington DC, January 2002 - present.

Elected to governing Council, Society for Risk Analysis, 2001-04.

Visiting Professor, Harvard Law School, Spring 1999.

John D. MacArthur Lecture in Environmental Policy and Law at Bucknell University (Lewisburg, PA, April 19, 1999) (annual invited lecture sponsored by the MacArthur Foundation).

President, Society for Risk Analysis - Research Triangle Chapter (SRA-RTC), 1998.

Editorial Board member, Risk Analysis: An International Journal (the official journal of the Society for Risk Analysis), 1998-present.

Hewlett Colloquium Distinguished Visitor, Washington University at St. Louis (February 6-7,

1997) (delivered lectures and conducted meetings with faculty and students to assist in the university's development of a new multidisciplinary curriculum in environmental studies).

The article "Law and the New Ecology: Evolution, Categories and Consequences," 22 Ecology Law Quarterly 325 (1995) was selected by a national peer review panel of environmental law faculty as one of the dozen best environmental law articles of 1995 (out of over 400 entries), and reprinted in the annual Land Use and Environment Law Review (1996)).

Law clerk to the Hon. Stephen G. Breyer, U.S. Court of Appeals, First Circuit, 1988-89.

Law clerk to the Hon. Jack B. Weinstein, Chief Judge, U.S. District Court, Eastern District of New York, 1987-88.

Harvard Law Review, vols. 99-100 (1985-1987): Editor; Co-Chair, Harvard Law Review Centennial, 1987.

Best Brief Award, Harvard Defenders Moot Court, 1985.

Second place, Williston Contracts Competition, 1985.

Best Individual Speaker, U.S.-Ireland Challenge Debate, 1985 (debate between the National Champion debate teams from the United States and Ireland).

Assistant Coach, 1985 National Debate Champions.

Referee

AEI-Brookings Joint Center for Regulatory Studies
Harvard University Press
Journal of Environmental Economics & Management
Risk Analysis: An International Journal
Science

Litigation

United States v. Vineland Chemical Co., et al., 931 F.2d 52 (Table), 33 Env'tl Rep. (Cases) 1316 (3rd Cir. 1991). Won affirmance of injunction and penalties imposed in RCRA enforcement action against pesticide manufacturer who illegally operated hazardous waste facility after statutory expiration of permit. Court held right to procedural Due Process not violated by district court's imposition of such penalties during operator's pending appeal to court of appeals of EPA's related administrative notice to cease operations. Briefed and argued for United States.

Tongass Conservation Society v. Cheney, 924 F.2d 1137 (D.C. Cir. 1991). Won affirmance of district court's finding that the Navy had adequately considered all reasonable alternatives in its preparation of the environmental impact statement required for the construction of an acoustic testing facility in Alaska for Trident-class nuclear-powered submarines. Argued for United States.

Kruchten, et al. v. United States, 914 F.2d 1106 (8th Cir. 1990). Won affirmance of district court's determination that the United States as trustee landowner has no duty under Minnesota law to repair an embankment protecting abutting farmers from Minnesota River overflow. Argued for United States.

Capital Cities/ABC v. County of Los Angeles, (Cal. Super. Ct. 1986). Won order barring County from auctioning a license to be "The Official Radio Station of the L.A. County Beaches" (with exclusive right to broadcast from the beaches), on ground that County lacked authority under state law to market access to public beaches, especially in light of First Amendment interests at stake. As summer associate, drafted brief.

Languages: excellent French, some Spanish, vestigial German