

Lars Olson
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Department of Agricultural and Resource Economics
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College of Agriculture & Natural Resources
Agricultural & Resource Economics

PERSONAL INFORMATION

Educational Background

- 1988, Ph.D., Economics, Cornell University, Ithaca, N.Y.
- 1985, M.A., Economics, Cornell University, Ithaca, N.Y.
- 1981, B.A., Mathematics and Economics (Honors), Eckerd College, St. Petersburg, Florida

Academic Appointments at UMD

- 1998 - present, Professor, Department of Agricultural and Resource Economics, University of Maryland, College Park
- 1993 - 1998, Associate Professor, Department of Agricultural and Resource Economics, University of Maryland, College Park

Administrative Appointments at UMD

- 2017-2018, Interim Chair, Department of Agricultural and Resource Economics, University of Maryland, College Park, 10/15/2017-8/4/2018
- 2008 - 2013, Chair, Department of Agricultural and Resource Economics, University of Maryland, College Park, 8/1/2008-7/31/2013

Other Employment

- 2016-2017, Sabbatical Research Professor, National Socio-Environmental Synthesis Center (SESYNC)
- 2002 - 2003, Visiting Research Scholar, IMF Institute, February 2002, March, April 2003
- 1998, Visiting Lecturer, Natural Resource and Environmental Economics, Finnish Postgraduate Programme in Economics
- 1997, Visiting Fellow, Tinbergen Institute
- 1994, Visiting Fellow, Tinbergen Institute
- 1992 - 1993, Associate Professor of Resource and Environmental Economics, University of California, Department of Soil and Environmental Sciences
- 1991, Visiting Fellow, Cornell University, Department of Agricultural Economics, Summer 1991

- 1988 - 1992, Assistant Professor of Resource and Environmental Economics, University of California, Department of Soil and Environmental Sciences
- 1986 - 1987, Acting Assistant Professor of Resource and Environmental Economics, University of California, Department of Soil and Environmental Sciences

RESEARCH, SCHOLARLY AND CREATIVE ACTIVITIES

Chapters

Books

- 2006, Olson, L.J. and S. Roy, "Theory of Stochastic Optimal Economic Growth", *Handbook of Economic Growth - Volume 1: The Discrete Time Case*, C. Le Van, R. Dana, T. Mitra and K. Nishimura, 297-335, (invited survey)

Refereed Journals

- 2021, Holzer, J. and L.J. Olson, Precautionary Buffers and Stochastic Dependence in Environmental Policy, *J. Environmental Economics and Management*, v106, <https://doi.org/10.1016/j.jeem.2020.102406>.
- 2020, Gore, M., A. Hübschle, A. Botha, M.A. Ottinger, L.J. Shaffer, B. Coverdale, R. Garbett, R. Harrell, S. Krueger, J. Murrow, L.J. Olson, H.S. Robinson, L. Thompson, L. van den Heever, W. Bowerman, A Conservation Criminology-Based Desk Assessment of Vulture Poisoning in the Great Limpopo Transfrontier Conservation Area, *Global Ecology and Conservation*, <https://doi.org/10.1016/j.gecco.2020.e01076>.
- 2020, Lichtenberg, E. and L.J. Olson, Tariffs and the risk of invasive pest introductions in commodity imports: theory and empirical evidence, *J. Environmental Economics and Management*, <https://doi.org/10.1016/j.jeem.2020.102321>.
- 2018, Lichtenberg, E. and L.J. Olson, The Fruit and Vegetable Import Pathway for Potential Invasive Pest Arrivals. *PLoS ONE* 13(2): e0192280. <https://doi.org/10.1371/journal.pone.0192280>.
- 2014, Haack, R.A., K.O. Britton, G.E. Brockerhoff, J.F. Cavey, L.J. Garrett, M. Kimberley, F. Lowenstein, A. Nuding, L.J. Olson, J. Turner, K.N. Vasilaky, Effectiveness of the International Phytosanitary Standard ISPM No. 15 on Reducing Wood Borer Infestation Rates in Wood Packaging Material Entering the United States, *PLoS ONE*, 9(5): e96611. <https://doi.org/10.1371/journal.pone.0096611>
- 2013, Strutt, A., J.A. Turner, R.A. Haack, L. Olson, Evaluating the Impacts of an International Phytosanitary Standard for Wood Packaging Material: Global and United States Trade Implications, *Forest Policy and Economics*, 27, 54-64. Available online
- 2010, Olson, L.J. and S. Roy, Dynamic Sanitary and Phytosanitary Policy, *Journal of Environmental Economics and Management*, 60(1), 21-30. Available online
- 2008, Olson, L.J. and S. Roy, Controlling a Biological Invasion: A Non-Classical Dynamic Economic Model, *Economic Theory*, 36(3), 453-469
- 2006, Olson, L.J., The Economics of Terrestrial Invasive Species: A Review of the Literature, *Agricultural and Resource Economics Review*, 35(1), 178-194.

- 2005, Just, R.E., #S. Netanyahu and L.J. Olson, Depletion of Natural Resources, Technological Uncertainty, and the Adoption of Technological Substitutes, *Resource and Energy Economics*, 27(2), 91-108
- 2005, Bramoulle, Y. and L.J. Olson, Allocation of Pollution Abatement Under Learning by Doing, *Journal of Public Economics*, 89(9-10), 1935-1960
- 2005, Olson, L.J. and S. Roy, On Prevention and Control of an Uncertain Biological Invasion, *Review of Agricultural Economics (Proceedings)*, 27(3), 491-497
- 2002, Olson, L.J. and S. Roy, The Economics of Controlling a Stochastic Biological Invasion, *American Journal of Agricultural Economics (Proceedings)*, 84(5), 1311-1316
- 2001, Larson, C.E., L.J. Olson and S. Sharma, Optimal Inventory Policies when the Distribution of Demand is Not Known, *Journal of Economic Theory*, 101, 381-300
- 2000, Olson, L.J. and S. Roy, Dynamic Efficiency of Conservation of Renewable Resources Under Uncertainty, *Journal of Economic Theory*, 95(2), 186-214
- 1997, Olson, L.J. and K.C. Knapp, Exhaustible Resource Allocation in an Overlapping Generations Economy, *Journal of Environmental Economics and Management*, 32(3), 277-292
- 1996, Nyarko, Y. and L.J. Olson, Optimal Growth with Unobservable Resources and Learning, *Journal of Economic Behavior and Organization*, 29, 465-491
- 1996, Olson, L.J. and S. Roy, On Conservation of Renewable Resources with Stock-Dependent Return and Non-Concave Production, *Journal of Economic Theory*, 70(1), 133-157
- 1996, Knapp, K.C. and L.J. Olson, Dynamic Resource Management: Intertemporal Substitution and Risk Aversion, *American Journal of Agricultural Economics*, 78, 1004-1014
- 1996, Olson, L.J., Dynamic Economic Models with Uncertainty and Irreversibility: Methods and Applications, *Nonlinear World*, 3, 757-770
- 1995, Knapp, K.C. and L.J. Olson, The Economics of Conjunctive Groundwater Management with Stochastic Surface Supplies, *Journal of Environmental Economics and Management*, 28(3), 340-356, reprinted in: Grafton, R.Q. 2009. *The Economics of Water Resources (International Library of Critical Writings in Economics)*, Cheltenham, Edward Elgar
- 1994, Nyarko, Y. and L.J. Olson, Stochastic Growth when Utility Depends on Both Consumption and the Stock Level, *Economic Theory*, 4, 791-797
- 1992, Conrad, J.M. and L.J. Olson, The Economics of a Stock Pollutant: Aldicarb on Long Island, *Environmental and Resource Economics*, 2, 245-258
- 1992, Dow, Jr., J.P. and L.J. Olson, Irreversibility and the Behavior of Aggregate Stochastic Growth Models, *Journal of Economic Dynamics and Control*, 16, 207-223
- 1991, Nyarko, Y. and L.J. Olson, Stochastic Dynamic Models with Stock-Dependent Rewards, *Journal of Economic Theory*, 55, 161-168
- 1991, Dow, Jr., J.P. and L.J. Olson, An Analytic Solution to a Stochastic Consumption/Saving Problem with Liquidity Constraints, *Southern Economic Journal*, 58: 459-464
- 1990, Olson, L.J., Multivariate Decision-Making Under Risk Aversion, *Journal of Economic Theory*, 50: 193-203
- 1990, Olson, L.J., Environmental Preservation With Production, *Journal of Environmental Economics and Management*, 18: 88-96
- 1990, Olson, L.J., The Search for a Safe Environment: The Economics of Screening and Regulating Environmental Hazards, *Journal of Environmental Economics and Management*, 19: 1-18

- 1989, Olson, L.J., Stochastic Growth with Irreversible Investment, *Journal of Economic Theory*, 47: 101-129
- 1984, Pimentel, D., C. Fried, L.J. Olson, S. Schmidt, K. Wagner-Johnson, A. Westman, A. Whelan, K. Foglia, T. Klein, R. Sobin, and A. Bochner, *Environmental and Social Costs of Biomass Energy*, *BioScience*, 34: 89-94

Published Conference Proceedings

Non-Refereed Conference Proceedings

- 1998, Lichtenberg, E. and L.J. Olson, *Noncooperative and Cooperative Management of an Accumulative Water Pollutant, Conflict and Cooperation on Trans Boundary Water Resources*, (R.E. Just and S. Netanyahu, eds.), Kluwer Academic Publishers
- 1996, Just, R.E., L.J. Olson, and S. Netanyahu, *Resource Depletion, Technological Uncertainty and Adoption of Improved Technology: The Case of Desalination*, in *Security and Sustainability in a Mature Water Economy: A Global Perspective*, Water and Resource Economics Consortium, *Proceedings of an International Workshop*, (J.J. Pigram, ed.)
- 1990, Olson, L.J., *Some Economic Aspects of Risk Assessment*, *Proceedings of a Symposium on Pesticides and Other Toxics: Assessing Their Risk*, (Janet L. White, ed.), 109-119
- 1985, Olson, L.J., *A Dynamic Model of the Atlantic Salmon Fisheries Under Distant and Home Water Harvesting*, *Proceedings of the 1985 International Conference of the System Dynamics Society*, Volume II, 641-650

Conferences, Workshops and Talks

Invited Talks

- 2017, Risk factors for pest interceptions in fruit and vegetable imports and the value of systematics in facilitating international trade, Smithsonian Environmental Research Center, September 21.
- 2017, Risk factors for pest interceptions in fruit and vegetable imports and the value of systematics in facilitating international trade, National Socio-Environmental Synthesis Center, March 7.
- 2017, Optimization in environmental and resource economics, National Socio-Environmental Synthesis Center, January 31.
- 2005, Controlling a Biological Invasion: A Non-classical Dynamic Economic Model, Université Laval, Laval, Quebec, April 15, 2005
- 2003, The Economics of Controlling a Biological Invasion, *Resources for the Future*, June 16, 2003
- 2000, Dynamic Efficiency of Conservation of Renewable Resources Under Uncertainty, University Graduate Faculty of Economics, Oregon State University, May 12, 2000
- 1999, Incentive Contracts for Intertemporal Allocation with Independently Distributed Private Information, Department of Economics, University of Michigan, December 10, 1999
- 1997, On the Economics of Renewable Resource Management Under Uncertainty, Tinbergen Institute, Rotterdam, September 15, 1997

- 1997, Dynamic Efficiency of Conservation of Renewable Resources Under Uncertainty, Department of Economics, University of Michigan, October 17, 1997
- 1996, The Economics of Resource Conservation and Extinction, Department of Economics, University of Guelph, August 26, 1996
- 1994, Exhaustible Resource Allocation in an Overlapping Generations Model, Tinbergen Institute, Rotterdam, May 20, 1994
- 1993, Economic and Information Considerations Regarding the Use of Ancillary Data in Carcinogen Risk Assessment, Institute for Environmental Studies, University of Washington, March 8, 1993
- 1993, Exhaustible Resource Allocation in an Overlapping Generations Model, Department of Economics, University of Washington, March 9, 1993
- 1991, Statistical Decision Theory and Bayesian Models of Economic Decision-Making Under Uncertainty with Applications, Department of Statistics, UC-Riverside, February 5, 1991
- 1991, Optimal Growth with Unobservable Resources and Learning, Department of Economics, University of Illinois, October 17, 1991
- 1991, Optimal Growth with Unobservable Resources and Learning, Department of Agricultural Economics, Purdue University, October 18, 1991
- 1991, Optimal Inventory Policies when the Distribution of Demand is Not Known, Department of Economics, UC-Riverside, October 24, 1991
- 1990, Stochastic Dynamic Resource Models with Stock-Dependent Rewards, UC-Riverside, Graduate School of Management, Feb. 23, 1990
- 1990, Optimal Resource Management with Unobservable Resources and Learning, Department of Economics, California Institute of Technology, October 30, 1990
- 1989, The Economics of Screening and Regulating Potential Carcinogens, Dept. of Soil and Environmental Sciences, UC-Riverside, April 13, 1989
- 1988, Multivariate Decision-Making Under Risk Aversion, Dept. Of Economics, UCLA
- 1987, Choice Over Risky Prospects As Choice Over Induced Distributions on Utility: A Unified Approach to Stochastic Dominance, UC-Riverside, Graduate School of Management

Refereed Presentations

- 2005, On Prevention and Control of an Uncertain Biological Invasion, ASSA Meetings, Philadelphia, January 8, 2005
- 1992, Dynamic Economic Models with Irreversibility and Uncertainty: Methods and Applications, 1st World Congress of Nonlinear Analysts, Tampa, August 19, 1992

Refereed Panels

- 1989, AERE session of ASSA meetings

Non-Refereed Presentations

- 2020, The value of phytosanitary inspection and identification services in facilitating international trade: evidence from the U.S., USDA Interagency Research Forum on Invasive Species, January 16.

- 2011, Trends and Factors that Influence Pest Interception Rates in Wood Packing Materials, 22nd USDA Interagency Research Forum on Invasive Species, Annapolis, MD, January 12, 2011
- 2010, Dynamic Sanitary and Phytosanitary Trade Policy, 4th World Congress of Environmental and Resource Economists, Montreal, Canada, July 2, 2010
- 2006, Economic Aspects of Prevention versus Control of Nonnative Weeds Under Uncertainty, 2006 Annual Conference of the Western Society of Weed Science, Reno, Nevada, March 15, 2006
- 2003, Honor of Henry Y. Wan, Jr., The Economics of Controlling a Biological Invasion, Scientific Conference on International and Development Economics, Cornell University, September 7, 2003
- 2002, The Economics of Controlling a Stochastic Biological Invasion, 2002 Annual Meetings of the American Agricultural Economics Association, Long Beach, July 30, 2002
- 2002, The Economics of Controlling a Biological Invasion, 2002 Meetings of the Canadian Resource and Environmental Economics Study Group, Montreal, Canada, October 19, 2002
- 1998, Dynamic Efficiency of Conservation of Renewable Resources Under Uncertainty, 1998 Winter Meetings of the Econometric Society, Chicago, January 4, 1998
- 1998, Depletion of Natural Resources, Technological Uncertainty, and the Adoption of Technological Substitutes, Conference on Technological and Environmental Major Risks, CIRANO, Montreal, QC, Canada, November 13, 1998
- 1997, Water Quality and Irreversibility, 1997 Meeting of the International Water and Resource Economics Consortium, Annapolis, Maryland, April 14, 1997
- 1997, Dynamic Efficiency of Conservation of Renewable Resources Under Uncertainty, Colloquium on Natural Resources and Environmental Economics, Université Laval, Laval, Quebec, November 8, 1997
- 1994, The Economics of Conjunctive Groundwater Use Under Uncertainty, 1994 Annual Meetings of the Western Economic Association, Vancouver, July 2, 1994
- 1994, Groundwater Management and the Future of Irrigated Agriculture, World Affairs Conference, University of Nebraska, Kearney, October 9, 1994
- 1992, Exhaustible Resource Allocation in an Overlapping Generations Model, Annual Meeting of the Allied Social Science Associations, New Orleans, January 3, 1992
- 1992, The Economics of Conjunctive Groundwater Management with Stochastic Surface Supplies, 11th Pacific Coast Resource Modeling Conference, Berkeley, June 4, 1992
- 1992, Optimal Growth with Unobservable Resources and Learning, Summer Meeting of the Econometric Society, Seattle, June 25, 1992
- 1992, Dynamic Economic Models with Uncertainty and Irreversibility: Methods and Applications, 1st World Congress of Nonlinear Analysts, Tampa, August 19, 1992
- 1992, Exhaustible Resource Allocation in an Overlapping Generations Model, 2nd Annual Meeting of the Canadian Resource and Environmental Economics Study Group, September 27, 1992
- 1992, Economic Considerations and the Use of Ancillary Data in Carcinogen Risk Assessment, 1992 Annual Meeting of the Society for Risk Analysis, San Diego, December 8, 1992
- 1990, Stochastic Dynamic Resource Models with Stock-Dependent Rewards, 6th World Congress of the Econometric Society, Barcelona, Spain, August 27, 1990

- 1990, Optimal Resource Management with Unobservable Resources and Learning, 3rd Interdisciplinary Conference on Natural Resource Modeling, Ithaca, NY, October 13, 1990
- 1989, Some Economic Aspects of Risk Assessment, Symposium on Pesticides and Other Toxics: Assessing Their Risk, UC-Riverside, June 17, 1989
- 1989, The Search for Environmental Quality: The Economics of Screening and Regulating Environmental Hazards, 1989 Western Economics Association International Annual Conference, Lake Tahoe, California, June 20, 1989

Non-Refereed Posters

- 2020. Thanicha Ruangmas (presenter), Lars J Olson, Lyndsay Sumner, Asjed Ahmed Tufail, Mairead Whitford Jones, Adam Johnson, Patrick Quinn and Sydney Weaver, Using Global Fishing Watch to Track Heterogeneous Commercial Fishers' Responses to Changes in Sea Surface Temperature, SI24A - Responses of Fishing Communities to Ocean Change Posters, American Geophysical Union Ocean Sciences Meeting, San Diego, CA, February 18, 2020. (FIRE stream poster accepted for presentation at AGU Ocean Sciences but not presented)
- 2019, Tongbi Tu (presenter), Sankarasubramanian Arumugam, Xiaoli Dong, Caitlin Dyckman, Theodore Grantham, Lars J Olson, Benjamin L Ruddell, Nicola Ulibarri and Albert Ruhi, Sustainable Water Management in the Lower Colorado Basin: Influence of Climate and Regulatory Context on the Ability to Meet Human and Environmental Water Needs, H23N-2089 Managing and Modeling Tradeoffs and Challenges of Environmental and Low Flows in the 21st Century I Posters, American Geophysical Union Fall Meeting, San Francisco, December 10, 2019.
- 2018, Page, I.B. and L.J. Olson. Integrating Large Cohorts of First-Year Undergraduates into Research Efforts: Lessons from the University of Maryland's FIRE Program, ED43G Educator/Student Programs Promoting Authentic Scientific Research II Posters, American Geophysical Union Fall Meeting, Washington, D.C., December 13, 2018.
- 2018, Page, I.B., L.J. Olson, G. Aggarwal, M. Fachler, J. Filla, A. Foster, S. Jackson, R. Morris, I. Nyboer and J. Tan, Modeling the Determinants of Agricultural Groundwater Extraction in the Ogallala Aquifer, H23J Groundwater Sustainability Studies: Integrating Monitoring, Modeling, and Policy IV Posters, American Geophysical Union Fall Meeting, Washington, D.C., December 11, 2018.
- 2018, Faculty mentor with I.B. Page for: Tan, J., G. Aggarwal, J. Filla and I Nyboer, Predicting Groundwater Usage with Machine Learning Methods and Traditional Statistical Techniques: An Application to the Ogallala Aquifer, ED13E Undergraduate Earth, Atmospheric, Ocean, and Space Science Research and Outreach Posters, American Geophysical Union Fall Meeting, Washington, D.C., December 10, 2018.

Workshops

- 2010, Economics, Sanitary and Phytosanitary Policy and Transparency, USDA Economic Research Service Workshop on Improving Transparency of Nontariff Measures in Food and Agricultural Trade, Washington, DC, November 19, 2010

- 2006, Policy Instruments for Prevention of Invasive Species in Strategic International Trade Relationships, Program for Research on the Economics of Invasive Species Management Review and Workshop, Economic Research Service, USDA, Washington, DC, October 19, 2006
- 2005, International Trade and the Economics of Invasive Species Prevention and Control, Program for Research on the Economics of Invasive Species Management Review and Workshop, Economic Research Service, USDA, Washington, DC, October 20, 2005
- 2004, Randomly Introduced Biological Invasions: The Economics of Prevention and Control, Program for Research on the Economics of Invasive Species Management Review and Workshop, Washington, DC, August 19, 2004
- 1993, Exhaustible Resource Allocation in an Overlapping Generations Model, California Workshop on Environmental and Resource Economics, Santa Barbara, May 8, 1993

Other

- 2013, Proposal Strategies for USDA, NSF Economics and Related Funding Opportunities, National Socio-Environmental Synthesis Center, Annapolis, Maryland, February 28, 2013
- 2010, The Value of Systematics and Identification Services in Facilitating International Trade, Federal Interagency Committee on Invasive Terrestrial Animals and Pathogens, Washington, DC, October 13, 2010
- 2005, Policy Instruments for Prevention of Invasive Species in Strategic International Trade Relationships, 2005 Program for Research on the Economics of Invasive Species Management Organizational Meeting, Economic Research Service, USDA, Washington, DC, October 19, 2005

Sponsored Research and Programs

- 2022-2023, Erik Lichtenberg, Economic Analysis of Agricultural Quarantine Inspection User Fees, USDA-APHIS, \$94,501, co-PI (50%)
- 2020-2021, Erik Lichtenberg, Economic Analysis of Agricultural Quarantine Inspection User Fees, USDA-APHIS, \$140,650, co-PI (50%)
- 2013, Migration and Employment in Nepal, International Food Policy Research Institute, \$28,179, PI
- 2013, Steven A. Gabriel and Elisabeth Gilmore, Renewable Energy from Wastewater: A Synthesis of the Agricultural, Energy, & Transportation Sectors & Environmental Tradeoffs, SESYNC Ventures Program, 2013-2014, \$110,000, Co-PI
- 2012, Frank Coale and Doug Parker, Mid-Atlantic Water Program, USDA, CSREES, 2012-2013, \$2,359,891, Co-PI
- 2011, Doug Parker, Water Quality Trading Guidelines: Development Determination and Measurement of Parameters in the Ecosystem Marketplace, USDA, Natural Resource Conservation Service, 2011-2012, \$175,000, PI
- 2010, Economic Resilience Modeling, Robust Analytics, 2010-2011, \$22,147, PI
- 2010, Doug Lipton and Geret DePiper, U.S. Department of Commerce. NOAA. National Marine Fisheries Service - Sea Grant Marine Resource Economics Graduate Fellowship, 2010-2012, \$64,166, Co-PI

- 2008, Steve Kasperski, Economics and Fisheries Policy for Multi-species Fisheries with Biological and Technological Interdependence, U.S. Department of Commerce. NOAA. National Marine Fisheries Service - Sea Grant Marine Resource Economics Graduate Fellowship, 2008-2010, \$64,164, PI
- 2008, Erik Lichtenberg, Risk Factors for Invasive Pest Introductions in Commodity Imports, USDA, Economic Research Service, PREISM, 2008-2010, \$172,000, PI
- 2005, Erik Lichtenberg, The Economic Value of the Beltsville Agricultural Research Center's Systematics Program, USDA, Beltsville Agricultural Research Center, 2005-2008, \$347,240, PI
- 2005, Santanu Roy, Policy Instruments for Prevention of Invasive Species in Strategic International Trade Relationships, USDA, Economic Research Service, PREISM, 2005-2009, \$157,000, PI
- 2003, Santanu Roy, Randomly Introduced Biological Invasions: The Economics of Prevention and Control, USDA, Economic Research Service, PREISM, 2003-2006. \$119,000, PI
- 2001, The Economics of Controlling a Biological Invasion, University of Maryland, Graduate Research Board Summer Research Award, \$8,500, PI
- 2001, The Economics of Controlling Invasive Species in Maryland, Maryland Agricultural Experiment Station Competitive Grant, \$24,313, PI
- 2001, Analysis of Marine Anglers' Expenditure Data, U.S. Department of Commerce. NOAA. National Marine Fisheries Service, \$26,505, PI
- 1996, The Economics of Resource Conservation and Extinction, University of Maryland, Graduate Research Board Summer Research Award, (\$7250, declined, superseded by NSF grant)
- 1996, The Economics of Conservation, Extinction, and Sustainability, National Science Foundation, 1996-1998, \$71,344, PI
- 1991, K.C. Knapp, Economics of Groundwater Management with Uncertainty and Learning, UC Water Resources Center, 1991-1993. \$31,010, PI
- 1990, Economics and the Control of Agricultural Groundwater Contaminants, Giannini Foundation, 1990-1991, \$12,633, PI
- 1990, C. Cranor, C. Byus, A. Chang, and D.V. Gokhale, Evidentiary Procedures for Carcinogen Risk Assessment, National Science Foundation, 1990-1993, \$71,660, Co-PI
- 1988, Fishery Regulation Under Incomplete Stock Information, University of California-Riverside Regents' Faculty Fellowship, 1988-1989, \$1,400, PI
- 1987, C. Cranor, C. Byus, A. Chang, and D.V. Gokhale, UC Riverside Carcinogen Risk Assessment, University of California Toxic Substances Program, 1987-1989. \$230,000, Co-PI
- Date not known, Field Research Travel, University of California-Riverside Academic Senate, 3 grants totaling, \$1,938
- Date not known, Intramural Research, University of California-Riverside Academic Senate, 1 grant, \$980

Unfunded Proposals Submitted (my funding credit %)

- 2022, Quantifying Impacts of Climate-smart Agriculture Practices on Cropland Emissions (CAPCE), USDA-NIFA, \$58,043,875, Co-PI (5%)

- 2022, AI Institute: Artificial Intelligence-enabled Decision-making for Resilient Agroecosystem Management (AII-DREAM) in Diverse Hydro-climate and Physiographic Regions, NSF, \$19,999,968, Co-PI (2.5%)
- 2020, DISES: Managing widespread species invasions in social-environmental systems with feedback, NSF (sub-contract from U Colorado), \$258,735, Co-PI (33.3%)

Fellowships, Gifts and Other Funded Research

Fellowships

- 1985, National Science Foundation Graduate Fellow, 1981-1983, 1984-1985
- 1985, A.D. White Graduate Fellowship, Cornell University, 1981-1983, 1984-1985

TEACHING, MENTORING AND ADVISING

Courses Taught

- AREC753, 1993-1994, 6 students
- ECON785, 1994-1995, 9 students
- ECON785, 1995-1996, 12 students
- ECON785, 1996-1997, 9 students
- ECON785, 1997-1998, 9 students
- ECON785, 1998-1999, 7 students
- ECON785, 1999-2000, 7 students
- ECON785, 2000-2001, 8 students
- ECON785, 2001-2002, 6 students
- ECON785, 2002-2003, 9 students
- AREC620, 2003-2004, 13 students
- AREC620, 2004-2005, 12 students
- AREC620, 2005-2006, 12 students
- AREC620, 2006-2007, 15 students
- AREC620, 2007-2008, 14 students
- AREC620, 2008-2009, 15 students
- AREC620, 2009-2010, 10 students
- AREC620, 2010-2011, 9 students
- AREC620, 2011-2012, 8 students
- AREC620, 2012-2013, 10 students
- AREC620, 2013-2014, 8 students
- AREC620, 2014-2015, 8 students
- AREC620, 2015-2016, 8 students
- AREC620, 2016-2017, 12 students
- AREC620, 2017-2018, 9 students
- AREC620, 2018-2019, 3 students
- AREC620, 2019-2020, 8 students
- AREC620, 2020-2021, 7 students
- AREC620, 2021-2022, 9 students
- AREC620, 2022-2023, 8 students
- AREC610, 2014-2015, 8 students
- AREC432, 1993-1994, 21 students
- AREC432, 1994-1995, 42 students (taught jointly with Professor Erik Lichtenberg)
- AREC240, 1996-1997, 56 students
- AREC240, 1997-1998, 52 students
- AREC240, 1998-1999, 58 students
- AREC240, 1999-2000, 52 students
- AREC240, 2000-2001, 58 students
- AREC240, 2001-2002, 54 students
- AREC250, 2003-2004, 54 students
- AREC250, 2004-2005, 56 students

- AREC250, 2005-2006, 56 students
- AREC250, 2006-2007, 58 students
- AREC250, 2007-2008, 63 students
- AREC240, 2013-2014, 57 students
- AREC241, 2014-2015, 69 students (I-Series, DSHS)
- AREC241, 2015-2016, 68 students (I-Series, DSHS)
- AREC241, 2019-2020, 69 students (I-Series, DSHS)
- AREC241, 2020-2021, 67 students (I-Series, DSHS)
- AREC386, 2021-2022, 2 students
- AREC386, 2022-2023, 2 students
- AREC399, 2015-2016, 1 student
- ENSP386, 2019-2020, 1 student
- ENSP386, 2021-2022, 1 student
- HNUH258A, 2021-2022, 56 students (I-Series, Scholarship in Practice)
- HNUH258A, 2022-2023, 48 students (I-Series, Scholarship in Practice)
- TLTC399, 2022-2023, 2 students

Teaching Innovations

Major Programs Established

- 2011, Global Poverty Minor (founding Director)
- 2014, First Year Innovation and Research Experience: Sustainability Analytics (founding faculty)
- 2020, Information and Power University Honors Cluster (founding lead faculty with James Archsmith)

Course or Curriculum Development

- 2022-23, Carillon Community: Harvest, AREC280, Harvesting Big Data to Understand Agriculture and Climate Change (I-Series, Scholarship in Practice)
- 2020-22, HONR258A, Harvesting Big Data to Understand Agriculture and Climate Change (I-Series, Scholarship in Practice)
- 2015, Collaborative Classroom Environmental Data Visualization
- 2014, AREC241, Environment, Economics and Policy (I-Series)

Advising: Curricular

Undergraduate

- 2022-23, primary academic advisor for 16 ENSP-Environmental Economics majors
- 2021-22, primary academic advisor for 82 AREC majors
- 2021-22, primary academic advisor for 16 ENSP-Environmental Economics majors
- 2020-21, primary academic advisor for 9 ENSP-Environmental Economics majors
- 2019-20, primary academic advisor for 9 ENSP-Environmental Economics majors

Advising: Research or Clinical

Undergraduate

- Summer 2021, M. Campbell, SOARE Summer Opportunities in Agricultural Research and the Environment, a partnership between the College of Agriculture and Natural Resources (AGNR), The Big Ten Alliance Summer Research Opportunities Program (SROP), and the UMD Graduate School. (DEIR)
- Spring 2012, K. Milligan, The relationship between socio-economic and ecological factors and species decline and/or recovery, NSF Socio-Environmental Synthesis Center Internship Program

Master's

- Sum I 2019, Tihitina Andarge, June 25, 2019, committee member
- Spring 2018, Jun Zhang, May 16, 2018, committee co-chair
- Spring 2018, Andrew Rosenberg, March 15, 2018, committee co-chair
- Fall 2016, Youpei Yan, committee member
- Sum II 2016, Kohei Ueda, August 19, 2016, committee member
- Sum I 2014, Seksun Moryadee, June 16, 2014, committee member
- Spring 2013, Sang Won Yoon, May 14, 2013, committee member
- Fall 2011, Haewon McJeon, September 8, 2011, committee member
- Fall 2009, Dongquon Shen, October 19, 2009, committee member
- Spring 2009, Jorge Holzer, May 21, 2009, committee co-chair
- Fall 2008, Stephen Kasperski, December 8, 2008, committee co-chair
- Spring 2008, Michele Baggio, April 30, 2008, committee co-chair
- Fall 2007, Chad Lawley, October 30, 2007, committee co-chair
- Fall 2004, Gregmar Galinato, December 6, 2004, committee member
- Fall 2004, Andres Ulloa, December 21, 2004, committee member
- Spring 2002, Craig Landry, April 18, 2002, committee member
- Spring 2002, Hojeong Park, February 19, 2002, committee chair
- Fall 2001, Oscar Melo, August 30, 2001, committee member
- Spring 2000, Tulika Narayan, March 31, 2000, committee chair
- Spring 2000, Gustavo Anriquez, May 24, 2000, committee member
- Fall 1999, Fabrizio Bresciani, October 29, 1999, committee member
- Spring 1999, Camilo Sarmiento, February 5, 1999, committee member
- Spring 1999, Oscar Cristi, March 2, 1999, committee chair
- Spring 1999, Nancy Bergeron, March 31, 1999, committee chair
- Fall 1998, Lars Anwandter, September 18, 1998, committee member
- Spring 1998, Javier Cuervo, March 6, 1998, committee chair
- Fall 1997, Ana Maria Ibanez, August 14, 1997, committee member
- Fall 1997, Jin Kyo Suh, December 22, 1997, committee member
- Sum II 1997, Tim Thomas, July 14, 1997, committee member
- Spring 1997, Tony Penn, February 20, 1997, committee member
- Spring 1997, Elena Irwin, April 24, 1997, committee member

- Spring 1997, Claudia Ocana, May 2, 1997, committee member
- Spring 1997, John Curtis, May 8, 1997, committee member
- Fall 1996, Pam Dunn, December 12, 1996, committee member
- Fall 1996, Siddhartha Mitra, December 12, 1996, committee member
- Sum I 1996, Sinaia Netanyahu, June 19, 1996, committee member
- Fall 1994, Oh Sang Kwon, December 12, 1994, committee chair
- Spring 1994, Ellen Post, February 18, 1994, committee chair

Doctoral (date, student, degree institution, defense date, placement, committee role)

- Ongoing, Alexandre Perrault, UMD, committee chair
- Summer 2020, Haoluan Wang, UMD, July 20, 2020, Ph.D. prospectus defense, committee member
- Spring 2020, Tihitina Andarge, UMD, April 17, 2020, U. Massachusetts-Amherst, committee member
- Fall 2019, Yoanna Kraus Elsin, UMD, October 14, 2019, committee member
- Summer 2019, Edith Laget, UMD (Economics), July 16, 2019, Dean's representative
- Summer 2019, Tihitina Andarge, UMD, June 25, 2019, Ph.D. prospectus defense, committee member
- Spring 2019, Jun Zhang, UMD, March 26, 2019, Renmin University, China, co-chair with Andrew Sweeting
- Spring 2019, Andrew Rosenberg, UMD, March 12, 2019, USDA Economic Research Service, co-chair with David Newburn
- Fall 2017, John Roberts, UMD, December 18, 2017, Commodity Futures Trading Commission, committee member
- Summer 2017, Daniel Voica, UMD, June 28, 2017, Massey University, New Zealand, committee member
- Spring 2017, Ziyang Yang, UMD, March 30, 2017, Xiamen University, China, committee member
- Fall 2016, Youpei Yan, UMD, Ph.D. prospectus defense, committee member
- Fall 2016, Elina Page, UMD, October 26, 2016, USDA-Economic Research Service, committee member
- Spring 2016, Monica Saavoss, UMD, April 22, 2016, USDA-Economic Research Service, committee member
- Fall 2014, Michael Taylor, UMD, November 7, 2014, University of Nevada – Reno, committee member
- Fall 2014, Seksun Moryadee, UMD (Civil and Environmental Engineering), December 3, 2014, Dean's representative
- Sum I 2014, Sang Won Yoon, UMD, June 5, 2014, University of Wisconsin – Stevens Point, committee member
- Spring 2014, Lauren Deason, UMD (Economics), May 14, 2014, International Food Policy Research Institute (IFPRI), Dean's representative
- Spring 2013, Tarik Chfadi, UMD, May 30, 2013, Joint Institute for Food Safety and Applied Nutrition (JIFSAN), UMD, committee member

- Spring 2012, Michele Baggio, UMD, ETH Zurich/University of Connecticut, co-chair with Erik Lichtenberg
- Spring 2012, Haewon McJeon, UMD (Public Policy), March, 29, 2012, Joint Global Change Research Institute, Dean's representative
- Fall 2011, Sauleh Siddiqui, UMD (Civil and Environmental Engineering), September 12, 2011, Johns Hopkins University, Dean's representative
- Spring 2011, Steve Kasperski, UMD, National Marine Fisheries Service, Seattle, co-chair with Richard Just
- Spring 2010, Anmol Ratan, UMD, January 20, 2010, Monash University, Australia, committee member
- Spring 2010, Jorge Holzer, UMD, Maryland Department of Natural Resources/University of Maryland, co-chair with Ted McConnell
- Spring 2010, Niti Bhutani, AREC, April 14, 2010, Delhi University, committee member
- Fall 2009, Lucija Muehlenbachs, UMD, October 29, 2009, Resources for the Future/University of Calgary, committee member
- Spring 2009, Chad Lawley, UMD, University of Manitoba, co-chair with Erik Lichtenberg
- Sum II 2008, Paramita Sinha, UMD, July 11, 2008, RTI International, committee member
- Fall 2007, Casey Delhotal, UMD (Public Policy), November 13, 2007, U.S. Department of Energy, Dean's representative
- Fall 2007, Oscar Melo, UMD, December 7, 2007, Ponticia Universidad Catolica de Chile, Santiago Chile, committee member
- Spring 2007, Nancy Bergeron, UMD, Conference Board of Canada/Transport Canada, committee chair
- Fall 2006, Gregmar Galinato, UMD, August 10, 2006, Washington State University, committee member
- Spring 2006, Oscar Cristi, UMD, Universidad del Desarrollo, Chile, committee chair
- Fall, 2005, Gustavo Anriquez, UMD, FAO, Rome, Italy, committee member
- Sum II 2005, Cristian Pardo, UMD (Economics), July 5, 2005, Saint Joseph's University, Dean's representative
- Spring 2004, Craig Landry, UMD, January 23, 2004, East Carolina University, committee member
- Spring 2004, Conrad Choiniere, UMD, May 17, 2004, U.S. Food and Drug Administration, committee member
- Spring 2003, Hojeong Park, UMD, Korea Energy Economics Institute/Korea University, Seoul, Korea, committee chair
- Spring 2002, Tulika Narayan, UMD, Abt Associates, committee chair
- Fall 2001, Claudia Ocana, UMD, November 16, 2001, Southwest Texas University, committee member
- Spring 2001, Rania Al Mashat, UMD (Economics), February 7, 2001, International Monetary Fund (IMF), Dean's representative
- Fall 2000, Andrew Sunil Rajkumar, UMD (Economics), October 26, 2000, World Bank, Dean's representative
- Fall 1998, Paul de Hek, Tinbergen Institute, Erasmus University, Rotterdam, Netherlands, December 11, 1998, Erasmus University, Rotterdam, Netherlands, external examiner

- Spring 1998, Hassan Bencheekroun, University of Laval, Canada, April 24, 1998, Florida Atlantic University/McGill University, external examiner
- Sum II 1997, Fritz Laux, UMD (Economics), July 2, 1997, Dean's representative
- Spring 1997, Rob Hicks, UMD, National Marine Fisheries Service, committee member
- Spring 1997, Brian Roe, UMD, Ohio State University, committee member
- Spring 1996, Oh Sang Kwon, UMD, Seoul National University, committee chair
- Spring 1996, Margaret Forsyth, University of Guelph, Canada, University of Waterloo, Ontario, Canada, external examiner
- Spring 1995, Ellen Post, UMD, Abt Associates, committee chair
- Spring 1990, Hooshang Talebi Habibabadi, UC Riverside, Dean's representative

Mentorship

- Fall 2018-present, Jing Cai, Faculty mentor
- Spring 2022-present, Neslihan Uler, Faculty mentor
- Fall 2016-Fall 2017, Fall 2018-2019, Jorge Holzer, Faculty mentor
- Fall 2013-Fall 2017, Snaebjorn Gunnsteinsson, Faculty mentor
- Spring 2018-Spring 2019, Alexandre Perrault, Ph.D. qualifying paper mentor
- Winter 2015-Fall 2016, Boya Liu, Ph.D. qualifying paper mentor
- Spring 2014-Spring 2015, A. Rosenberg, Ph.D. qualifying paper mentor
- Fall 2013, Lint Barrage, AREC Assistant Professor, Faculty mentor
- Spring 2012, A. Newman, Ph.D. qualifying paper mentor
- Spring 2013, C. Wichman, Ph.D. qualifying paper mentor
- Fall 2005, Spring 2009, Carol McAusland, Faculty mentor

Other Teaching Activities

- 2023-, Carillon Faculty Fellow
- 2020-2023, Lead Faculty Fellow, University Honors (Information and Power cluster)
- 2015-present, Faculty Collaborator - Sustainability Analytics First Year Innovation and Research Experience

SERVICE AND OUTREACH

Editorships, Editorial Boards and Reviewing Activities

Editorships

- 1996 - 1999, Associate Editor, Journal of Environmental Economics and Management

Editorial Boards

- 2001 - 2004, Journal of Environmental Economics and Management, Editorial Council, 1994-1995

Reviewing Activities for Journals and Presses

- Reviewer, Annals of Operations Research
- Reviewer, Agricultural and Resource Economics Review
- Reviewer, American Economic Review
- Reviewer, American Journal of Agricultural Economics
- Reviewer, Annals of Regional Science
- Reviewer, Australian Journal of Agricultural and Resource Economics
- Reviewer, Biological Invasions
- Reviewer, California Agriculture
- Reviewer, Canadian Journal of Economics
- Reviewer, Choices
- Reviewer, Contemporary Policy Issues
- Reviewer, Ecological Applications
- Reviewer, Ecological Economics
- Reviewer, Econometrica
- Reviewer, Economic Theory
- Reviewer, Ecosphere
- Reviewer, Environmental and Resource Economics
- Reviewer, Environmental Economics and Policy Studies
- Reviewer, European Economic Review
- Reviewer, European Review of Agricultural Economics
- Reviewer, Finnish Economic Papers
- Reviewer, Forestry: An International Journal of Forest Research
- Reviewer, International Economic Journal
- Reviewer, International Economic Review
- Reviewer, Journal of Agricultural and Resource Economics
- Reviewer, Journal of Agricultural, Biological and Environmental Statistics
- Reviewer, Journal of Applied Ecology
- Reviewer, Journal of Applied Econometrics
- Reviewer, Journal of the Association of Environmental and Resource Economists
- Reviewer, Journal of Economic Dynamics and Control
- Reviewer, Journal of Economic Theory
- Reviewer, Journal of Environmental Economics and Management
- Reviewer, Journal of Futures Markets
- Reviewer, Journal of Political Economy
- Reviewer, Journal of Population Ecology
- Reviewer, Journal of Public Economics
- Reviewer, Journal of the American Statistical Association
- Reviewer, Letters in Spatial and Resource Sciences
- Reviewer, Natural Resource Modeling
- Reviewer, Nature: Plants
- Reviewer, PLOS ONE
- Reviewer, Resource and Energy Economics

- Reviewer, Scandinavian Journal of Economics
- Reviewer, Southern Economic Journal
- Reviewer, Water Resources Research
- Reviewer, Cambridge University Press
- Reviewer, McGraw Hill Publishers
- Reviewer, World Scientific Publishing Company

Reviewing Activities for Agencies and Foundations

- 2022, Reviewer, Israeli Science Foundation
- 2018, Reviewer, Netherlands Organisation for Scientific Research (NWO) in collaboration with The Indonesian Ministry of Research, Technology and Higher Education. Science for Global Development.
- 2011, Reviewer, The Bank of Sweden Tercentenary Foundation.
- 2008, Reviewer, USDA, ERS, Program of Research on the Economics of Invasive Species Management.
- 1997, 2005, Reviewer, Social Sciences and Humanities Research Council of Canada (SSHRC).
- 2002, Reviewer, National Institutes for Water Resources/USGS National Competitive Grant Program.
- 1995, Reviewer, Binational Agricultural Research and Development Fund (BARD).
- 1994, Reviewer, Maryland Department of Natural Resources.
- 1992, Review Panel Chair, UC Toxic Substances Program.
- 1992, Reviewer, National Sea Grant College Program.
- 1990, Reviewer, UC Water Resources Center.

Committees, Professional & Campus Service

Campus Service - Department

- 2019-present, Director of Undergraduate Studies
- 2019-present, Member, Assistantship/Teaching Committee
- 2019-present, Member, Scholarship Committee
- 2020-present, Dept. Liaison, Teaching and Learning Transformation Center
- 2022, Chair, Lecturer and Assistant Director of Undergraduate Studies Search Committee
- 2022, Member, Ad hoc Committee on Department Funding
- 2021-2022, Chair, Faculty Advisory Committee
- 2019-2021, Member, Faculty Advisory Committee
- 2020-2021, Chair, APT subcommittee (Jing Cai)
- 2020-2021, Member, APT subcommittee (Ken Leonard)
- 2018-2019, Member, APT subcommittee (Jorge Holzer)
- 2017, Chair, APT subcommittee (Josh Linn)
- 2017 - 2018, Member, APT subcommittee (David Newburn)
- 2017, Member, APT subcommittee (Erich Battistin)
- 2016 - 2017, Chair, APT subcommittee (Pamela Jakiela)

- 2015 - 2016, Chair, Faculty Search Committee
- 2015 - 2016, Member, Graduate Committee
- 2014 - 2015, Chair, Faculty Search Committee
- 2014 - 2015, Member, Department Chair Search Committee
- 2005 - 2008, Member, Faculty Search Committee
- 2006 - 2008, Member, Graduate Committee
- 2003 - 2005, Member, Undergraduate Committee
- 2004 - 2006, Member, Graduate Qualifying Examination Committee
- 2001 - 2002, Director of Graduate Studies,
- 2001 - 2002, Member, Assistantship Committee
- 2001 - 2002, Member, Teaching Coordination Committee,
- 2000 - 2002, Chair, Computer Oversight Committee
- 2000 - 2002, Member, Graduate Committee
- 2000, Chair, Department Chair Search Committee
- 2000, Chair, Graduate Qualifying Examination Committee
- 1999 - 2000, Chair, Faculty Advisory Committee
- 1998 - 1999, Member, Undergraduate Committee and Undergraduate Advisor
- 1998 - 2000, Member, Food Safety Faculty Search Committee
- 1998 - 2002, Member, Computer Oversight Committee
- 1997 - 2000, Member, Faculty Advisory Committee
- 1997 - 2000, Member, Graduate Qualifying Examination Committee
- 1997 - 1998, Director of Graduate Studies
- 1997 - 1998, Member, Assistantship Committee
- 1997 - 1998, Member, Teaching Coordination Committee
- 1995 - 2003, Member, Department of Economics Field Examination Committee (Environmental and Natural Resource Economics)
- 1995 - 1998, Member, Graduate Committee
- 1994 - 2000, Library liaison to UMCP libraries
- 1994 - 1995, Chair, Library Committee
- 1994 - 1995, Member, Recruitment Committee

Campus Service - College

- 2021-present, Member, AGNR Alumni Collaboration Team
- 2019-present, Member, AGNR PCC Committee
- 2019-present, Member, ENSP Steering Committee
- 2019-present, Primary faculty advisor, ENSP: Environmental Economics
- 2020-2021, Member, Faculty Research Council
- 2014, Member, Assistant to Dean Search Committee
- 2012, Member, Associate Dean Review Committee
- 2005 - 2006, Chair, College. Appointment, Promotion and Tenure (APT) Committee
- 2004 - 2006, Member, College, Appointment, Promotion and Tenure (APT) Committee
- 2000, Member, Associate Dean Review Committee
- 1999 - 2000, Chair, Curricula and Courses (PCC) Committee, Programs

- 1997 - 2000, Member, Programs, Curricula and Courses (PCC) Committee
- 1999, Member, Faculty and Staff Awards Committee

Campus Service - University

- 2021, Member, First-Year Innovation and Research Experience (FIRE) APT committee (Cristina Risco, Addiction Science)
- 2021, Kulkarni Graduate Summer Research Fellowship Review Committee
- 2021, Member, Dean of the College of Agriculture and Natural Resources Review Committee
- 2014-present, Founding Faculty Leader, First Year Innovation and Research Experience: Sustainability Analytics
- 2020, Director, Global Poverty Minor
- 2015 - 2016, 2017-2019, Member, Provost's Academic Planning Advisory Council
- 2011 - 2016, Founding Director, Global Poverty Minor
- 2010 - 2016, Member, Global Studies Minors Committee
- 2010 - 2015, Member, I-Series General Education Faculty Review Board
- 2014 - 2015, FIRE Research Educator Search Committee
- 2014 - 2015, Member, Associate Provost and Dean of Undergraduate Studies Search Committee
- 2013 - 2014, Member, Campus APT Appeals Committee
- 2012, Member, Associate Dean for Undergraduate Studies Search Committee
- 2007 - 2009, Member, Climate Action Plan Workgroup

Other Non-University Committees, Memberships, Panels, etc.

- Member, Understanding causal pathways within complex water management systems working group, National Socio-Environmental Synthesis Center, 2018-2020.
- Member, Globalization of the live plant trade: Informing efficient strategies for reducing non-native pest invasion risk working group, National Socio-Environmental Synthesis Center, 2013-2018.
- 2002 - 2017, 2023 Member, American Agricultural Economics Association
- 1987 - 2017, Member, Association of Environmental and Resource Economists
- 1985 - 2017, Member, American Economic Association
- 1990 – 2003, 2008, Member, Econometric Society
- 1995 - 2000, Member, Society for the Advancement of Economic Theory
- 1992 - 1996, Member, Resource Policy Consortium
- 1992 - 2003, Member, Society for the Promotion of Economic Theory
- 1989 - 1994, Member, Western Economic Association
- 1986 - 1994, Member, Resource Modeling Association
- 1990, Representative, UC Toxic Substances Program Executive Committee Meeting, May 4

Historical Committees, Professional & Campus Service (10+ years ago)

- 1992 - 1993, Chair, Staff personnel committee, University of California, Riverside
- 1992 - 1993, Member, T.A. planning committee, University of California, Riverside

- 1990 - 1992, Member, Staff personnel committee, University of California, Riverside
- 1990 - 1992, Member, Environmental science graduate program development committee, University of California, Riverside
- 1989 - 1990, Member, Resource economics faculty search committee, University of California, Riverside
- 1989 - 1990, Member, Equipment committee, University of California, Riverside
- 1989 - 1990, Member, Graduate School of Management faculty search committee, University of California, Riverside
- 1989 - 1990, Member, Department of Economics faculty search committee, University of California, Riverside
- 1988 - 1989, Member, Resource economics faculty search committee, University of California, Riverside
- 1988 - 1989, Member, Graduate School of Management faculty search committee, University of California, Riverside
- 1988 - 1993, Library liaison, University of California, Riverside
- 1987 - 1988, Member, Graduate Economics Group, core curriculum committee, University of California, Riverside
- 1987 - 1988, Chair, Social committee, University of California, Riverside
- 1986 - 1987, Member, Social committee, University of California, Riverside
- 1993, Chair, Ad hoc tenure review committee, University of California, Riverside

External Service and Consulting

Community Engagements, Local, State, National, International

- 2007, Environmental Protection Agency Workshop on Valuation for Environmental Policy: Session III, Invasive Species, Arlington, VA, Discussant, April 23, 2007
- 2005, Environmental Protection Agency Workshop on Economic Impacts of Aquatic Invasive Species, Washington, D.C., Invited Participant, July 20-21, 2005
- 2003, Advisory, Maryland Nutria Panel, Member, Maryland Nutria Panel, 2002-2003, (Interagency advisory panel on Nutria control: US Fish and Wildlife Service, Maryland Dept. of Natural Resources, APHIS)

International Activities

- 2013, 2nd Research Assessment Exercise, University of Oulu, Finland, Review panel member

AWARDS, HONORS AND RECOGNITION

Research Fellowships, Prizes and Awards

- 2020, Dean Gordon Cairns Award for Distinguished Creative Work and Teaching in Agriculture, University of Maryland, College of Agriculture and Natural Resources
- 1981, Philip Lee Honor Award for Outstanding Scholarly Achievement, Eckerd College
- 1979, Stanley Zyzniewski Undergraduate Prize, Southern Conference on Slavic Studies