

May 2010

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Ph.D., Economics, University of Michigan, 1989.  
M.P.P., Public Policy, University of Michigan, 1986.  
B.S., Community Economic Development, University of California, Davis, 1980.

*Areas of Specialization:*

Environmental Policy, Public Finance, Industrial Organization, Applied Game Theory.

*Professional Activities:*

Senior Fellow, Resources for the Future, Quality of the Environment Division. (1998-present)  
Fellow, Resources for the Future, Quality of the Environment Division. (1989-1998)  
Consultant to state and federal agencies, electricity companies, environmental organizations and international lending and economic assistance institutions.

*Previous Experience:*

Professional Lecturer in International Relations, Energy, Environment, Science and Technology. Johns Hopkins SAIS University. (1993-1999).  
Adjunct Professor, Department of Economics, Georgetown University. (1998).  
Instructor, University of Michigan: Introductory Microeconomics.  
Teaching Assistant, University of Michigan: Operations Research.  
Teaching Assistant, University of Michigan: Law and Economics. (1984-1989).  
Economic Analyst, Pacific Gas and Electric Company. (1984)  
Program Manager, SolarCal Local Government Commission on Conservation and Renewable Resources, State of California. (1981-1982).

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- “An Experimental Study of Auctions versus Grandfathering to Assign Pollution Permits,” 2010. *Journal of the European Economic Association*, (with Jacob Goeree, Charles Holt, Karen Palmer, William Shobe), forthcoming.
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- “Valuing Benefits from Ecosystem Improvements using Stated Preference Methods: An Example from Reducing Acidification in the Adirondacks Park,” 2008. (with David A. Evans, H. Spencer Banzhaf, Alan J. Krupnick and Juha Siikamaki), in *Saving Biological Diversity*, Robert A. Askins, Glenn D. Dreyer, Gerald R. Visgilio, Diana M. Whitelaw eds., New York: Springer.
- “Climate Change Primer: Cap and Trade,” 2008, *Energy Law Journal*, (with Bill Westerfield, Brian McLean, Franz Litz and Jeff King). 29(1): 173-193.
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"Local Government Initiatives for Affordable Housing" 1981, (with S. Schwartz and R. Johnston) Institute of Governmental Affairs, University of California, Davis, EQS No. 35, (December).

#### AWARDS

MacArthur Scholar, University of Michigan Program in International Peace and Security Studies, 1985-1989.  
Institute of Public Policy Studies Fellowship, 1983-1984.

#### OTHER

Member, National Academy of Sciences, Board on Environmental Studies and Toxicology, 2005-present.

Member, Environmental Protection Agency Advisory Council on Clean Air Compliance Analysis, 2004-present.

Member, Princeton Carbon Mitigation Initiative Advisory Council, 2010-present.

Member, State of California Economic and Allocation Advisory Committee, 2009-2010.

Member, State of California Market Advisory Committee for Greenhouse Gas Policy, 2006-2007.

Member, Environmental Protection Agency Science Advisory Board Second Generation Model Advisory Panel, 2004-2005.

Member, Environmental Protection Agency, Scientific Advisory Board, Environmental Economics Advisory Committee, 1998-2004.

Member, Environmental Protection Agency, Scientific Advisory Board, Committee on Illegal Competitive Advantage, 2004.

Member, National Research Council, Committee on Air Quality Management in the United States, 2001-2004.

Reviewer, National Energy Modeling System, Energy Information Administration, 1992-present.

Reviewer of proposals for Environmental Protection Agency, National Science Foundation, Department of Energy.

Member, Environmental Protection Agency, Effluent Guidelines Task Force, 1996-1998.

Member, National Oceanic and Atmospheric Administration Blue Ribbon Panel on Valuation of Environmental Benefits in the Great Lakes Region, 1997-1998.

Member, Environmental Protection Agency, Scientific Advisory Board, Mercury Subcommittee, 1997.

Member, Management Board, New York State Environmental Externality Cost Study, 1993-1995.

Reviewer for:

*American Economic Review*

*Ecological Economics*

*Energy Policy*

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*The Electricity Journal*

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*Land Economics*

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*and various state, federal and international research agencies.*