
Terrance M. Hurley

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Education

1995 Ph.D., Economics, Iowa State University
1990 B.A., California State University, Sacramento
Major: Economics Minor: Mathematics

Academic Positions Held

2015 – Austin A. Dowell Professor of Applied Economics
2012 – Professor, Applied Economics, University of Minnesota, Twin Cities
2012 – 2015 Visiting Scientist, Commonwealth Scientific and Industrial Research Organisation (CSIRO) Ecosystem Sciences, Canberra, Australia
2011 – Associate Director, International Science & Technology Practice & Policy, University of Minnesota, Twin Cities
2003 – 2012 Associate Professor, Applied Economics, University of Minnesota, Twin Cities
2006 – 2009 Director of Graduate Studies, Applied Economics Graduate Program, University of Minnesota, Twin Cities
1999 – 2003 Assistant Professor, Applied Economics, University of Minnesota, Twin Cities
1998 – 1999 Assistant Professor, Environmental and Natural Resource Economics, University of Rhode Island
1996 – 1998 Visiting & Associate Scientist, Center for Agricultural and Rural Development, Iowa State University
1995 – 1996 Post-Doctoral Research Associate, Department of Economics, Iowa State University
1993 – 1994 Instructor, Department of Economics, Drake University & Iowa State University
1990 – 1995 Research & Teaching Assistant, Department of Economics, Iowa State University

Instructional Activity

Classes Taught

Applied Microeconomic Analysis of Game Theory and Information. Spring 2015 (Enrollment: 25)

Microeconomic Analysis of Production & Choice Under Uncertainty. Fall 2014 (Enrollment: 24), Fall 2013 (13), Fall 2012 (21), Fall 2011 (25)
 Graduate Research Development Seminar. Spring 2014 (Enrollment: 8).
 Discussions in Introduced Species and Genotypes: Fall 2010 (with Frelich; Enrollment: 7)
 Microeconomic Analysis: Fall 2009 (Enrollment: 30), Fall 2008 (23)
 Risk Analysis Modeling for Introduced Species and Genotypes: Winter 2012 (with Andow, Johnson, & Venette; Enrollment: 5), Winter 2011 (with Andow, Haight, Johnson, & Venette; 5), Winter 2010 (with Andow, Haight, Johnson, & Venette; 5), Winter 2009 (with Andow, Haight, Johnson, & Venette; 6), Winter 2008 (with Andow, Haight, Johnson, & Venette; 8)
 Graduate Seminar: Ph.D. Program: Fall 2012 (Enrollment: 10), Fall 2010 (with Taff; 3), Spring 2008 (with Glewwe; 5), Spring 2007 (with Smith; 7)
 Methods of Economic Data Analysis: Fall 2005 (with G. McCullough; Enrollment: 15)
 Applied Game Theory: Fall 2011 (with Polasky; Enrollment: 17), Fall 2010 (with Polasky; 21), Spring 2010 (with Polasky; 11), Spring 2009 (with Smith; 10), Fall 2007 (with Polasky; 17), Fall 2006 (with Polasky; 15), Fall 2005 (with Polasky; 6), Fall 2004 (with Polasky; 13), Fall 2003 (with Polasky; 8), Spring 2002 (with Polasky; 10)
 Intermediate Microeconomics: Summer 2007 (Enrollment: 13), 2006 (5), 2005 (16); Fall 2002 (84), 2001 (72)
 Bangladesh Training Program (Production/Consumption, 2 days), Fall 2000 (Enrollment: 9)
 Advanced Microeconomic Theory II: Spring 1999 (with Swallow; Enrollment: 9)
 Labor Economics: Spring 1994 (Enrollment: 9), Summer 1993 (23)
 Public Finance: Summer 1993 (Enrollment: 17), Summer 1992 (14)

Guest Lectures

Economics of Science and Technology Policy (APEC 5721). Summarizing Benefits and Costs in Agricultural R&D Investment Evaluation. Instructor: P. Pardey and J. Beddow. Fall 2014.
 Consumer Behavior & Policy (APEC 8401). Experimental Economics: What Text Books Fail To Mention. Instructor: B. Senauer. Fall 2005.
 What Do Insurance Companies & Casinos Have in Common? Teaching Important Concepts Of Risk & Insurance With Experiments (College in Schools & Minnesota Council on Economic Education). Instructor: C. Parliament. Spring 2005.
 Aspects of Precision Agriculture Economics (MAST 2420/S 4111). Instructor: Various. Spring 2001 – 2008.
 Bt Corn and Insect Resistance Management. Class: Ecological Risk Assessment (Ent 4241/WRS 8050). Instructor: R. Venette. Spring 2000 - 2002.

Advising

Graduate Advising

Ph.D. Theses Advised/Co-Advised to Completion

David Smith (2015). The Economics of Perennial Bioenergy Crop Production Under Risk and Uncertainty: Understanding Economic and Policy Incentives (with Homans)
 Derya Eryilmaz (2015). Essays on the Analysis of Electricity Markets and Policy: Renewable Electricity and Demand Response (with Homans)
 Xudong Rao (2015). Four Essays on Agricultural Production, Risk, and Productivity (with Pardey)

Daniel Hawes (2013). Neuroeconomic Studies on Personality and Decision-Making (with Rustichini)

Jason Beddow (2012). A Bio-Economic Assessment of the Spatial Dynamics of U.S. Corn Production and Yields (with Pardey)

Stephen Aultman (2011). Mitigating floods and pestilence: Examining the provision of public goods under uncertainty

Clint Pecenka (2011). Experiments on Identity, Theft and Mitigation Strategies (with Glewwe)

Le Pham (2008). Factors that Affect the Existence and Characteristics of Separating Bayesian Equilibrium (with Polasky)

Ines Langrock (2007). Understanding Differences in Risky Behavior: How Much Do Differences in Risk Preferences and Risk Perceptions Matter?

Oishi Kikuo (2006). Does Precision Agriculture Pay? Profitability Potential Of Variable Rate Application Of Fertilizers Econometrics And Geostatistics Approaches

Ph.D. Thesis Committees

Yu Na Le (2015)	Amanda Heitz (CSOM 2012)
Zhoujun Gu (CSOM 2015)	Tetsuya Horie (2011)
Brian Zurkowski (ECON 2015)	Papak Nabipay (2011)
Suhyun Jung (2015)	Misty Heggness (2010)
Probal Mojumder (CSOM 2015)	Paola Mallucci (CSOM 2010)
JaeHwuen Jung (CSOM 2015)	Kate Ko (2008)
Jong Choi (2014)	Linh Vu (2008)
Tim Delbridge (2014)	Michinori Uwasu (2008)
Shweta Singh (CSOM 2014)	Erik Nelson (2007)
Lesley Tylczak (ENT 2013)	Moises Resende Filho (2006)
Jin Qi (2013)	Charles Owach, Makerere University (2005)
Yuanyuan Ma (CSOM 2013)	Doyle Kalumbi (2002)
Ali Bittinger Co-Advisor (2013)	Silvia Secchi, Iowa State University (2000)
Corey Risch (2013)	Allan Mussell (1999)
Jin-Young Moon (2012)	

M.S. Theses Advised to Completion

Maxwell Mkondiwa (2015, Plan B). Whither Broad or Spatial Specific Fertilizer Recommendations? (with Pardey)

Zachary Biesanz (2015, Plan A). The effect of punishing "over-contributors" on overall welfare: Some Experimental Evidence

Shweta Singh (2011, Plan B). An analysis of asymmetric health information on insurance choice decisions

Nadezda A. Golyaeva (2010, Plan B). Exacerbation of Moral Hazard Due to Government Intervention in Response to the U.S. Mortgage Crisis of 2007

Jose Ramirez-Rocha (2008, Plan B). Compliance With Bt Technical Requirements: The 2002 Minnesota And Wisconsin Farm Polls

Ines Langrock (2004, Plan B). Farmer Demand For Corn Rootworm Bt Corn: Do Insect Resistance Management Guidelines Really Matter?

Yanmei Fu (2003, Plan B). The Impact of Technology Use on Employee Wages in the U.S. Hog Industry

M.S. Thesis Committees

Xinshuo Zhang (2014)

Shouli Zhao (2014)

Bhagyashree Katare (2013)

Brian Zurowski (ECON 2012)

Jay Mooreland (2011)

Robert Yawson (PA 2009)

Olena Zakharova (2008)

Research Assistants Supervised

Tiesta Thakur (Summer 2015)

Huichun Sun (Summer 2015)

Theresa Bauer (Summer 2011 – 2013)

Oishi Kikuo (Summer 2002 – Fall 2005)

Jose Rocha-Ramirez (Spring 2002 – 2004)

Yanmei Fu (Fall 2001-2003)

David Smith (Summer 2014 – 2015)

Stephen Aultman (Fall 2008 – Spring 2011)

Xiangming Fang (Spring 2004)

Ines Langrock (Summer 2003, Fall 2005)

Pascal Elizabeth (Fall 1999 – Spring 2000)

Teaching Assistants Supervised

Huichun Sun (Spring 2015)

Akinori Kitsuki (Fall 2014)

Martha Rogers (Fall 2012)

David Bael (Fall 2008)

Ines Langrock (Fall 2001, 2002)

Adan Silverio Murillo (Fall 2013)

Giovann Alarcon (Fall 2009, 2011)

Juan Dominguez (Fall 2005)

Undergraduate Advising

National Science Foundation Research Experiences for Undergraduates

Winston Oakley, University of Minnesota (2012)

Life Science Summer Undergraduate Research Program

Madeleine Daep, Washington University (2011)

Undergraduate Research Opportunities Program Supervision

Tyler Gieseke (2013-14). Social distance in cooperation games: Examining the effect of conversation between players.

Srinivas Jasti (2005 – 06). The Success Of Golden Rice In India.

Nathaniel Peterson (2004 – 05). Explaining Behavioral Deviations from the Expected Utility Model.

Internships Supervised

Geoffrey Tomaino (Allied, THA, Spring 2013)

Thomas Haeg (Finnegan's, Spring 2012)

Cameron Johnson (Northwestern Mutual, Fall 2011)

Alfred Alejo (Donaldson Company, Fall 2010)

Matt Palzkill (Cargill Kitchen Solutions, Spring 2010)

Cailin Vandenberg (Minnesota Daily, Spring 2007)

Sara Kling (Merrill Lynch, Summer 2006)

Amanda Holman (Target, Fall 2005)

Samuel Schuette (Scottrade, Fall 2004)

Philip Reiter (Northwestern Mutual, Fall 2004)

Katie Tjornhom (Wells Fargo SBA, Spring 2004)
Katie Larson (United Leasing Inc., Fall 2003)
Philip Reiter (Pace Dairy Foods, Summer 2003)
Benjamin Haselbauer (Minneapolis Parks & Recreation Board, Spring 2003)
Betty Berning (St.Paul Saints, Summer/Fall 2002)
Scott Gilbert (Cargill, Summer 2002)
Caralee Anderson (Boynton Health Center, Spring 2002)
Jeff Rolf (Eat Fleet, Summer 2001)

Independent Study Supervised
Brenda Adams (Spring, 2002)

Research Assistants Supervised
Ethan Barquest (2013)
Nathan Peterson (2004)
Aaron Wicks (1999)

Anthony McDonald (2013)
Jose Rocha-Ramirez (2002)
Nicholas Jensen (1999)

Publications and Research Papers

Journal Articles

1. Andow, Pueppke, Schaafsma, Gassmann, Sappington, Meinke, Mitchell, Hurley, Hellmich, and Porter (Forthcoming). Early Detection and Mitigation of Resistance in Western Corn Rootworm (Coleoptera: Chrysomelidae) to *Bt* Maize. *Journal of Economic Entomology*.
2. Hurley and Frisvold (Forthcoming). Economic Barriers to Herbicide Resistance Management. *Weed Science*.
3. Beddow, Pardey, Chai, Hurley, Kriticos, Braun, Park, Cuddy, and Yonow (2015). Biological Obsolescence—Stripe Rust and Global Wheat Production. *Nature Plants*. doi:10.1038/nplants.2015.132.
4. Tylczak, Andow, Borgida, Hurley, and Williams (2015). Design Clarity in Public Outreach Documents: A Guidebook for a First Detector Volunteer Network. *Journal of Extension* 53(2).
5. Pardey, Beddow, Hurley, Beatty and Eidman (2014). A Bounds Analysis of World Food Futures: Global Agriculture to 2050. *Australian Journal of Agricultural and Resource Economics* 58:571-89. **Best AJARE Paper, Australian Agricultural & Resource Economics Society.**
6. Hurley, Rao and Pardey (2014). Re-examining the Reported Rates of Return to Food and Agricultural R&D. *American Journal of Agricultural Economics* 96(4): 1492 - 1504. including Supplementary Appendix <http://ajae.oxfordjournals.org/content/early/2014/06/04/ajae.aau047/suppl/DC1>. **Quality of Research Discovery Award, Australian Agricultural & Resource Economics Society.**
7. Hurley, Yue, and Anderson (2013). Polarized Preferences in Home Grown Value Auctions. *Journal of Agricultural and Resource Economics* 38(2):187-203.
8. Pardey, Beddow, Kriticos, Hurley, Park, Duveiller, Sutherst, Burdon, and Hodson (2013). Right-sizing Stem-Rust Research. *Science* 340(6129):147-148, including Supplementary Materials for Right-sizing Stem Rust Research, www.sciencemag.org/cgi/content/full/340/6129/147/DC1.

9. Yue, Hurley, and Anderson (2012). Heterogeneous Consumer Preferences for Native and Invasive Plants: Evidence from Experimental Auctions. *Horticultural Science* 47(8):1091-1095.
10. Moises and Hurley (2012). Information Asymmetry and Traceability Incentives for Food Safety. *International Journal of Production Economics* 139(2):596-603.
11. Yu, Hurley, Kliebenstein, and Orazem (2012). Firm Size, Technical Change and Wages in the Pork Sector, 1990 -2005. *Journal of Agricultural and Resource Economics* 37(2):263-279.
12. Yu, Hurley, Kliebenstein, and Orazem (2012). A Test for Complementarities Among Multiple Technologies that Avoids the Curse of Dimensionality. *Economic Letters* 116(3):354-357.
13. Onstad, Mitchell, Hurley, Krupke, Lundgren, Porter, DiFonzo, Baute, Spencer, Hellmich, Buschman, Hutchison, and Tooker (2011). Seeds of Change: Corn Seed Mixtures for Resistance Management and IPM. *Journal of Economic Entomology* 104(2):343-52.
14. Yue, Hurley, and Anderson (2011). Do Native and Invasive Labels Affect Consumer Willingness to Pay for Plants? Evidence from Experimental Auctions. *Agricultural Economics* 42(2):195-205.
15. Frisvold, Hurley, and Mitchell (2009). Overview: Herbicide Resistant Crops--Diffusion, Benefits, Pricing, and Resistance Management. *AgBioForum* 12(3&4):244-248.
16. Hurley, Mitchell, and Frisvold (2009). Characteristics of Herbicides and Weed-Management Programs Most Important to Corn, Cotton, and Soybean. *AgBioForum* 12(3&4):269-280.
17. Hurley, Mitchell, and Frisvold (2009). Weed Management Costs, Weed Best Management Practices, and the Roundup Ready® Weed Management Program. *AgBioForum* 12(3&4):281-290.
18. Hurley, Mitchell, and Frisvold (2009). Effects of Weed-Resistance Concerns and Resistance-Management Practices on the Value of Roundup Ready® Crops. *AgBioForum* 12(3&4):291-302.
19. Frisvold, Hurley, and Mitchell (2009). Adoption of Best Management Practices to Control Weed Resistance by Corn, Cotton, and Soybean Growers. *AgBioForum* 12(3&4):370-381.
20. Hurley (2009). Commentary: Is It Possible to Determine the Extent to Which Informational Asymmetries and Prejudice Bias Responses? *Journal of Law, Medicine, & Ethics* 37(4):594-597.
21. Hurley, Langrock, and Ostlie (2006). Estimating the Benefits of Bt Corn and Cost of Insect Resistance Management Ex Ante. *Journal of Agricultural and Resource Economics* 31(2): 355-375.
22. Goldberger, Merrill, and Hurley (2005). Bt Corn Farmer Compliance With Insect Resistance Management Requirements In Minnesota And Wisconsin. *AgBioForum* 8 (2&3):151-160.
23. Hurley, Oishi, and Malzer (2005). Estimating the Potential Value of Variable Rate Nitrogen Applications: A Comparison of Spatial Econometric and Geostatistical Models. *Journal of Agricultural and Resource Economics* 30(2):231-249.
24. Hurley and Shogren (2005). An Experimental Comparison of Induced and Elicited Beliefs. *Journal of Risk and Uncertainty* 30(2):169-188.
25. Hurley, Malzer, and Kilian (2004). Estimating Site-Specific Crop Response Functions: A Conceptual Framework and Geostatistical Model. *Agronomy Journal* 96:1331-1343.

26. Hurley, Mitchell, and Rice (2004). Risk and the value of Bt Corn. *American Journal of Agricultural Economics* 86(2):345-358.
27. Mitchell, Hurley, Babcock, and Hellmich (2002). Insuring the Stewardship of Bt Corn: A Carrot versus A Stick. *Journal of Agricultural and Resource Economics* 27:390-405.
28. Hurley, Secchi, Babcock, and Hellmich (2002). Managing the Risk of European Corn Borer Resistance to Bt Corn. *Environmental and Resource Economics* 22:537-558.
29. Hurley, Babcock, and Hellmich (2001). Bt Corn and Insect Resistance: An Economic Assessment of Refuges. *Journal of Agricultural and Resource Economics* 26(1):176-194. **Outstanding JARE Article, Western Agricultural Economics Association.**
30. Hurley, Orazem, and Kliebenstein (2000). An Analysis of Occupational Health in Pork Production. *American Journal of Agricultural Economics* 82(2):323-333.
31. Hurley, Otto, and Holtkamp (1999). Valuation of Water Quality in Livestock Regions: An Application to Rural Watersheds in Iowa. *Journal of Agricultural and Applied Economics* 31(1).
32. Hurley, Orazem, and Kliebenstein (1999). Structure of Wages and Benefits in the U.S. Pork Industry. *American Journal of Agricultural Economics* 81:144-163.
33. Hurley and Shogren (1998). Asymmetric Information Contests. *European Journal of Political Economy* 14:645-665.
34. Hurley and Shogren (1998). Effort Levels in a Cournot-Nash Contest with Asymmetric Information. *Journal of Public Economics* 69(2):195-210.
35. Hurley (1998). Rent Dissipation and Efficiency in a Contest with Asymmetric Valuations. *Public Choice* 94:289-298.
36. Hurley and Shogren (1997). Environmental Conflicts and the SLAPP. *Journal of Environmental Economics and Management* 33(3):253-273.
37. Ribaudo and Hurley (1997). Economic and Environmental Effects Associated with Reducing the Use of Atrazine: An Example of Cross-Disciplinary Research. *Journal of Agricultural and Applied Economics* 29(1):87-97.

Book Chapters

1. Beddow, Hurley, Pardey and Alston (2014). Food Security: Yield Gap. *Encyclopedia of Agriculture and Food Systems* (N. K. V. Alfen). Oxford: Academic Press, 352-65.
2. Pardey, Chan-Kang, Dehmer, Beddow, Hurley, Rao and Alston (2014). Investments in and the Economic Returns to Agricultural and Food R&D Worldwide. *Encyclopedia of Agriculture and Food Systems* (N. K. V. Alfen). Oxford: Academic Press, 78-97.
3. Hurley and Mitchell (2014). Insect Resistance Management: Adoption and Compliance. *Insect Resistance Management: Biology, Economics, and Prediction, Second Edition* (D.W. Onstad). Academic Press. Oxford, UK. pp. 421-452.
4. Hurley and Mitchell (2008). Insect Resistance Management: Adoption and Compliance. *Insect Resistance Management: Biology, Economics, and Prediction* (D.W. Onstad). pp. 227-254.
5. Langrock and Hurley (2006). Farmer Demand for Corn Rootworm Bt Corn: Do Insect Resistance Management Guidelines Really Matter? *Regulating Agricultural Biotechnology: Economics and Policy* (R.E. Just, J.M. Alston, and D. Zilberman). New York: Springer Publishers. pp. 579-598. **Book won Quality of Communication Award, American Agricultural Economics Association.**

6. Mitchell and Hurley (2006). Adverse Selection, Moral Hazard, and Grower Compliance with Bt Corn Refuge. *Regulating Agricultural Biotechnology: Economics and Policy* (R.E. Just, J.M. Alston, and D. Zilberman). New York: Springer Publishers. pp. 599-624. **Book won Quality of Communication Award, American Agricultural Economics Association.**
7. Hurley, Secchi, and Hellmich (2006). Managing European Corn Borer Resistance to Bt Corn with Dynamic Refuges. *Regulating Agricultural Biotechnology: Economics and Policy* (R.E. Just, J.M. Alston, and D. Zilberman). New York: Springer Publishers. pp. 559-578. **Book won Quality of Communication Award, American Agricultural Economics Association.**
8. Hurley (2005). Bt Resistance Management: Experiences From the U.S. *Environmental Costs and Benefits of Transgenic Crops in Europe* (J. Wessler). Wageningen UR Frontis Series vol. 7, Springer, Dordrecht. pp. 81-93.
9. Hurley (2005). Comment on Kleter and Kuiper: Environmental fate and impact considerations related to the use of transgenic crops. *Environmental Costs and Benefits of Transgenic Crops in Europe* (J. Wessler). Wageningen UR Frontis Series vol. 7, Springer, Dordrecht. pp. 45-46.
10. Hurley and Babcock (2003). Valuing Pest Control: How Much is Due to Risk Aversion? *Risk Management and the Environment: Agriculture in Perspective* (B.A. Babcock, R.W. Fraser and J.N. Lekakis). Kluwer Academic Publishers. pp. 134-144.
11. Hurley, Secchi, Babcock, and Hellmich (2002). Managing the Risk of European Corn Borer Resistance to Bt Corn. *The Economics of Managing Biotechnologies* (T. Swanson, ed.). Kluwer Academic Publishers. pp. 171-193.
12. Settle, Hurley, and Shogren (2001). Citizen Suits. *The Law and Economics of the Environment* (A. Heyes, ed.). Edward Elgar Publishing. pp. 217-248.
13. Shogren and Hurley (1999). Experiments in Environmental Economics. *Handbook of Environmental and Resource Economics* (van den Bergh, ed.). Edward Elgar Publishing. pp. 1180-1190.
14. Hurley and Shogren (1998). Strategic Behavior in Incomplete Information Contests. *Advances in Applied Micro-economics Volume 7* (Baye ed.). JAI Press Inc. pp. 87-101.
15. Hurley and Shogren (1998). Theory and Behavior in Environmental Conflicts with Asymmetric Information. *Game Theory and the Global Environment* (Hanley and Folmer, eds.). Edward Elgar Publishing.
16. Shogren and Hurley (1997). Tournament Incentives in Environmental Policy Economics. *Sustainability and Global Environmental Policy: New Perspectives* (Dragun and Jakobsson, eds.). Edward Elgar Publishing. pp. 215-234.

Conference Proceedings

1. Hurley (2012). We Are Predictably Irrational. *Proceedings of the Allen D. Leman Swine Conference*. St. Paul, MN, September 15-18, 2012.
2. Hurley, Mitchell, and Frisvold (2009). Factors Affecting Weed Control Costs and Farmer Values for Roundup Ready® Cotton. *Proceedings of the Beltwide Cotton Conference*, San Antonio, TX, January 5-8, 2009.
3. Frisvold, Hurley, and Mitchell (2009). Cotton Grower Adoption of Weed Resistance Management Practices. *Proceedings of the Beltwide Cotton Conference*, San Antonio, TX, January 5-8, 2009.

4. Hurley, Mitchell, and Frisvold (2009). Adoption, Residual Herbicide Use And Grower Values For Roundup Ready® Cotton. *Proceedings of the Beltwide Cotton Conference*, San Antonio, TX, January 5-8, 2009.
5. Hurley, Oishi, and Malzer (2006). Temporal And Spatial Variability Of Corn Response To Fertilizer: What Is The Potential For Management? *Proceedings of the 8th International Conference on Precision Agriculture & Other Precision Resources Management*. Minneapolis, MN. July 24, 2006.
6. Mitchell, Hutchison, and Hurley (2005). Risk and the Value of Additional Insecticide Applications for European Corn Borer Control in Processing Sweet Corn. *Proceedings of the 2005 Midwest Food Processors Association Annual Meeting*. Madison, WI: Midwest Food Processors Association.
7. Hurley, Malzer, and Kilian (2002). A Test Of Within Field Variation For Corn Response To Nitrogen In Central Minnesota. *Proceedings of the 6th International Conference on Precision Agriculture and Other Resource Management* (eds. P.C. Robert, R.H. Rust, and W.E. Larson). Minneapolis, MN. July 14-17, 2002. ASA, CSSA, SSSA, Madison, WI.
8. Hurley, Malzer, and Kilian (2002). A test of within field variation of corn response to nitrogen in central Minnesota. *Precision Agriculture: Herausforderung an Integrative Forschung, Entwicklung und Anwendung in der Praxis* (eds. A. Werner and A. Jarfe). Kuratorium für Technik und Bauwesen in der Landwirtschaft e. V. (KTBL), Bartningstraße 49, 64289 Darmstadt. pp. 413-421.
9. Hutchison, Burkness, Pahl, and Hurley (2002). Integrating Novel Technologies for Cabbage IPM in the USA: Value of On-Farm Research. *Proceedings of the 4th International Workshop on the Management of Diamondback Moth and Other Crucifer Pests*. University of Melbourne, Australia, November 26-29, 2001.
10. Kilian, Hurley, and Malzer (2001). Economic aspects of precision agriculture: An economic assessment of different site-specific N-fertilization approaches. *Proceedings Third European Conference on Precisions Agriculture* (ed. S. Blackmore and G. Grenier). Agro. pp. 521-526.
11. Hutchison, Burkness, Pahl, Hurley, Weinzierl and Wedberg (2001). Risk-based Methods for Assessing the Value of IPM Technology: Examples for Cabbage and Sweet Corn. *Proceedings of the 2001 Midwest Food Processors Vegetable Conference*. La Crosse, WI.
12. Hurley (2000). An Economic Assessment of Resistance Management: The Case of Bt Corn. *Proceedings of the 19th Annual Crop Pest Management Short Course* (edited by Ken Ostlie, Kevin Cananaugh, and Tracey Benson). Minnesota Extension Service, University of Minnesota, St. Paul. pp. 205-212.
13. Kliebenstein, Hurley, and Orazem (1998). Employee Relations Outlook for the Pork Industry. *Proceedings of the Employee Relations Conference*. National Pork Producers Council, Des Moines, IA.
14. Gassman, Wu, Mitchell, Babcock, Hurley, and Chung (1998). Impact of U.S. Agricultural Policy on Regional Nitrogen Losses. *Proceedings of the 3rd International Conference on Diffuse Pollution (Poster Papers)*. Edinburgh, Scotland. International Association of Water Quality, London, England. pp. 115-122.

Submitted Or In Progress

1. Aultman, Coggins, and Hurley (Submitted June 2015). An Insurance Mechanism for Public Goods Under Uncertainty.

2. Borgida, Williams, Andow, Hurley, and Tylczak (Submitted May 2015). The role of social psychological factors in creating and maintaining a volunteer citizen monitoring network.
3. Hurley (May 2015). Competitive Price Effects with Uncertain Production: A Slutskyesque Approach.
4. Beddow, Pardey, and Hurley (June 2014). Reassessing Weather (Climate) and Crop Productivity: A Spatially Explicit Bio-Economic Assessment.
5. Katare, Yue, and Hurley (January 2014). Consumer Willingness to Pay for Nano-packaged Food Products: Evidence from Eye-tracking Technology and Experimental Auctions.
6. Hurley, Mitchell, Frisvold, and Aultman (March 2013). Valuing Herbicide Resistant Soybeans and Incentives for Weed Resistance Management.
7. Aultman, Hurley, Haight, and Homans (July 2012). Valuing Monitoring Networks for New Pathogens: The Case of Soybean Rust.
8. Hurley, Mitchell, and Frisvold (April 2011). Roundup Ready® Cotton Weed Management Programs: Estimates of the Expected Value to Farmers in 2008.
9. Hurley, Orazem, and Kliebenstein (In Preparation). The Evolution of Technology Adoption and Farm Size in Hog Production: A Tale of Specialization?

Miscellaneous

1. Hurley and Mitchell (2015). Value of Insect Pest Management to U.S. and Canadian Corn, Soybean and Canola Farmers. Selected Paper: AAEA & WAEA Joint Annual Conference, San Francisco, CA.
2. Mokhtarzadeh, MacRae, Koch, Marston, Hurley, Gebre-Egziabher, and Colten (2015). UAS Targeting Precision Agriculture. *Inside Unmanned Systems* Spring:60-71.
3. Williams, Borgida, Andow, Hurley and Tylczak¹ (2015). Sticking Around and Loving It: Psychological Factors Underlying Volunteer Engagement and Retention. Selected Poster: Society of Personality and Social Psychology Conference, Long Beach, CA.
4. Pardey, Beddow, Hurley, Beatty, and Eidman (2014). The International Agricultural Prospects Model: Assessing Consumption and Production Futures Through 2050 (version 2.1). University of Minnesota, Department of Applied Economics Staff paper P14-9. St. Paul, MN. Available at: <http://ageconsearch.umn.edu/handle/18219>.
5. Tylczak¹, Andow, Hurley, Borgida and Sagor (2014). Citizen Science in Entomology: Establishing and Maintaining Insect Detection Networks in At-Risk Habitats. Selected Poster: 62nd Annual Meeting of the Entomological Society of America. November 16-19, Portland, OR.
6. Hurley, Pardey and Rao. Returns to Food and Agricultural R&D Investments Worldwide, 1958-2011. InSTePP Brief. St. Paul: International Science and Technology Practice and Policy center, University of Minnesota, October 2013.
7. Hurley, Buhr, Zering, Tonsor, and DiPietre (2013). Optimizing Long-Term Feeding and Building Decisions on Farms Using Immunological Castration. Selected Poster: Allen D. Lemans Swine Conference, September 14-17, St. Paul, MN.
8. Buhr, Zering, Hurley, Tonsor, and DiPietre (2013). Optimal Finish Weights and Gross Margins for Immunologically Castrated Barrows. Selected Poster: Allen D. Lemans Swine Conference, September 14-17, St. Paul, MN.
9. Tonsor, Buhr, Zering, Hurley, and DiPietre (2013). Aggregate Economic Impacts of Immunological Castration Adoption in the U.S. Selected Poster: Allen D. Lemans Swine Conference, September 14-17, St. Paul, MN.

10. Katare, Yue, and Hurley (2013). Consumer Willingness to Pay for Nano-packaged Food Products: Evidence from Eye-tracking Technology and Experimental Auctions. Selected Paper: AAEA Conference, Washington D.C. Available at <http://ageconsearch.umn.edu/handle/149676>.
11. Beddow, Hurley, Kriticos and Pardey (2013). Measuring the Global Occurrence and Probabilistic Consequences of Wheat Stem Rust. Harvest Choice Technical Note: Saint Paul and Washington, D.C.
12. Oakley, Andow, Borgida and Hurley (2012). Time Costs of Volunteer Networks for Monitoring Invasive Species. Upper Midwest Invasive Species Conference, October 29-31, 2012, La Crosse, WI.
13. Dong, Mitchell, Hurley, and Frisvold (2012). Quantifying Farmer Adoption Intensity for Weed Resistance Management Practices and Its Determinants. Selected Paper: AAEA Conference, Seattle, WA. Available at <http://purl.umn.edu/125194>.
14. Rao, Hurley, and Pardey (2012). Recalibrating the Reported Rates of Return to Food and Agricultural R&D. Selected Poster: AAEA Conference, Seattle, WA. Available at <http://purl.umn.edu/124581>.
15. Williams, Fisher, Borgida, Andow, Hurley and Solarz (2012). All for one or one for all: Motivations to volunteer in a community-based context. Selected Poster: Society of Personality and Social Psychology Conference, San Diego, CA.
16. Hurley (September 2011). Letter to the Editor: Superweeds Vs. Supercrops. *Scientific American* 3005(3):8.
17. Hurley, Yue, and Anderson (2011). Polarized Preferences In Homegrown Value Auctions. Selected Paper: AAEA Conference, Pittsburgh, PA. Available at <http://purl.umn.edu/103596>.
18. Hurley (2010). A Review of Agricultural Production Risk in the Developing World. Working Paper, HarvestChoice.
19. Aultman, Hurley, Homans, and Haight (2010). Valuing Monitoring Networks for Invasive Species: The Case of Soybean Rust. Selected Paper: AAEA Conference, Denver, CO. Available at <http://ageconsearch.umn.edu/handle/62011>.
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21. Frisvold, Hurley, and Mitchell (2009). Adoption of Best Management Practices to Control Weed Resistance By Cotton, Corn, and Soybean Growers. Selected Paper: AAEA Conference, Milwaukee, WI. Available at <http://ageconsearch.umn.edu/handle/49432>.
22. Aultman, Hurley, Mitchell, and Frisvold (2009). Valuing the Roundup Ready® Soybean Weed Management Program. Selected Paper: AAEA Conference, Milwaukee, WI. Available at <http://ageconsearch.umn.edu/handle/49342>.
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24. Yu, Hurley, Kliebenstein, and Orazem. 2007. Testing for Complementarity and Substitutability Among Multiple Technologies: The Case of U.S. Hog Farms. Selected Paper: AAEA Conference, Portland, OR. Available at http://agecon.lib.umn.edu/cgi-bin/pdf_view.pl?paperid=26209&ftype=.pdf.

25. Yu, Hurley, Kliebenstein, and Orazem. 2007. Firm Size, Technical Change and Wages: Evidence from the Pork Sector from 1990-2005. Selected Paper: AAEA Conference, Portland, OR. Available at http://agecon.lib.umn.edu/cgi-bin/pdf_view.pl?paperid=26368&ftype=.pdf
26. Langrock and Hurley. 2006. Risk Preferences, Perceptions and Systematic Biases. Selected Paper: AAEA Conference, Long Beach, CA. Available at <http://agecon.lib.umn.edu/aaea06/sp06la09.pdf>.
27. Oishi, Hurley, and Malzer. 2006. Evidence of Temporal Variation in Site-Specific Crop Response to Fertilizer Inputs. Selected Paper: AAEA Conference, Long Beach, CA. Available at <http://agecon.lib.umn.edu/aaea06/sp06oi01.pdf>.
28. Kliebenstein, Hurley, Orazem, Miller, and May. 2006. Work Environment, Job Satisfaction, Top Employees Work Interests. *Iowa State University Animal Industry Report 2006*. Iowa State University, University Extension. A.S. Leaflet R2166.
29. Kliebenstein, Hurley, Orazem, Miller, and May. 2006. Employee Rosters Rise; Wages Continue To Climb. *Iowa State University Animal Industry Report 2006*. Iowa State University, University Extension. A.S. Leaflet R2167.
30. Kliebenstein, Hurley, Orazem, Miller, and May. 2006. A Look at the Employment in the United States Swine Production Industry. *Iowa State University Animal Industry Report 2006*. Iowa State University, University Extension. A.S. Leaflet R2168.
31. Kliebenstein, Hurley, Orazem, Miller, and May. 2006. Looking for a Job, Finding the Right Employee. *Iowa State University Animal Industry Report 2006*. Iowa State University, University Extension. A.S. Leaflet R2169.
32. Hutchison, Burkness, Carrillo, Hurley, and Pahl. 2006. Fresh-market cabbage: Increasing economic returns while reducing risk. Public. 08230. Univ. of Minnesota Extension Service, St. Paul, MN.
33. Hutchison, Burkness, Carrillo, Galvan, Mitchell, and Hurley. 2006. Integrated Pest Management: A Risk Management Framework to Improve Decision-Making. University of Minnesota Extension Service, St. Paul, MN.
34. Hutchison, Burkness, Pahl, Hurley, and Mitchell. 2005. IPM-- Rationale for a Risk/Reward Framework to Accelerate the adoption of IPM: measuring and communicating risk within the context of client perceptions. Invited Presentation, Symposium on Innovations in Entomology, National Meeting of the Entomol. Soc. of America, Dec. 15-18th, Ft. Lauderdale, FL.
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36. Hurley, Kliebenstein, Orazem, and Miller. Employee Rosters Rise, Wages on the Upswing. *National Hog Farmer*. June 15, 2005. pp. E8-E15.
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38. Hurley, Kliebenstein, Orazem, and Miller. Employees, Employers Search for the Right Fit. *National Hog Farmer*. June 15, 2005. pp. E24-E31.
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40. Mitchell, Zhu, and Hurley (2004). Adverse Selection, Moral Hazard, and Grower Compliance With Bt Corn Refuge. Selected Paper: AAEA Conference, Denver, CO. Available at <http://agecon.lib.umn.edu/>.
41. Rocha-Ramirez and Hurley (2003). Who is planting GM crops and why? The Thoughts and Experiences of Minnesota Farmers. Available at http://www.apec.umn.edu/faculty/thurley/Extension/Extension_Home.html
42. Langrock and Hurley (2003). Farmer Demand for Corn Rootworm Bt Corn: Do Insect Resistance Guidelines really matter? Selected Paper: AAEA Conference, Montreal, Canada. Available at <http://agecon.lib.umn.edu/>.
43. Hurley, Malzer, and Kilian (2003). Estimating Site-Specific Nitrogen Crop Response Functions: A Conceptual Framework and Geostatistical Model. Selected paper: AAEA Conference, Montreal, Canada. Available at <http://agecon.lib.umn.edu/>.
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45. Hurley, Secchi, and Hellmich (2001). Managing European Corn Borer Resistance to Bt Corn with Dynamic Refuges. *Staff General Research Papers # 2010*, Iowa State University, Department of Economics.
46. Mitchell, Hurley, and Rice (2001). What is the value of Bt corn? Selected paper: AAEA Conference, Chicago, IL. Available at <http://agecon.lib.umn.edu/>.
47. Hurley, Secchi, Babcock, and Hellmich (2001). Managing European Corn Borer Resistance to Bt Corn with Dynamic Refuges. Selected paper: AAEA Conference, Chicago, IL. Available at <http://agecon.lib.umn.edu/>.
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51. Mitchell, Hurley, Babcock, and Hellmich (2000). Insuring the Stewardship of Bt Corn: A Carrot versus A Stick. CARD Working Paper 00-WP 243. 2000 AAEA Selected Paper.
52. Hurley and Elisabeth (2000). Wage Changes in the Pork Industry: How Did Minnesota Workers Fare? *Minnesota Agricultural Economist* 702(Fall):1,5-7.
53. Hurley, Orazem, and Kliebenstein (2000). Changes in the Structure of Wages in the U.S. Pork Industry. Selected paper: AAEA Conference, Tampa, FL. Available at <http://agecon.lib.umn.edu/>.
54. Hurley and Olson (2000). Production Decisions with Uncertain Markets: The Case of Bt Corn. Selected paper: AAEA Conference, Tampa, FL. Available at <http://agecon.lib.umn.edu/>.
55. Hurley, Kliebenstein, Orazem, and Miller. Decade of Employment Data Marks Pork Industry Changes. *National Hog Farmer*. June 15, 2000. pp. E2-E7.
56. Hurley, Kliebenstein, Orazem, and Miller. Employee Rosters Rise; Wages Climb More Than 50%. *National Hog Farmer*. June 15, 2000. pp. E8-E15.

57. Hurley, Kliebenstein, Orazem, and Miller. Work Environment, Time Off Lead Job Satisfaction List. *National Hog Farmer*. June 15, 2000. pp. E16-E22.
58. Hurley, Kliebenstein, Orazem, and Miller. Looking for a Job, Finding the Right Employee. *National Hog Farmer*. June 15, 2000. pp. E24-E29.
59. Durgan, Hicks, Hurley, Naeve, Schafer, Schwartz, and Wilcke (1999). A Consideration of Conventional and Genetically Modified Varieties. *Minnesota Variety Trials*. MP 102 2000. pp. 5-7.
60. Pautsch, Babcock, Hurley and Campbell (1999). Relative Efficiency Of Sequestering Carbon In Agricultural Soils Through Second Best Market-Based Instruments. Selected paper: AAEA Conference, Nashville, TN. Available at <http://agecon.lib.umn.edu/>.
61. Higgins and Hurley (1999). Panel 1: Refuge Design and Deployment. *EPA/USDA Workshop on Bt Crop Resistance Management* (P.A. Stewart, ed.). pp. 12-16.
62. Hurley (1999). Panel 4: Compliance Issues. *EPA/USDA Workshop on Bt Crop Resistance Management* (P.A. Stewart, ed.). pp. 61-63.
63. Hurley, Secchi, and Hellmich (1999). Managing the Risk of European Corn Borer Resistance to Bt Corn: An Assessment of Controversial Refuge Recommendations. Selected paper: AAEA Conference, Nashville. Available at <http://agecon.lib.umn.edu/>.
64. Hurley, Secchi, Babcock, and Hellmich (1999). Managing the Risk of European Corn Borer Resistance to Transgenic Corn: An Assessment of Refuge Recommendations. CARD Staff Report 99-SR 88.
65. Babcock, Hurley, Wu, and Mitchell (1998). The Environmental Effects of Freedom to Farm. Selected paper: AAEA Conference, Salt Lake City, UT. Available at <http://agecon.lib.umn.edu/>.
66. Hurley, Babcock, and Hellmich (1998). Biotechnology and Pest Resistance: An Economic Assessment of Refuges. Selected paper: AAEA Conference, Salt Lake City, UT. Available at <http://agecon.lib.umn.edu/>.
67. Wang, Babcock, and Hurley (1998). Crop Nutrient Needs Potentially Supplied by Livestock Manure in Iowa, Illinois, and Indiana. CARD Working Paper 98-WP 194.
68. Babcock, Campbell, Gassman, Hurley, Mitchell, Otake, Siemers, and Wu (1998). RAPS 1997: Agricultural and Environmental Outlook. Center for Agriculture and Rural Development, Iowa State University, Ames IA.
69. Hurley, Kliebenstein, and Orazem (1997). Structure of Wages and Benefits in the U.S. Pork Industry. Selected paper: AAEA Conference, Toronto, Canada.
70. Hurley, Otto, and Holtkamp (1997). Valuation of Water Quality in Livestock Regions: An Application to Rural Watersheds in Iowa. Selected paper: AAEA Conference, Toronto, Canada.
71. Hurley, Kliebenstein, and Orazem (1997). An Analysis of Occupational Health in Pork Production. Selected paper: AAEA Conference, Toronto, Canada.
72. Hurley, Babcock, and Hellmich (1997). Biotechnology and Pest Resistance: An Economic Assessment of Refuges. CARD Working Paper 97-WP 183.
73. Hurley, Orazem, Kliebenstein, and Miller (1996). Employee Management: Final Report. *National Hog Farmer* pp. 19-31.
74. Hurley, Orazem, Kliebenstein, and Miller (December 1996). Employee Management: Results of a Nationwide Survey of Pork Producers and Employees. *National Hog Farmer Special Report No. 2*.

75. Hurley, Orazem, Kliebenstein, and Miller (1997). Salary Levels in the Swine Industry. *1996 Swine Research Report*. Iowa State University, University Extension. pp. 143-145.
76. Hurley, Orazem, Kliebenstein, and Miller (1997). Employee Benefit Packages in the Swine Industry. *1996 Swine Research Report*, Iowa State University, University Extension. pp. 146-147.
77. Hurley, Orazem, and Kliebenstein (1997). Worker Health Issues in Pork Production. *1996 Swine Research Report*. Iowa State University, University Extension. pp. 148-153.
78. Hurley, Orazem, and Kliebenstein (1996). An Analysis of Occupational Health in Pork Production. Staff Papers No. 284. Iowa State University Department of Economics.
79. Hurley, Babcock, Reynolds, and Loesch (1996). Waterfowl Populations and the Conservation Reserve Program in the Prairie Pothole Region of North and South Dakota. CARD Working Paper 96-WP 165.
80. Hurley, Chaudhary, Kliebenstein, and Westercamp (1996). Cost of Respiratory Disease. *1995 Swine Research Report*. Iowa State University, University Extension. pp. 152-153.
81. Hurley, Chaudhary, Kliebenstein, and Westercamp (1996). Cost of Pig Scours. *1995 Swine Research Report*. Iowa State University, University Extension. pp. 154-156.
82. Hurley (1995). The Fisherman, The Factory, and The SLAPP. *AERE Newsletter* 15(2):16-20.

Research Papers and Reports

1. Craven and Hurley (2006). Proposed Rates For Adjusted Gross Revenue (Agr)-Lite Crop Insurance In Minnesota.
2. Hurley and Craven (2006). Proposed Risk Regions For Adjusted Gross Revenue (Agr)-Lite Crop Insurance In Minnesota.
3. Hurley (2004). What can economists contribute to a strategic ecological monitoring program for plant-incorporated-protectants? Background paper for Symposium on Strategic Monitoring for Ecological Impacts from Crops with Plant-Incorporated-Protectants.
4. Mitchell, Hurley, and Rice (October 2003). Is Bt Corn Really a Drag? Bt Corn Yield Drag and Yield Variance.
5. Hurley and Shogren (April 2001). Rationality in an Asymmetric Information Gaming Experiment.
6. Hurley (February 2000). A Bioeconomic Evaluation of the Gradual Introduction of Multiple Toxin Bt Corn.
7. Hurley and Mitchell (December 1999). Economic Refuge Recommendations for Multiple Toxin Bt Corn and An Assessment of Insurance Incentives for the Voluntary Adoption of Refuge Recommendations.
8. Hurley (1999). To GMO or not To GMO? Production Considerations for the First Year of a New Millennium.
9. Hurley, Secchi, and Hellmich (November 1999). A Bayesian Method for Using Field-Based Survival Data to Measure Insect Resistance to *Bacillus Thuringiensis*.

Grants

External (PI or Co-PI)

1. Owen, Ervin, Everman, Frisvold, Gunsolus, Hurley, Jussaume, Norsworthy, and Livingston (2014-2016). Understanding How Market Structure Affects Pest Resistance to Enhance Sustainable Corn and Soybean Production. USDA/NIFA-AFRI. Award: \$910,198.

2. Hurley, Mitchell, Shi, and Livingston (2014-2016). Understanding How Market Structure Affects Pest Resistance to Enhance Sustainable Corn and Soybean Production. USDA/NIFA-AFRI. Award: \$478,599.
3. Pardey, Beddow, and Hurley (2013-2014). Wheat Yellow Rust: Global Impact Assessment. CIMMYT. Award: \$104,761.
4. Pardey and Hurley (2013-2015). Appropriately Targeting and Scaling Crop Management Recommendations: A Case Study of Integrated Maize-Legume Systems in Southern Africa. McKnight Foundation. Award: \$107, 589.
5. Andow, Borgida, and Hurley (2011-14). Volunteerism among private-landowners for detection of invasive species. NSF. Award: \$680,000.
6. Andow, Hurley, Hale, Host, and Knowles (2010-13). Reducing human-mediated spread of non-native earthworms in vulnerable northern hardwood forests. USDA/NIFA. Award: \$491,000.
7. Kurle, Ostlie, Hurley, and Homans (2008-09). Cost-effective strategies to detect and manage soybean rust in the United States. USDA/CSREES RMA. Award: \$76,407.
8. Homans, Polasky, Vennette, and Hurley (2006-08). Spatial Decision-Making Tools for Efficient Allocation Strategies in Invasive Species Management. USDA/ERS Cooperative Agreement. Award: \$106,000.
9. Hurley (2004-07). Contributions to a Framework for Managing Insect Resistance to Transgenic Crops. USDA/ARS Cooperative Agreement. Award: \$15,000.
10. Robert, Rolph, and Hurley (2003-06). A Novel Nationwide Risk Management Education Initiative: Merging Precision Agriculture and ISO 9000/14000 Management Systems. USDA/CSREES. Award: \$145,000.
11. Hurley, Mitchell, and Hutchison (2003-06). Reducing Risk to Accelerate Adoption of Sweet Corn IPM. North Central Integrated Pest Management Competitive Grants Program. Award: \$67,312.
12. Andow, Hurley, Buttel, and Ives (2001-06). Dynamic Resistance Management for Transgenic Insecticidal Crops. USDA/IFAFA. Award: \$890,000.
13. Hurley (2001). Managing Insect Resistance to Bt. Monsanto Company. Award: \$15,000.
14. Hurley and Mitchell (2000). Economic Refuge Recommendations with Noncompliance and An Assessment of Insurance Incentives for the Voluntary Adoption of Refuge Recommendations. Aventis. Award: \$20,000.
15. Hurley and Ostlie (2000). An Economic Evaluation of Producer Incentives to Adopt Transgenic Corn Root Worm Protection. Monsanto. Award: \$15,000.
16. Kliebenstein, Hurley, and Orazem (1999-2000). Labor Rates and Fringe Benefits in the U.S. Swine Production Industry: A Comparison by Operation Size, Type and Region; An Analysis of the 1999-2000 Labor Survey. National Pork Producers Council. Award: \$33,725.
17. Hurley, Mitchell, Babcock, and Hellmich (1998-99). Economic Refuge Recommendations for Multiple Toxin Bt Corn and An Assessment of Insurance Incentives for the Voluntary Adoption of Refuge Recommendations. AgrEvo USA. Award: \$18,000.
18. Hurley, Babcock, and Hellmich (1998-99). An Economic Evaluation of Refuge for Resistance Management in Bt Corn. Monsanto Company. Award: \$41,000.
19. Kliebenstein, Orazem, and Hurley (1996). Labor Rates and Fringe Benefits in the U.S. Swine Production Industry: Comparison by Operation Size, Type, and Region. National Pork Producers Council. Award: \$17,000.

20. Kliebenstein, Orazem, and Hurley (1995 – 96). Economic Value of Improvements in Environmental, Health, and Safety in Pork Production. National Pork Producers Council. Award: \$9,214.

Internal (PI or Co-PI)

1. Balas, Hegland, Taylor, Gebre-Egziabher, Seiler, Weyrauch, MacRae, Koch, Malvich, and Hurley (2014-16). Precision Agriculture: Robotics and Sensor Development for Revolutionary Improvements in the Global Food Supply and Reduced Environmental Impact in the Agriculture Industry. MnDRIVE Transdisciplinary Research, Award: \$500,000.
2. Bradeen, Pardey, Beddow, Hurley, Hutchinson, and Kianian (2014). Repositioning Minnesota's Crop Sciences: A Trans-disciplinary Public-Private Partnership for Spatial Bio-economic Information, Trait Discovery and Decision Platforms to Sustain Global Agricultural Productivity and Market Growth. MN Global Food Ventures. Award: \$252,268.
3. Hurley (2006). International Travel Grant. Office of International Programs. Award: \$650.
4. Hurley (2001). International Travel Grant. Office of International Programs. Award: \$500.
5. Hurley (2001). International Travel Grant. Center International Food and Agricultural Policy. Award: \$1,200.
6. Sands, Wiersma, Fore, Kandel, and Hurley (2000-02). Reducing Crop Losses from Excess Water in Northwest Minnesota with Subsurface (Tile) Drainage. Minnesota Agricultural Experiment Station, Rapid Agricultural Response Fund. Award: \$160,000.
7. Hurley (2000). An Analysis of the Adoption and Use of Bt Plant-Pesticides in Minnesota. University of Minnesota, Grant-in-Aid of Research, Artistry and Scholarship. Award: \$18,500.

Senior Personnel

1. Invasive Species & Genotypes IGERT (PIs: Newman, Andow, Galatowitsch, Kapuscinski, & Shaw). National Science Foundation. 2007-2012.
2. NIRT: Evaluating Oversight Mechanisms for Active Nanostructures and Nanosystems: Learning from Past Technologies in a Societal Context (PIs: Wolf, Kokkoli, Kuzma, Paradise, & Ramachandran). National Science Foundation. 2006-2010.

Professional Activity

Invited Presentations & Commentary

1. Trading Off Risk & Rewards: A Spatial Economic Assessment of Fertilizer Use. Organized Symposium—Realizing the Potential of African Agriculture: A Spatial Bio-Economic Assessment. International Conference of Agricultural Economics. Milan, Italy, August 11, 2015.
2. Value of Neonicotinoids in North America (with Mitchell). NC205/NCCC46 Annual Joint Meeting. San Antonio, TX, January 27, 2015.
3. HT Crops: The North American Experience. Workshop on Herbicide Tolerant crops in the EU: Strengthening the economic and environmental impact assessment. European Commission-Joint Research Centre-Institute for Prospective Technological Studies. Paris, France, December 15, 2014.

4. Knocking Down Economic Barriers to Herbicide Resistance Management. Organized Symposium. North Central Weed Science Society 69th Annual Meeting. Minneapolis, MN, December 4, 2014.
5. The changing seed and farm landscape: What are the implications for managing resistance? Organized Symposium. Entomological Society of America 62nd Annual Meeting. Portland, OR, November 18, 2014.
6. Weather Risk, Nitrogen and Improved Hybrids in Sub-Saharan Africa. CIMMYT Meeting, El Baton, Mexico, October 13, 2014.
7. Overview of U.S. Crop Insurance. Embrapa-Agropensa Meeting, Brasillia, Brazil, August 21, 2014.
8. Deploying Technologies to Manage Biotic and Abiotic Risks. Embrapa-Agropensa Meeting, Brasillia, Brazil, August 20, 2014.
9. Enhancing Global Food Security Through More Sustainable Pest And Disease Management. 248th American Chemical Society National Meeting. San Francisco, CA, August 13, 2014.
10. Production Risk in Landscape Scale Agricultural Policy Analysis. Annual meeting of the International Consortium on Applied Bioeconomy Research. Nairobi, Kenya, June 19, 2014.
11. Value of NNi Seed Treatments to U.S. Corn & Soybean Farmers. Research Update for U.S. EPA. Washington D.C., April 30, 2014.
12. Value of Neonicotinoid Seed Treatments to U.S. Corn and Soybean Farmers. NC205/NCCC46 and IWGO Joint Meeting. Chicago, IL, April 17, 2014.
13. Assessing the Non-Pecuniary Benefits of Neonicotinoid Insecticides for Corn, Soybean, and Canola in the U.S. & Canada. Report on the Economic Benefits of the Neonicotinoid Insecticides Clothianidin, Imidacloprid and Thiamethoxam in North American Agriculture. Research Triangle Park, NC, March 26, 2014.
14. Recalibrating the Reported Rates of Return to Food and Agricultural R&D. UKAID Department for International Development Workshop on Methods for Assessing Costs and Benefits in Research, London, United Kingdom (remotely), March 14, 2014.
15. New Perspectives on Sustaining Agricultural Productivity Growth: The Bio-Economics of Sustaining Past Productivity Gains. CHS Leadership Forum, Minneapolis, MN, December 4, 2013.
16. Valuation of Herbicide Resistant Soybeans and An Evaluation of Incentives for Weed Resistance Management. Public Policies, Research and the Economics of Herbicide Resistance Management, Farm Foundation Workshop, Washington D.C., November 8, 2013 (Presentation Prepared by Hurley and Presented by Mitchell due to travel conflict).
17. Pickpockets, Squanderers & Bullies: Lessons From Behavioral Economics. 2013 Extension Program Conference, Duluth, MN, October 8, 2013.
18. Transgenic Crops and Pest Resistance: Lessons Emerging From the U.S. AARES Symposium: A Reevaluation of Pest Resistance Management Strategies: Bio-Economic Perspectives. AAEA Conference, Washington D.C., August 6, 2013.
19. Incentivizing pest resistance management to enhance the durability of Bt crops. Symposium: IRM – The Road To Resistance Is Paved With Good Intentions. North Central Branch Entomological Society of America 68th Annual Meeting. Rapid City, SD, June 18, 2013.
20. Comments on Public & Private Incentives for Sustainable Weed Management. Herbicide Resistance Management – The Path Forward Symposium, WSSA Conference, Baltimore MD, February 5, 2013.

21. Biotic Constraints to Agricultural Production: Assessing the Global Risk of Pests & Diseases. Side Event — A Changing Climate: Action Needed for Adaptation to Pests and Diseases in Crops and Livestock. 39th Session of the Committee on World Food Security. Rome, Italy, October 18, 2012.
22. Keynote: We Are Predictably Irrational. Allen D. Leman Swine Conference. St. Paul, MN, September 15, 2012 (Attendance ≈ 600).
23. Behavioral Economics. Conference on Teaching Economics and Personal Finance, University of Minnesota, St. Paul MN, August 7, 2012.
24. Comments on Public & Private Incentives for Sustainable Weed Management. Herbicide Resistance Weeds & Sustainable Weed Management Symposium. AAEA Conference, Seattle WA, August 14, 2012.
25. Behavioral Economics. Conference on Teaching Economics and Personal Finance, University of Minnesota, St. Paul MN, August 10, 2011.
26. Behavioral Economics. Conference on Teaching Economics and Personal Finance, University of Minnesota, St. Paul MN, August 10, 2010.
27. Weed Best Management Practices & The Sustainability of the Roundup Ready® Weed Management Program. Stewardship of Plant-Incorporated-Protectant Crops. 57th Annual Entomological Society of America Meeting, Indianapolis, IN, December 16, 2009.
28. Behavioral Economics. Conference on Teaching Economics and Personal Finance, University of Minnesota, St. Paul MN, August 12, 2009.
29. Valuing The Roundup Ready® Weed Management Program. Oregon State University, April 17, 2009.
30. Applied Economics Graduate Programs: The Minnesota Model. Oregon State University, April 17, 2009.
31. Weed Best Management Practices & the Value of Roundup Ready Weed Management in Soybean. *Minnesota Soybean Growers Board Of Directors Meeting*. St. Paul, MN, January 29, 2009.
32. Valuing the Soybean Rust Monitoring Network. *Minnesota Soybean Growers Board Of Directors Meeting*. St. Paul, MN, January 29, 2009.
33. Evaluating the Pecuniary and Non-Pecuniary Benefits of Roundup Ready Corn, Soybeans and Cotton (with P. Mitchell and G. Frisvold). Monsanto, St. Louis, MO, November 10, 2008.
34. Evaluating the Pecuniary and Non-Pecuniary Benefits of Roundup Ready Corn, Soybeans and Cotton (with P. Mitchell and G. Frisvold). Monsanto, St. Louis, MO, March 19, 2008.
35. Understanding Risky Behavior: Can economists respond to the Manski critique? University of Minnesota, Morris, MN, November 7, 2007.
36. Refuge Requirements and Enforcement. Biotechnology Workshop. IAAE Conference, Gold Coast, Australia, August 21, 2006.
37. Economists Are Scientists Too: What Economists Can Contribute To Science Based Policy. Augsburg College Mathematics Colloquium Series, Minneapolis, MN, February 8, 2006.
38. Estimating The Value of Precision Agriculture Using Experimental Field Data: Its More Than Just Space. Organized Symposium: AAEA Conference, Providence, RI, July 25, 2005.
39. Human Resource Management Trends In Pork Production (with James Kliebenstein & Steve May). 17th World Pork Expo, Des Moines, IA, June 10, 2005.

40. IRM Compliance Costs. Monsanto's 2005 CRW IRM Data Review, Chicago, IL, April 11, 2005.
41. Math & Statistics: What Makes Economics the King of the Social Sciences? Augsburg College Mathematics Colloquium Series, Minneapolis, MN, February 9, 2005.
42. Bt Corn Adoption & IRM Compliance. Meeting of the Regional Research Committee on Ecology and Management of European Corn Borer and Other Stalk-Boring Lepidoptera, Beltsville, MD, January 25, 2005.
43. What can economists contribute to a strategic ecological monitoring program for plant-incorporated-protectants? Symposium on Strategic Monitoring for Ecological Impacts from Crops with Plant-Incorporated-Protectants. Arlington, VA, August 5, 2004.
44. Preparing & Submitting Journal Articles: Perspectives From A Recently Tenured Professor. Organized Symposium: AAEE Conference, Denver, CO, August 2, 2004.
45. Trade & Regulation Of Genetically Modified Crops. Forum: Environmental, Business & Economic Issues of Genetically Modified Food: An Introduction & Discussion of the Topic of Genetically Modified Foods. Augsburg College, April 1, 2004.
46. Use of GM Corn and Soybean in Minnesota: Perspectives From a 2002 Farm Survey. Organized Symposium: AAEE Conference, Montreal, Canada, July 30, 2003.
47. Bt Resistance Management: Experiences From The U.S. Frontis Workshop: Environmental Costs and Benefits of Transgenic Crops in Europe, Wageningen, The Netherlands, June 2, 2003.
48. Research Update: Dynamic Resistance Management for Transgenic Insecticidal Crops. Meeting of the Regional Research Committee on Ecology and Management of European Corn Borer and Other Stalk-Boring Lepidoptera, Kansas City, MO, January 29, 2003.
49. Determining The Economy Of Precision Agriculture: Methodological Prerequisites and Results. Precision Agriculture Conference, Bonn, Germany, March 17, 2002.
50. IRM Compliance, Indianapolis, IN, January 29, 2002.
51. A Comparison of IRM Benefits for Single and Double Toxin Bt Corn, Indianapolis, IN, January 29, 2002.
52. Economic and Compliance Issues. Meeting of the Regional Research Committee on Ecology and Management of European Corn Borer and Other Stalk-Boring Lepidoptera, East Lansing, MI, January 28, 2001.
53. An Economic Analysis of European Corn Borer Bt Corn. Monsanto/YieldGard Academic Data Review, St. Louis, MO, October 11, 2000.
54. An Analysis of the Adoption and Use of Bt Plant Pesticides. Monsanto/MaxGard Academic Data Review, St. Louis, MO, October 10, 2000.
55. Current Trends in Employee Relations and Management. *P.O.R.K. Academy*. Sponsored by the National Pork Board and Pfizer Animal Health. Indianapolis, IN, June 7, 2000.
56. Managing the Risk of European Corn Borer Resistance to Bt Corn. *Biotechnology, Environmental Policy, and Agriculture: A workshop on the management of the impacts of biotechnologies*. Sponsored by the European Science Foundation and the UK Department of International Development. Hosted by the International Plant Genetic Resources Institute. Rome, Italy, May 30, 2000.
57. Agricultural Biotechnology: Are we ready for a new era in food, health, and the environment? *Genetically Modified Food: Issues and Opportunities*. MNBIO. Minneapolis, MN, April 11, 2000.

58. An Economic Evaluation of Refuge for Resistance Management in Bt Corn. Monsanto/YieldGard Academic Data Review, St. Louis, MO, October 19, 1999.
59. Managing the Risk of European Corn Borer (Lepidoptera: Pyralidae) Resistance to Transgenic Corn. Invited Presentation. The 32nd Annual Meeting of the Society for Invertebrate Pathology, Riverside, CA, August 22-27, 1999.
60. Panel 4: Compliance Issues, EPA/USDA Workshop on Bt Crop Resistance Management, Rosemont, IL, June 18, 1999.
61. An Experimental Evaluation of an Environmental Conflict. 3rd Toulouse Conference on Environment and Resource Economics, Toulouse, June 16, 1999.
62. Refuge Recommendations for Bt Corn: Why is consensus so hard? Meeting of the Regional Research Committee on Ecology and Management of European Corn Borer and Other Stalk-Boring Lepidoptera, Minneapolis, MN, January 26, 1999.
63. An Economic Assessment of Resistance Management: Bt Corn and the European Corn Borer. Informal Conference Session, Entomological Society of America Annual Meeting, Las Vegas, NV, November 10, 1998.
64. Economic Assessment of Resistance Management: Bt Corn with Multiple Toxins. Monsanto/YieldGard Academic Data Review, St. Louis, MO, October 27, 1998.
65. An Economic Assessment of Refuge under Uncertainty: Controlling European Corn Borer Resistance to Bt Corn. Meeting of the Regional Research Committee on Ecology and Management of European Corn Borer and Other Stalk-Boring Lepidoptera, Kansas City, MO, September 24, 1998.
66. Carbon Sequestration and Agriculture: Recent Trends and Future Opportunities. Workshop on Impacts of Global Climate Change and Mitigation Strategies on US Agriculture, Washington, D.C., May 28, 1998.
67. Biotechnology and Pest Resistance: An Economic Assessment of Refuges. Entomological Society of America, North Central Branch Annual Meeting, Sioux Falls, SD, March 10, 1998.
68. Biotechnology and Pest Resistance: An Economic Assessment of Refuges. Meeting of the Regional Research Committee on Ecology and Management of European Corn Borer and Other Stalk-Boring Lepidoptera, Omaha, NE, January 27, 1998.
69. Employee Management in Pork Production: A Summary of the 1995 NPPC Employer-Employee Survey. Swine Extension Educator's Conference. Des Moines, IA. September 4-5, 1996.
70. Economic Impact of Health and Safety Programs on Pork Production and Human Health. Reported to the Worker Health and Safety Task Force. Des Moines, IA. December 13, 1995.

Selected Presentations/Contributed Papers

1. Value of Insect Pest Management to US and Canadian Corn, Soybean and Canola Farmers. Selected Paper: AAEA Conference, San Francisco, CA, July 27, 2015.
2. Recalibrating the Reported Rates of Return to Food and Agricultural R&D. Contributed Paper: 58th National AARES Conference, Port Macquarie, New South Wales, Australia, February 7, 2014.
3. Polarized Preferences in Homegrown Value Auctions. Selected Paper: AAEA Conference, Pittsburgh, PA, July 26, 2011.
4. Valuing the Roundup Ready® Soybean Weed Management Program. Selected Paper: AAEA Conference, Milwaukee, WI, July 28, 2009.

5. Adoption, Residual Herbicide Use And Grower Values For Roundup Ready® Cotton. Beltwide Cotton Conference, San Antonio, TX, January 7, 2009.
6. Testing for Complementarity and Substitutability among Multiple Technologies: The Case of U.S. Hog Farms. Selected paper: AAEA Conference, Portland, OR, July 31, 2007.
7. Temporal And Spatial Variability Of Corn Response To Fertilizer: What Is The Potential For Management? Eighth International Conference on Precision Agriculture & Other Precision Resources Management. Minneapolis, MN. July 24, 2006.
8. Farmer Demand for Corn Rootworm Bt Corn: Do Insect Resistance Management Guidelines Really Matter? NC-1003 Conference: Economics of Regulation of Agricultural Biotechnologies. Arlington VA, March 12, 2005.
9. Estimating Site-Specific Nitrogen Crop Response Functions: A Conceptual Framework and Geostatistical Model. Selected paper: AAEA Conference, Montreal, Canada, July 29, 2003.
10. A Test Of Within Field Variation For Corn Response To Nitrogen In Central Minnesota. 6th International Conference on Precision Agriculture and Other Precision Resource Management, Minneapolis, MN, July 15, 2002.
11. Managing European Corn Borer Resistance to Bt Corn with Dynamic Refuges. Heartland Environmental and Resource Economics Workshop, Ames, IA, September 24, 2001.
12. Managing European Corn Borer Resistance to Bt Corn with Dynamic Refuges. Selected paper: AAEA Conference, Chicago, IL, August 7, 2001.
13. The Value of Information for Variable Rate Nitrogen Applications: A Comparison of Soil Test, Topographical, and Remote Sensing Information. Selected paper: AAEA Conference, Chicago, IL, August 6, 2001.
14. Managing European Corn Borer Resistance to Bt Corn with Dynamic Refuges. International Consortium on Agricultural Biotechnology Research; 5th International Conference on Biotechnology, Science and Modern Agriculture: a New Industry at the Dawn of a New Century; Ravello, Italy, June 16, 2001.
15. Behavior in Environmental Conflicts with Asymmetric Information: Some Experimental Evidence. Heartland Environmental and Resource Economics Workshop, Ames, IA, September 18, 2000.
16. Changes in the Structure of Wages in the U.S. Pork Industry. Selected paper: AAEA Conference, Tampa, FL, July 31, 2000.
17. Production Decisions with Uncertain Markets: The Case of Bt Corn. Selected paper: AAEA Conference, Tampa, FL, August 2, 2000.
18. Assessing the Risk of Insect Resistance to Transgenic Corn: A Bayesian Approach Using Field Level Monitoring Data. Heartland Environmental and Resource Economics Workshop, Ames, IA, September 21, 1999.
19. Managing the Risk of European Corn Borer Resistance to Bt Corn: An Assessment of Controversial Refuge Recommendations. Selected paper: AAEA Conference, Nashville, TN, August 8-11, 1999.
20. An Experimental Investigation of Asymmetric Information. North American Meetings of the Economic Science Association, Tucson, AZ, October 17, 1998.
21. The Environmental Effects of Freedom to Farm. Selected paper: AAEA Conference, Salt Lake City, UT, August 3, 1998.
22. Biotechnology and Pest Resistance: An Economic Assessment of Refuges. Selected paper: AAEA Conference, Salt Lake City, UT, August 3, 1998.

23. Structure of Wages and Benefits in the U.S. Pork Industry. Selected paper: AAEA Conference, Toronto, Canada, July 29, 1997.
24. Valuation of Water Quality in Livestock Regions: An Application to Rural Watersheds in Iowa. Selected paper: AAEA Conference, Toronto, Canada, July 29, 1997.
25. An Analysis of Occupational Health in Pork Production. Selected paper: AAEA Conference, Toronto, Canada, July 28, 1997.

Extension Presentations

1. Knocking Down Economic Barriers to Herbicide Resistance Management. West Central Spring Agronomy Update. Rochester, MN, February 18, 2015 (attendance ≈ 58).
2. Anything New In Precision Agriculture? Variable Rate Fertilizer & ISO 9001 Training Program. *AFE Staff & Program Development Conference*. Arden Hills, MN, April 14, 2003 (attendance = 15).
3. Nutrient BMP Insurance. *AFE Staff & Program Development Conference*. Arden Hills, MN, April 2, 2003 (attendance = 12).
4. Estimating The Economic Feasibility Of Tile Drainage. *Farmland Tile Drainage Design-Water Management Workshop*, Crookston, MN, February 26, 2002 (attendance = 72).
5. Estimating The Economic Feasibility Of Tile Drainage. *Farmland Tile Drainage Design-Water Management Workshop*, North Mankato, MN, March 5, 2002 (attendance = 75).
6. What Is The Value Of Bt Corn? Yield Protection and Risk. 21st Annual Crop Pest Management Short Course, St. Paul, MN, November 19, 2001 (attendance = 131)
http://www.agro.agri.umn.edu/21stcroppestmanage/21st_annual_crop_pest_management.htm
7. Things to Know Before Planting GMOs. *Agricultural, Food, and Environment Capacity Area, Staff Development Conference*, St. Paul, MN, May 15, 2001 (attendance ≈ 10)
<http://www.extension.umn.edu/capacity/afe/components/powerpointconference.htm>
8. Tile Drainage Economic Feasibility. *Farmland Tile Drainage Design-Water Management Workshop*, Marshall, MN, March 5, 2001 (attendance ≈ 80).
9. Tile Drainage Economic Feasibility. *Farmland Tile Drainage Design-Water Management Workshop*, Moorhead, MN, March 7, 2001 (attendance ≈ 80).
10. Things to Know About GM Crops. *University of Minnesota Crops Research Update*, Cosmos, MN, January, 25 2001 (attendance ≈ 60).
11. Reducing Crop Losses from Excess Water in Northwest Minnesota with Subsurface (Tile) Drainage: Economic Evaluation. *Ag Drainage Field Days*, Crookston, MN, September 27, 2000 (attendance ≈ 25).
12. Reducing Crop Losses from Excess Water in Northwest Minnesota with Subsurface (Tile) Drainage: Economic Evaluation. *Ag Drainage Field Days*, Brooks, MN, September 28, 2000 (attendance ≈ 40).
13. Agricultural Biotechnology: Understanding Your Options. *Corn/Soybean Days 2000*. Cambridge, MN, March 8, 2000 (attendance ≈ 45).
14. Agricultural Biotechnology: Understanding Your Options. *Grower Meeting conducted by Progressive Ag Center*. Racine, MN, February 24, 2000 (attendance ≈ 40);
15. Agricultural Biotechnology: Are we ready for a new era in food, health, and the environment? *Grower Meeting*. Madelia, MN, February 22, 2000 (attendance ≈ 15).

16. To GMO or not To GMO? Production Considerations for the First Year of a New Millennium. *Crop Systems Staff Development Training*, Roseville, MN, December 1, 1999. (attendance ≈ 15).
17. To GMO or not To GMO? Production Considerations for the First Year of a New Millennium. *Rural Response/FINPACK Staff Development*, St. Paul, MN, December 14, 1999 (attendance ≈ 25).
18. To GMO or not To GMO? Production Considerations for the First Year of a New Millennium. *Winter Crop Days*, Kasson, MN, January 19, 2000 (attendance ≈ 100).
19. To GMO or not To GMO? Production Considerations for the First Year of a New Millennium. *Winter Crop Days*, Rushford, MN, January 19, 2000 (attendance ≈ 20),
20. To GMO or not To GMO? Production Considerations for the First Year of a New Millennium. *Winter Crop Days*, North Mankato, MN, January 20, 2000 (attendance ≈ 75).
21. To GMO or not To GMO? Production Considerations for the First Year of a New Millennium. *2000 Soybean Production Conference*, Crookston, MN, January 25, 2000 (attendance ≈ 15).
22. To GMO or not To GMO? Production Considerations for the First Year of a New Millennium. *2000 Soybean Production Conference*, Moorhead, MN, January 26, 2000 (attendance ≈ 8).
23. To GMO or not To GMO? Production Considerations for the First Year of a New Millennium. *2000 Soybean Production Conference*, Willmar, MN, January 27, 2000 (attendance ≈ 35).
24. An Economic Assessment of Resistance Management: The Case of Bt Corn. *19th Annual Crop Pest Management Short Course*, St. Paul, MN, November 22, 1999. (2 sessions: attendance ≈ 55).

Applied Economics Department Seminars

1. Understanding Risky Production, Insurance, and Self-Protection: A Classical Approach. March 24, 2008
2. Market Insurance, Self-Insurance, and Self-Protection: A Slutskyesque Approach. January 20, 2006
3. Insect Resistance Management: What Is a Farmer's Cost? April 4, 2005
4. Estimating the Potential Value of Variable Rate Nitrogen Applications: A Comparison Of Soil Test, Topographical, And Remote Sensed Information. October 1, 2004
5. Economics When Location Matters II: The Case of Precision Agriculture. February 27, 2004
6. Risk and the Value of Bt Corn. September 19, 2003
7. A Note on Capturing Beliefs with Predictions. April 19, 2002
8. What is the value of Bt Corn? October 5, 2001
9. Changes in the Structure of Wages in the U.S. Pork Industry: 1990-95. February 25, 2000

News Releases and Interviews

1. *Mergermarket & Dealreporter*, Esther D'Amico, July 8, 2015
2. *Abi Stokes Mighthill*, March 6, 2014
3. *New Scientist*, Andy Coghlan. June 6, 2013
4. *Swinecast*. Ned Arthur. November 18, 2005
5. *Swinecast*. Ned Arthur. August 19, 2005
6. *Linder Farm Network*. Linda Brekke. June 7, 2002

7. *Minnesota Farm Network*. Tom Rathman. January, 24 2002
8. *News & Information*. University of Minnesota Extension Service (J. Sperbeck, ed.). Reconsider the Value of Bt Corn Each Year, Economist Advises. January 23, 2002
9. *Star Tribune*. Sharon Schmickle. November 20, 2001
10. *Soybean Digest*. Stephanie Larson. May 3, 2001
11. *AgriNews*. Janet Kubat, Staff Writer. October 26, 2000
12. *Minnesota Public Radio*. Andrew Haige. April 24, 2000
13. *Star Tribune*. Sharon Schmickle. February 28, 2000
14. *Farm Progress*. Willie Vogt, Technology Editor. January 21, 2000
15. *AgriNews*. Janet Kubat, Staff Writer. January 19, 2000
16. Corn, soybean market access may be important seed choice factor. *News & Information*. University of Minnesota Extension Service (J. Kurtz, ed.). January 10, 2000
17. Economist: Substantial price advantage for non-GM corn unlikely in 2000. *News & Information*. University of Minnesota Extension Service (J. Kurtz, ed.). January 10, 2000
18. If past patterns continue, big non-GM soybean price premium is unlikely in 2000. *News & Information*. University of Minnesota Extension Service (J. Kurtz, ed.). January 10, 2000

Service and Development

Committee Chairman

- University of Minnesota, Applied Economics, Priorities Committee, 2014 - Present
- University of Minnesota, Applied Economics, Consumer Economics and Food Marketing Interview Committee, 2015
- University of Minnesota, Applied Economics, International Development Interview Committee, 2015
- University of Minnesota, College of Food Agricultural & Natural Resource Sciences, Promotion and Tenure Committee. 2013
- University of Minnesota, Applied Economics, Microeconomics Prelim Committee, 2012, 2014
- University of Minnesota, Applied Economics, Computer Services Committee, 2009 – 2010
- University of Minnesota, Agronomy & Plant Genetics, Applied Economics, Dairy Science, and Soil, Water, & Climate, Hueg-Harrison Fellowship Awards Committee, 2009
- AAEA Outstanding Masters Thesis Award Committee, 2007 - 2008
- University of Minnesota, Applied Economics Graduate Program, Graduate Committee, 2006-2009
- University of Minnesota, Department of Applied Economics, Seminar Committee, 2003
- Northeastern Agricultural and Resource Economics Association Masters Thesis Award Committee, 2001

Committee Member

- Weed Science Society of America – National Academy of Sciences Herbicide Resistance Summit Planning Committee, 2012 - Present
- University of Minnesota, Applied Economics, Microeconomics Prelim Committee, 2012 - Present
- College of Food, Agriculture, & Natural Resource Science Forever Green Initiative Grant Proposal Review Committee, 2014

- College of Food, Agriculture, & Natural Resource Science Associate Dean of Research and Associate Dean of Academic Program Search Committee, 2014
- University of Minnesota, Applied Economics, Awards Committee, 2013 - 2014
- Planning Committee, Herbicide Resistance Workshop, Washington D.C., September 26, 2013
- AAEA Communications/Publications Committee, 2013-2015
- University of Minnesota, College of Food Agriculture & Natural Resource Science, Promotion and Tenure Committee. 2012-2013.
- University of Minnesota, Applied Economics Undergraduate Committee, 2012-2014
- University of Minnesota, Applied Economics Graduate Program Graduate Committee, 2000-2013
- University of Minnesota, College of Food, Agriculture, & Natural Resource Science, LTAR Committee, 2012
- The National Academies, Board on Agriculture and Natural Resources, Steering Committee for a National Summit on Strategies to Manage Herbicide-Resistant Weeds, 2011 - 2012
- University of Minnesota, Center for Farm Financial Management, Extension Economist/Assistant Extension Professor Search, 2010
- University of Minnesota, Applied Economics, Agribusiness Professor/Koller Chair Search, 2010
- University of Minnesota, Applied Economics, Computer Services Committee, 2009 - 2010
- AAEA Outstanding AJAE Article Award Committee, 2007 - 2011
- University of Minnesota, Applied Economics, Department Head Search Committee, 2008
- University of Minnesota, Applied Economics CSREES Review Committee, 2007 – 2008
- University of Minnesota, College of Food, Agriculture, & Natural Resource Sciences Technology Committee, 2007 – 2010
- University of Minnesota, Invasive Species & Genotypes IGERT Traineeship Awards Committee, 2007 - 2011
- University of Minnesota, Agronomy & Plant Genetics, Applied Economics, Dairy Science, and Soil, Water, & Climate, Hueg-Harrison Fellowship Awards Committee, 2006 - 2009
- University of Minnesota, Social Sciences Policy & Review Council: Course Proposals Committee, 2007
- AAEA Outstanding Masters Thesis Award Committee, 2007 - 2008
- University of Minnesota, Social Sciences Policy Review Council, 2006-2009
- FIFRA Scientific Advisory Panel: Analysis of a Natural Refuge of Non-Cotton Hosts for Monsanto's Bollgard II Cotton. Arlington, VA, June 13-16, 2006
- University of Minnesota, Applied Economics, Search Committee for Applied Microeconomics and Econometrics, 2005
- University of Minnesota, College of Agricultural, Food, and Environmental Science, Rapid Agricultural Response Fund Review Panel, 2005, 2007
- EPA FIFRA Scientific Advisory Panel ad hoc, 2000-2015
- University of Minnesota, Applied Economics Program Priorities Committee, 2004-2008
- University of Minnesota, Economics Minor Prelim Committee, 2004, 2009-2011
- University of Minnesota, Applied Economics Ph.D. Production Economics Field Exam Committee, 2000 - 2006.

- University of Minnesota, Applied Economics Promotion & Tenure Committee, 2004-2006, 2010 - 2011
- University of Minnesota, Applied Economics, Seminar Committee, 1999 – 2000, 2002-2003
- Center for International Food and Agricultural Policy's Graduate Student Paper Awards Committee, 2003
- University of Minnesota, Applied Economics Outreach Committee, 2001-2002
- Executive Planning Committee for the 21st Annual Crop Pest Management Short Course, 2001
- Biotechnology/Food Safety Planning Team for Fall Staff Development, 2001
- FIFRA Scientific Advisory Panel: Risk & Benefits Assessment for Bt Plant-Pesticides: Benefits and Economic Analysis. Arlington, VA, October 20, 2000
- FIFRA Scientific Advisory Panel: Risk & Benefits Assessment for Bt Plant-Pesticides: Insect Resistance Management. Arlington, VA, October 18, 2000
- University of Minnesota, College of Agricultural, Food, and Environmental Sciences, Agbiotech Working Group, 1999 - 2000
- Northeastern Agricultural and Resource Economics Association Masters Thesis Award Committee, 1999 - 2001
- University of Minnesota, Applied Economics Masters Thesis Award Selection Committee, 1999
- Computing and Data Processing Services Committee, 1993 - 1995
- Economics Graduate Student Association, 1990-1995

Invited Participant

- Workshop on Herbicide Tolerant crops in the EU: Strengthening the economic and environmental impact assessment. European Commission-Joint Research Centre-Institute for Prospective Technological Studies. Paris, France, December 15-16, 2014
- Planning Meeting for an Activity on Preventing or Deterring Weed, Insect, and Fungi Resistance to Pesticides. National Academies Board on Agriculture and Natural Resources. Washington D.C., September 11, 2014.
- Planning meeting for the "Herbicide Resistance Management Summit II." St. Louis, MO, May 13-14, 2013
- impPIPE Soybean Rust Monitoring Network Workshop. Pittsburgh, PA, August 1-3, 2010
- Economic Research Service & Farm Foundation: Program of Research on the Economics of Invasive Species Management. Washington D.C., October 20-21, 2005
- U.S. EPA Symposium: Strategic Monitoring for Ecological Impacts from Crops with Plant-Incorporated-Protectants. Arlington, VA, August 3-5, 2004
- U.S. EPA Resistance Management Modeling Workshop, Cincinnati, Ohio, May 11-12, 2004
- Frontis Workshop: Environmental Costs and Benefits of Transgenic Crops in Europe. Wageningen, The Netherlands, June 1-4, 2003
- Environmental Protection Agency Workshop on Bt Corn Insect Resistance Management Framework Development. *The Remedial Action Plans & Development Workshops*, Arlington, VA, November 5-6, 2001
- Environmental Protection Agency Workshop on Bt Corn Insect Resistance Management Framework Development: *The Insect Resistance Management Strategies Workshop*, Arlington, VA, September 10-11, 2001

- Environmental Protection Agency Workshop on Bt Corn Insect Resistance Management Framework Development: *Pest Simulation Model Design and Validation*, Washington, DC, June 4-5, 2001
- United States Department of Agriculture/Agricultural Research Service's High Spray Area Resistance Management Workshop, Ames, IA, May 22-23, 2001
- Resources for the Future Workshop on the Economics of Resistance Management, Warrenton, VA, April 4-6, 2001

Moderator/Facilitator

- Organized Symposium: The Future of Scholarly Publications in the Interconnected World. International Conference of Agricultural Economics. Milan, Italy, August 10, 2015.
- AERE Organized Symposium: Land and Ecosystem Services, Midwest Economics Association Annual Meeting, Minneapolis, MN, March 29, 2015
- Selected Paper Session: Productivity. AAEA Conference, Minneapolis, MN, July 29, 2014
- IGERT Workshop: Bioeconomic Modeling of Human-Mediated Invasive Species Dispersal: Tools for Resource Managers. St. Paul, MN, April 15, 2011
- Selected Paper Session: Agricultural Production Analyses. AAEA Conference, Portland, OR, July 31, 2007
- Profitability Session. Eighth International Conference on Precision Agriculture & Other Precision Resources Management. Minneapolis, MN. July 25, 2006
- Fertilizer Management Discussion Group. *Nutrient Management Workshop*, St. Paul, MN, January 18, 2003
- Extension Public Value: Showcasing Featured Programs (Business Retention & Expansion Strategies and 4-H Clubs). *2002 Program Summit*, St. Cloud, MN, November, 22, 2002
- Biotechnology: Ecology, Food Science, and Policy. *Agricultural, Food, and Environment Capacity Area, Staff Development Conference*, St. Paul, MN, May 16, 2001
- Selected Paper Session: Controlling Point/Non-Point Pollution with Marketable Permits. AAEA Annual Meeting, Tampa, FL, August 1, 2000
- Biotechnology Management Analysis-Empirical and Natural Science. *Biotechnology, Environmental Policy, and Agriculture: A workshop on the management of the impacts of biotechnologies*. Sponsored by the European Science Foundation and the UK Department of International Development. Hosted by the International Plant Genetic Resources Institute. Rome, Italy, May 30, 2000

Discussant/Commenter

- Managing the Impact of Exhaustible Resource Extraction on Ecosystem Service Values. AERE Organized Symposium: Land and Ecosystem Services, Midwest Economics Association Annual Meeting, Minneapolis, MN, March 29, 2015
- Economic and sociological strategies for dealing with weed resistance and similar problems. What has been tried and what has and hasn't worked? Herbicide Resistance Workshop, Washington D.C., September 26, 2013
- Spatio-Temporal Models of Asian Citrus Canker Risk: Implications for Indemnification Funds and Insurance Contracts. by B. Goodwin & N. Piggot. Program of Research on the Economics of Invasive Species Management. Washington D.C., October 20, 2005

- Jointly-Determined Ecological Thresholds and Economic Tradeoffs in Wildlife Disease Management. by R. Horan. Program of Research on the Economics of Invasive Species Management. Washington D.C., October 20, 2005
- Regulation, Trade, and Market Power: Agricultural Chemical Markets and Incentives for Biotechnology. by V. Smith. NC-1003 Conference: Economics of Regulation of Agricultural Biotechnologies. Arlington VA, March 11, 2005
- Environmental Fate and Impact Considerations Related to the Use of Transgenic Crops. by G.A. Kleter and H.A. Kuiper. Frontis Workshop: Environmental Costs and Benefits of Transgenic Crops in Europe, Wageningen, The Netherlands, June 2, 2003
- Cognition and Behavior in Normal Form Games. North American Meetings of the Economic Science Association, Tucson, AZ, October 17, 1998
- Selected Paper Session: Pesticides and Environmental Quality. AAEA Annual Meeting, Salt Lake City, UT, August 4, 1998

Editorial Boards/Councils

Co-Editor: *Applied Economic Perspectives and Policy*, 2013 - Present

Associate Editor: *Agronomy Journal*, 2008 – 2013

Editorial Board: *Environmental Biosafety Research*, 2005 – 2012.

Associate Editor: *American Journal of Agricultural Economics*, 2008 – 2011

Editorial Council: *Journal of Agricultural & Resource Economics*, 2006 – 2009

Guest Editor (with Frisvold & Mitchell): *AgBioForum* Volume 12, Issue 3 & 4, 2009

Reviewer/Referee (156)

1. AgBioforum (19)
2. Agricultural Economics (4)
3. Agricultural and Resource Economics Review (3)
4. Agricultural Systems
5. Agronomy Journal (18)
6. American Economic Review
7. American Journal of Agricultural Economics (26)
8. Applied Economic Perspectives & Policy (2)
9. Canadian Journal of Agricultural Economics (5)
10. Computers And Electronics In Agriculture
11. Crop Protection (2)
12. Ecological Economics
13. USDA Economic Research Service Reports
14. Environment and Development Economics (2)
15. Environmental Biosafety Research (3)
16. Environmental Management
17. Environmental and Resource Economics (4)
18. European Economic Review
19. European Journal of Political Economy (2)
20. European Review of Agricultural Economics (2)
21. Journal of Agribusiness
22. Journal of Agricultural & Applied Economics (5)

23. Journal of Agricultural & Resource Economics (11) (*Western Agricultural Economics Association 2010 Outstanding JARE Reviewer*).
24. Journal of Economic Behavior & Organization
25. Journal of Economics & Business
26. Journal of Economic Entomology (3)
27. Journal of Environmental Economics and Management (12)
28. Journal of Environmental Economics and Policy
29. Journal of Environmental Management
30. Journal of Public Economic Theory
31. Manufacturing & Service Operations Management
32. Marketing Science
33. Pest Management Science
34. Plant and Soil
35. Precision Agriculture (6)
36. Public Choice (3)
37. Resource & Energy Economics (3)
38. Review of Agricultural Economics (3)
39. Review of Economic Studies
40. Royal Society: Biology Letters
41. Weed Science
42. University of Minnesota, CFANS MNDrive Global Food Venture Fellowship Program 2015
43. USDA Agriculture and Food Research Initiative Foundation: Exploratory Research Program 2015
44. University of Minnesota Agricultural Experiment Station Projects: MIN-172 (2015), MIN-14-160 (2011), MIN-14-022 (2011), MIN-14-040 (2006), MIN-17-065 (2008)
45. Israel Science Foundation: 2006 Grant Proposal Review for Two-Sided Contests, Ambiguous Political Power, and Segmentation submitted by G.S. Epstein and N. Shmuel
46. Book Chapter: "Assessing the Value and Economic Risk of IPM" for Cambridge University Press IPM Textbook
47. Book Proposal: *An Applied Course in Microeconomic Theory* by J. Coggins for Blackwell Publishers
48. Book Proposal: *Game Theory and Economic Decisions* by S.R. Chakravarty for Routledge Publishing
49. Book Proposal: *Game Theory and Information: An Introduction to Game Theory (4th)* by E. Rasmusen for Blackwell
50. WAEA selected paper sessions 2014
51. AAEA selected paper sessions 1998, 2000, 2002, 2003, 2011, 2012
52. AAEA selected poster sessions 2000 and 2001
53. European Conference on Precision Agriculture and Precision Livestock Farming selected paper sessions 2005, 2006, & 2011

Consultancies

- AgInfomatics, LLC, Madison, WI, 2013-14
- Pardey & Associates, Falcon Heights, MN, 2012-13
- Abt Associates, Inc., Cambridge, MA, 2011-12

- Pfizer, Animal Health, New York, NY, 2011-12
- Geo Marine, Inc., Plano, TX, 2011 - 12
- International Food Policy Research Institute, Washington, DC, 2009 - 10
- Monsanto, St. Louis, MO, 2007-08
- Rural Community Insurance Services, Anoka, MN, 2008
- National Pork Board, Des Moines, IA, 2004-2005
- Center for Agricultural and Rural Development, Ames, IA, 1998-2000
- AgRisk Management, Ames, IA, 1997-1998

Organizer

- Neonicotinoid Seed Treatments: Current Research and Issues. NC205/NCCC46 and IWGO Joint Meeting. Chicago, IL, April 17, 2014 (with Mitchell)
- AARES Symposium: A Reevaluation of Pest Resistance Management Strategies: Bio-Economic Perspectives. AAEA Conference, Washington D.C., August 6, 2013 (with Pardey and Warr)
- Herbicide Resistance Weeds & Sustainable Weed Management, AAEA Conference, Seattle WA, August 14, 2012
- Testing the Precision Agriculture Hypothesis: Addressing the Challenges Of Data Collection and Analysis, AAEA Conference, Providence RI, July 25, 2005

Other

- CFANS Distinguished Teaching Award for Graduate Faculty, 2015
- Collaborator: NC246: Ecology and Management of Arthropods in Corn, 2015 - Present
- Evaluator for University of Minnesota Extension Service: Charles Holcomb's request for promotion to Associate Extension Professor, 2014
- Special Merit Based Salary Increase, 2012
- Tenure Evaluation for Dr. Christopher McIntosh, University of Minnesota, Duluth
- Topic Leader: Experimental Economics. AAEA Conference, Denver, CO, July 25-27, 2010
- Participant: ESCOP Science Roadmap, 2009,.
- Topic Leader: Productivity Analysis & Emerging Technologies. AAEA Conference, Milwaukee, WI, July 26-28, 2009,.
- Star Faculty Salary Increase, 2007
- Evaluator for University of Minnesota Extension Service: Bret Oelke's request for promotion to Associate Extension Professor, 2007
- Special Merit Based Salary Increase, 2006
- Member of the Western Agricultural Economics Association, 2004 - Present
- Member of the American Agricultural Economics Association, 1994 - Present
- Collaborator: Regional Research Committee on Ecology and Management of European Corn Borer and Other Lepidopteran Pests of Corn, 1998 - 2015
- Special Merit Based Salary Increase, 2002
- Panelist: Insect Resistance Management Modeling. Meeting of the Regional Research Committee on Ecology and Management of European Corn Borer and Other Stalk-Boring Lepidoptera, East Lansing, MI, January 29, 2001

- Topic Leader: Selected Paper Sessions: Environmental Economics. AAEA Conference, Chicago, IL, August 5-8, 2001
- Participant: The University of Arizona's Graduate Student Workshop on Experimental Economics, 1995
- Treasurer: Economics Graduate Student Association, 1992 – 1993