James M. MacDonald Curriculum Vitae

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Employment at UMD:

1/20-present; Research Professor, Department of Agricultural and Resource Economics

Other Employment:

1/01-10/19: Chief, Structure, Technology, and Productivity Branch, Economic Research Service, U.S. Department of Agriculture.

8/94-1/01: Senior Economist, Economic Research Service, U.S. Department of Agriculture.

8/94-5/10: Adjunct Professor, Lally School of Management, Rensselaer Polytechnic Institute

8/87-8/94: Associate Professor, Department of Economics, Rensselaer Polytechnic Institute

6/80-8/87: Economist, Economic Research Service, U.S. Department of Agriculture.

9/79-8/80: Instructor, Hamilton College

EXhuEat(6983), State University of New York at Buffalo B.S. (1975), Siena College

Publications:

Book Chapters:

"Concentration in Food and Agricultural Markets" (with John Crespi), in *Handbook of Agricultural Economics*, volume 6, D. Just and C. Barrett, eds., Amsterdam, Elsevier Press. June, 2022.

"How Farm Consolidation Affects Farmers and Farmworkers" in *Handbook on the Human Impact of Agriculture*, Harvey S. James, ed. Northampton, MA: Edward Elgar Publishing. 2021.

"CAFOs: Farm Animals and Industrialized Livestock Production" in *Oxford Encyclopedia of Environmental Science*. Oxford University Press. DOI: 10.1093/acrefore/9780199389414.013.240. July, 2018.

"Agriculture" (with Bruce M. Marion), in *The Structure of American Industry*, 13th edition. James Brock, ed. Long Grove, IL: Waveland Press, 2015. Earlier version appeared in 12th

edition, 2008 (Upper Saddle River, NJ: Pearson Prentice Hall).

"Comments on 'Influences of Agricultural Technology on the Size and Importance of Food Price Variability", J.P Chavas, D. Hummels, and B, Wright, eds., *Economics of Food Price Volatility*. National Bureau of Economic Research. Chicago: University of Chicago Press. 2014

"Reshaping Agricultural Production: Geography, Farm Structure, and Finances" (with Robert Hoppe and Eric O'Donoghue), in *Farming, Finance, and the Global Marketplace*. Alan Barkema and Jason Henderson, eds. Kansas City, MO: Federal Reserve Bank of Kansas City. 2010.

"Concentration, Mergers, and Antitrust" (with Marvin Hayenga, Kyle Steigert, and Brian Buhr), in *The 2007 Farm Bill: Policy Options and Consequences*, Joe L. Outlaw, editor. Oakbrook, IL: The Farm Foundation. February, 2007.

"Structural Change in the U.S. Agriculture" (with Robert Hoppe and David Banker), in *Policy Reform and Adjustment in the Agricultural Sectors of Developed Countries*. David Blandford and Berkeley Hill, eds. London: CABI Publishing. June, 2006.

"Overview of the U.S. Marketing System for Livestock" in *Exploring the Regulatory and Commercialization Issues Related to Genetically Engineered Animals*. A Summary of Two Multi-stakeholder Workshops. Pew Initiative on Food and Biotechnology. Rockville Md. December, 2005.

"Beef and Pork Packing Industries" in special issue devoted to Economics of Red Meat and Dairy Industries, of *The Veterinary Clinics of North America: Food Animal Practice*, Stephen R. Koontz and John Vassalo, eds. Philadelphia: Elsevier Science. July, 2003.

"Concentration, Mergers, and Antitrust" (with Marvin L. Hayenga), in *The 2002 Farm Bill: Policy Options and Consequences*, Joe L. Outlaw and Edward G. Smith, editors. Publication No. 2001-01. Oakbrook, IL: The Farm Foundation. September, 2001.

"Agribusiness Concentration, Competition and NAFTA", in *Structural Change as a Source of Trade Disputes Under NAFTA: Proceedings of the Seventh Agricultural and Food Policy Systems Workshop*, R.M.A. Loyns, Karl Meilke, Ronald D. Knutson, and Antonio Yunez-Naude, editors, 2001.

"Transportation and Communications", in *Globalization of the Processed Foods Market*, Dennis R. Henderson, Charles R. Handy, and Steven A. Neff, editors. U.S. Department of Agriculture, Economic Research Service. Agricultural Economic Report No. 742. October, 1996.

"Why Few States Choose Price Caps for Incentive Regulation of Telecommunications" (with J. R. Norsworthy and W. Fu), in *Incentive Regulation for Public Utilities*, Michael Crew, editor. Boston: Kluwer Academic Publishers, 1994.

"Organization and Performance of the Marketing System" (with Lester H. Myers), in Rural

Information Systems: New Directions in Data Collection and Retrieval, Rueben C. Buse, editor. Iowa City, IA: Iowa State University Press, 1992.

"Concentration and Railroad Pricing", in *Concentration and Price*, Leonard W. Weiss, editor. Cambridge, MA: The MIT Press, 1989.

"Economics of Scope, Contestability Theory, and Economic Efficiency", in *Economic Efficiency in Agricultural and Food Marketing*, Walter Armbruster and Richard L. Kilmer, editors. Ames, Iowa: Iowa State University Press, 1987.

"Advertising and Quality in Food Products: Some New Evidence on the Nelson Hypothesis" (with David T. Scheffman and Ira Taylor Whitten), in *Advertising and the Food Industry*, John M. Connor and Ronald Ward, editors. Madison, Wisconsin, North Central Regional Project NC-117, 1983.

Refereed Journals:

"The Industrial Organization of Food and Agriculture." *Review of Industrial Organization*, forthcoming, 2023.

"How Does a Change in Outside Options Affect Relational Contracting Outcomes? Experimental Evidence and Implications for Agricultural Contracting." (with Steven Wu and Jacob Brindley). *Journal of the Agricultural and Applied Economics Association* (February, 2023): 1-14

"Tracking the Consolidation of U.S. Agriculture." *Applied Economic Perspectives and Policy* 42 (September, 2020): 361-379.

"Research, Productivity, and Output Growth in U.S. Agriculture" (with Keith Fuglie, Matt Clancy, and Paul Heisey). *Journal of Agricultural and Applied Economics* 49 (November, 2017): 514-554.

"Consolidation, Concentration, and Competition in the Food System". *Economic Review*, Federal Reserve Bank of Kansas City. Volume 102, Special Issue: "Agricultural Consolidation: Causes and the Path Forward" (September 2017): 85-105. Reprinted in *Farm Policy Journal* (Australia), Summer 2017: 23-35.

"Concentration, Contracting, and Competition Policy in U.S. Agribusiness." *Concurrences: Competition Law Review*, No. 1, 2016 (February).

"Trends in Agricultural Contracts". *Choices: The Magazine of Food, Farm, and Resource Issues*. August, 2015.

"The Economics of Contract Grower Protection Legislation: The Packers and Stockyards Act and GIPSA Rule" (with Steven Wu). *Choices: The Magazine of Food, Farm, and Resource Issues*. August, 2015.

"Railroads and Price Discrimination: The Roles of Competition, Information, and Regulation".

Review of Industrial Organization 43 (August, 2013): 85-101.

"Market Power in Poultry Production Contracting? Evidence from a Farm Survey" (with Nigel Key). *Journal of Agricultural and Applied Economics* 44 (November, 2012): 477-490.

"Foregoing Subtherapeutic Antibiotics: the Impact on Broiler Grow-out Operations" (with Sun Ling Wang). *Applied Economic Perspectives and Policy*, 33 (Spring 2011): 79-99.

"Adoption of Technology, Management Practices, and Production Systems in U.S. Milk Production" (with Aditya R. Khanal and Jeffrey Gillespie). *Journal of Dairy Science* 93 (December, 2010): 612-622.

"Preface to the Centennial Issue" (with Scott Irwin, Richard Just, and Spiro Stefanou). *American Journal of Agricultural Economics* 92 (April, 2010): 297-299.

"The Minimum Wage, Restaurant Prices, and Labor Market Structure" (with Daniel Aaronson and Eric French). *Journal of Human Resources* 43 (Summer 2008): 688-720.

"Agricultural Contracting, Competition, and Antitrust". *American Journal of Agricultural Economics* 88 (December, 2006): 1244-1250.

"How Firms Construct Price Increases: Responses to Minimum Wage Increases" (with Daniel Aaronson). *American Journal of Agricultural Economics* 88 (May, 2006): 292-307.

"Technology, Labor Wars, and Producer Dynamics: Explaining Consolidation in Beefpacking" (with Michael Ollinger). *American Journal of Agricultural Economics* 87 (November, 2005): 1020-1033.

"Technological Change and Economies of Scale in U.S. Poultry Slaughter" (with Michael Ollinger and Milton Madison). *American Journal of Agricultural Economics* 87 (February, 2005): 117-30.

"Organizational Economics in Agriculture Policy Analysis" (with Mary C. Ahearn and David Banker). *American Journal of Agricultural Economics* 86 (August, 2004): 744-49.

"Tracing the Effects of Agricultural Commodity Prices on Food Costs" (with Catherine Morrison Paul). *American Journal of Agricultural Economics* 85 (August, 2003): 633-646.

"Competition and Prices in USDA Commodity Procurement" (with Charles Handy and Gerald Plato). *Southern Economic Journal* 69 (July, 2002): 128-43.

"Scale Economies and Consolidation in Hog Slaughter: Reply" (with Michael Ollinger). *American Journal of Agricultural Economics* 83 (November, 2001): 1084-86.

"Scale Economies and Consolidation in Hog Slaughter" (with Michael Ollinger). *American Journal of Agricultural Economics* 82 (May, 2000): 334-346.

"Demand, Information and Competition: Why Do Food Prices Fall at Seasonal Demand Peaks?" *Journal of Industrial Economics* 48 (March, 2000): 27-46.

"Modeling the Costs of Food Safety Regulation" (with Stephen Crutchfield). *American Journal of Agricultural Economics* 78 (December, 1996): 1251-1257.

"Railroad Deregulation: Pricing Reforms, Shipper Responses, and the Effects on Labor" (with Linda Cavalluzzo). *Industrial and Labor Relations Review* 50 (October, 1996): 80-91. Reprinted in P. MacAvoy and R. Schmalensee, eds., *The History of Deregulation* (London: Edward Elgar).

"Structural Change in Meat Processing: Implications for Food Safety Regulation" (with Charles Handy, Kenneth Nelson, and Michael Ollinger). *American Journal of Agricultural Economics* 78 (August, 1996): 780-785.

"Does Import Competition Force Efficient Production?" *Review of Economics and Statistics* 76 (November 1994): 721-727.

"Transactions Costs and the Governance of Coal Supply and Transportation Agreements." *Journal of the Transportation Research Forum* 35 (October 1994): 63-74.

"Telephone Pricing Structures: The Effects on Universal Service" (with Paul Cain). *Journal of Regulatory Economics* 3 (December 1991): 293-308.

"Do the Poor Still Pay More? An Analysis of Food Price Variations in Large Metropolitan Areas" (with Paul E. Nelson, Jr.). *Journal of Urban Economics* 30 (November 1991): 344-359.

"Multinational Strategies and Structures among U.S. Food Firms" (with Charles Handy). *American Journal of Agricultural Economics* 71 (December 1989):1246-1254.

"Railroad Deregulation, Innovation, and Competition: Effects of the Staggers Act on Grain Transportation." *The Journal of Law and Economics* 32 (April 1989): 63-97.

"The Microdynamics of Structural Change: Patterns of Merger and Divestiture Activity among Food Manufacturers." *Agribusiness: An International Journal* 4 (March 1988): 143-156.

"Effect of Deregulation on Export Grain Rail Rates in the Plains and Corn Belt." (with Stephen W. Fuller, Michael Wohlgenant, and David Bessler). *Journal of the Transportation Research Forum* 28 (1987): 160-167.

"Competition and Rail Rates for the Shipment of Corn, Soybeans, and Wheat." *RAND Journal of Economics* 18 (Spring 1987): 151-163.

"Entry and Exit on the Competitive Fringe." *Southern Economic Journal* 52 (January 1986): 640-652.

"R&D and the Directions of Diversification." *Review of Economics and Statistics* 67 (November 1985): 583-590.

"Dun and Bradstreet Business Microdata: Research Applications, and the Detection and Correction of Errors." *Journal of Economic and Social Measurement* 13 (July 1985): 173-185.

"Market Exchange or Vertical Integration: An Empirical Analysis." *Review of Economics and Statistics* 67 (May 1985): 327-331.

"Diversification, Market Growth, and Concentration in U.S. Manufacturing." *Southern Economic Journal* 50 (April 1984): 1098-1111.

"Merger Statistics Revisited: A Comment." Journal of Economic History 48 (June 1983): 483-485.

Conferences, Workshops and Talks:

Keynotes

"Consolidation, Concentration and Competition in Livestock Markets." Keynote address, Western Agricultural Economics Association, Santa Fe, NM, June 27, 2022.

"Why Are Farms Getting Larger? The Case of the U.S.". Keynote lecture prepared for the annual meeting of the German Association of Agricultural Economists (GeWiSoLa), Halle, Germany, September 28, 2011.

Invited talks

"Farm Consolidation: Three Implications for Farm Policy." American Enterprise Institute Conference on the 2023 Farm Bill: Farm Economy Overview. Washington, DC. February 27, 2023.

"The Outlook for U.S. Agriculture in 2023." National Association of County Officials, Annual Legislative Conference. Washington, DC, February 11, 2023.

"Developments in Antitrust Economics: Implications for Agribusiness." Organized Symposium. Agricultural and Applied Economics Association. Anaheim, CA. August 1, 2022.

"Consolidation and U.S. Agriculture." University of Pennsylvania School of Veterinary Medicine. April 19, 2022.

"Using ARMS for Costs and Returns Reporting." USDA Agricultural Marketing Service and Economic Research Service. Dairy Economics Seminar. May 27, 2021.

"Meeting the Triple Challenge: What Should OECD Do"? Global Forum on Agriculture. Organization for Economic Cooperation and Development, Paris, France. May 14, 2019. "Squeezed from Both Ends: Seller Market Power, Powerful Buyers, and Protecting the Producer". Panel discussion at *Food and Agriculture Competition Roundtable*, hosted by the American Antitrust Institute. University of Wisconsin Law School, Madison, WI. December 7, 2018.

"Concentration and Structural Change in U.S. Agriculture." Oklahoma Rural Economic Outlook Conference. Oklahoma State University. Stillwater, OK. October 17, 2018.

"Challenges and Opportunities for Agricultural Research in the Face of Consolidation and Concentration of the Sector". USDA Agricultural Research Service and Brazilian Agricultural Research Corporation (EMBRAPA). Beltsville, MD. May 16, 2018.

"Consolidation, Concentration, and Competition in the Food System". Federal Reserve Bank of Kansas City, 2017 Agricultural Symposium, on *Agricultural Consolidation: Causes and the Path Forward*. Kansas City, MO. June 15-16, 2017.

"Structural Transformation in North America" (with Mary Bohman). The 2016 EU Agricultural Outlook Conference. Brussels, Belgium. December 6, 2016.

"Large and Complex Farms: What Are They and Why Do We Care? (with Kathy Ott). National Academy of Sciences. Committee on National Statistics. Panel on Improving Data Collection and Reporting about Agriculture with Increasingly Complex Farm Structures. Washington, DC. October 31, 2016.

"Structural Transformation in North America: What Does it Mean for Agricultural Statistics?" Seventh International Congress on Agricultural Statistics. Rome, Italy. October 28, 2016.

"Antibiotics in Livestock Production". Annual Policy Conference of the Consumer Federation of America. Washington, DC. April 6, 2016.

"Farm Consolidation and its Drivers in the U.S.". Organization for Economic Cooperation and Development, Paris, France. November 17, 2014.

"Implications of Climate Change for Productivity in U.S. Dairies". 21st National Workshop for Dairy Economists and Policy Analysts. The Dairy Markets and Policy Extension Education Committee. Milwaukee, WI, May 1, 2014.

"Risk and Contracting in Agriculture". Federal Reserve Bank of Chicago Annual Agricultural Conference: *Taming Risks in Agriculture*. Chicago. November 19, 2013.

"Assessing Production Contracts in the Hog Industry" (with William McBride). Sixth International Congress on Agricultural Statistics. Rio de Janeiro, Brazil. October, 2013.

"Navigating the Federal Job Market". Agricultural and Applied Economics Association. Seattle, WA. August, 2012; Washington, DC, August, 2013.

"Reshaping Agricultural Production: Geography, Farm Structure, and Finances." Federal Reserve Bank of Kansas City 2010 Regional Symposium on Farming, Finance, and the Global Marketplace. Kansas City, MO. June 8-9, 2010.

"USDA's Agricultural Resource Management Survey". Cooperative Research Conference of the National Institute of Statistical Sciences and the National Agricultural Statistics Service. Research Triangle Park, NC. June, 2009.

"The Transformation of U.S. Livestock Agriculture". National Institute of Animal Agriculture. Louisville, KY. March 31, 2009.

"What Does USDA Data Tell Us About Dairy Competitiveness?" Southern Dairy Conference, Atlanta, GA. January 31, 2008.

"Trends in Agricultural Markets". Presentation to the Committee on 21st Century Systems Agriculture, National Academy of Sciences, Washington, DC. December 10, 2007

"The Emerging Contract Economy in Food and Agriculture." Food System Research Group, Second Biennial Research Conference. Madison, WI. June 15, 2005.

"The Evolution of Structural Change in the U.S. Agriculture." International Agricultural Trade Research Consortium. Philadelphia, PA. June 6, 2004.

"Effects of Incentive Regulation on Productivity in Telecommunications." Telecommunications Policy Research Conference, Solomons, MD, October 1993.

"Access Demand: Economic Analysis and Policy Issues." National Regulatory Research Institute Conference on Telecommunications Demand for New and Existing Services, Denver, CO, August 1992.

"Empirical Work Linking Industrial Organization and International Trade." Invited paper, NC-194 Workshop on Industrial Organization and International Trade, Columbus, Ohio, April 1991.

"Lessons for Telecommunications from Regulatory Reform in Transportation." University of Kansas Telecommunications Policy Workshops. Lawrence, KS. May, 1990-1993.

"Railroad Competition under the Staggers Act." Transportation Research Board, Washington, D.C., January 1990.

"Data Needs in Food Marketing." Invited paper at the American Agricultural Economics Association Workshop on New Directions in Data, Information Systems, and Their Uses, Baton Rouge, LA, July 1989. "Developments in Grain Rail Rates and Services since Deregulation." Invited paper at USDA Symposium on Transportation and Competitiveness of U.S. Agricultural Products in World Markets, Washington, D.C., November 1986.

"Economies of Scope, Contestability, and Economic Efficiency." Invited paper at USDA/Farm Foundation Symposium on Efficiency Concepts in Agriculture, Arlington, VA, October 1985.

Workshops

"Agribusiness Consolidation, Innovation, and Environmental Performance". Breakthrough Institute Conference on Ecomodernism 2019: Environmental Politics After Neoliberalism? Middleburg, VA, September 23, 2019.

"Uses of ARMS Data". USDA National Agricultural Statistics Service. National Training Workshop, 2008-2023. State enumerator training workshops in California (2013), Colorado (2016), Illinois (2018), Iowa (2004, 2005), Maryland (2009), Minnesota (2008, 2009, 2015, 2016), Missouri (2018), Montana (2017), Nebraska (2016, 2021), New York (2011), North Carolina (2010), North Dakota (2014), Texas (2015), Virginia (2007).

"Consolidation and Competition in Agribusiness." U.S. Department of Agriculture Annual Agricultural Outlook Forum. Arlington, VA. February 23, 2018. Also Weed Science Society of America, Annual Meeting, Arlington, VA, February 2, 2018. Also Council of Producers & Distributors of Agrotechnology, Regulatory Policy Meeting, Arlington, VA, March 13, 2018.

"Agriculture and Antitrust Enforcement Issues in Our 21st Century Economy". Panel moderator at Joint USDA/DOJ public workshops held during 2010 in Ankeny, IA (March 12), Madison, WI (June 25), Ft. Collins, CO (August 27) and Washington, DC (December 8).

Professional Publications

<u>U.S Department of Agriculture Refereed Research Reports</u> *Concentration and Competition in U.S. Agribusiness (with Keith Fuglie and Xiao Dong).* U.S. Department of Agriculture, Economic Research Service. Forthcoming, 2023.

America's Diverse Family Farms, 2020 Edition (with Christine Whitt and Jessica Todd). U.S. Department of Agriculture, Economic Research Service. Economic Information Bulletin No. 220. December, 2020

Farm Use of Futures, Options, and Marketing Contracts (with Daniel Prager, Christopher Burns, and Sarah Tulman). U.S. Department of Agriculture, Economic Research Service. Economic Information Bulletin No. 219. October, 2020.

Consolidation in U.S. Dairy Farming (with Jonathan Law and Roberto Mosheim). U.S. Department of Agriculture, Economic Research Service. Economic Research Report No. 274. July, 2020.

Changes in the Size and Location of U.S. Dairy Farms. U.S Department of Agriculture. Economic Research Service. Mandated Report to Congress. June, 2019.

America's Diverse Family Farms, 2018 Edition (with Christopher Burns). U.S. Department of Agriculture, Economic Research Service. Economic Information Bulletin No. 203. December, 2018.

Three Decades of Consolidation in U.S. Agriculture (with Robert Hoppe and Doris Newton). U.S. Department of Agriculture, Economic Research Service. Economic Information Bulletin No. 189. March, 2018.

America's Diverse Family Farms, 2016 Edition (with Robert Hoppe). U.S. Department of Agriculture, Economic Research Service. Economic Information Bulletin No. 164. December, 2016.

Changing Structure, Financial Risks, and Government Policies for the U.S. Dairy Industry (with Jerry Cessna and Roberto Mosheim). U.S. Department of Agriculture, Economic Research Service. Economic Research Report No. 205. March, 2016.

America's Diverse Family Farms, 2015 Edition (with Robert Hoppe). U.S. Department of Agriculture, Economic Research Service. Economic Information Bulletin No. 146. December, 2015.

Economics of Antibiotic Use in U.S. Livestock Production (with Stacy Sneeringer, Nigel Key, William McBride, and Ken Mathews). U.S. Department of Agriculture, Economic Research Service. Economic Research Report No. 200. November, 2015.

America's Diverse Family Farms, 2014 Edition (with Robert Hoppe). U.S. Department of

Agriculture, Economic Research Service. Economic Information Bulletin No. 133. December, 2014.

Technology, Organization, and Financial Performance in U.S. Broiler Production. U.S. Department of Agriculture, Economic Research Service. Economic Information Bulletin No. 126. June, 2014.

Farm Size and the Organization of U.S. Crop Farming (with Penni Korb and Robert Hoppe). U.S. Department of Agriculture, Economic Research Service. Economic Research Report No. 152. August, 2013.

Updating the ERS Farm Typology (with Robert Hoppe). U.S. Department of Agriculture, Economic Research Service. Economic Information Bulletin No. 110. April, 2013.

Agricultural Contracting Update: Contracts in 2008 (with Penni Korb). U.S. Department of Agriculture, Economic Research Service. Economic Information Bulletin No. 72. February, 2011.

Small Farms in the United States: Persistence under Pressure (with Robert A. Hoppe and Penni Korb). U.S. Department of Agriculture, Economic Research Service. Economic Information Bulletin No. 63. February, 2010.

Manure Use for Fertilizer and for Energy (with Marc Ribaudo, Michael Livingston, Jayson Beckman, and Wen Huang). U.S. Department of Agriculture, Economic Research Service. Mandated Report to the Congress. Administrative Publication No. (AP-037). June, 2009.

The Transformation of U.S. Livestock Agriculture: Scale, Efficiency and Risks (with William D. McBride). U.S. Department of Agriculture, Economic Research Service. Economic Information Bulletin No. 43. January, 2009.

The Economic Organization of U.S. Broiler Production. U.S. Department of Agriculture, Economic Research Service. Economic Information Bulletin No. 38. June, 2008.

Agricultural Contracting Update: Contracts in 2005 (with Penni Korb). U.S. Department of Agriculture, Economic Research Service. Economic Information Bulletin No. 35. April, 2008.

Profits, Costs, and the Changing Structure of Dairy Farming (with Erik O'Donoghue, William McBride, Richard Nehring, Carmen Sandretto, and Roberto Mosheim). U.S. Department of Agriculture, Economic Research Service. Economic Research Report No. ERR-47. September, 2007.

Productivity Growth in U.S. Agriculture (with Keith Fuglie and Eldon Ball). U.S. Department of Agriculture, Economic Research Service. Economic Brief No. EB-9. September, 2007.

America's Diverse Family Farms, 2007 Edition (with Robert Hoppe, David Banker, Penni Korb,

and Erik O'Donoghue). U.S. Department of Agriculture, Economic Research Service. Economic Information Bulletin No. 26. June, 2007.

Growing Farm Size and the Distribution of Farm Payments (with Robert Hoppe and David Banker). U.S. Department of Agriculture, Economic Research Service. Economic Brief No. 6. March, 2006.

America's Diverse Family Farms: Structure and Finances (with Robert A. Hoppe and David Banker). U.S. Department of Agriculture, Economic Research Service. Economic Information Bulletin No. 13. March, 2006.

Agricultural Contracting Update: Contracts in 2003 (with Penni Korb). U.S. Department of Agriculture, Economic Research Service. Economic Information Bulletin No. 9. January, 2006.

Did the Mandatory Requirement Aid the Market? Impact of the Livestock Mandatory Reporting Act (with Janet Perry, Ken Nelson, William Hahn, Carlos Arnade, and Gerald Plato). U.S. Department of Agriculture, Economic Research Service. Electronic Outlook Report LDP-M-135-1. September, 2005.

Structural and Financial Characteristics of U.S. Farms: The 2004 Family Farm Report (with David Banker, Robert Green, Robert Hoppe, Penni Korb, Ashok Mishra, Richard Nehring, Erik O'Donoghue, and Carmen Sandretto). U.S. Department of Agriculture, Economic Research Service. Agricultural Information Bulletin No. 797. March, 2005.

Contracts, Markets, and Prices: Organizing the Production and Use of Agricultural Commodities (with Janet Perry, Mary Ahearn, David Banker, William Chambers, Carolyn Dimitri, Nigel Key, Kenneth Nelson, and Leland Southard). U.S. Department of Agriculture, Economic Research Service. Agricultural Economics Report No. 837. November, 2004.

Declining Rice Production in East Texas: The Role of Commodity Payments and Production Costs (with Nathan Childs and Linda Foreman). U.S. Department of Agriculture, Economic Research Service. Mandated Report to the Congress. July, 2002.

America's Diverse Family Farms: Assorted Sizes, Types and Situations (with Robert A. Hoppe). U.S. Department of Agriculture, Economic Research Service. Agricultural Information Bulletin No. 769. May, 2001.

Structural Change in U.S. Chicken and Turkey Slaughter (with Michael Ollinger and Milt Madison). U.S. Department of Agriculture, Economic Research Service. Agricultural Economics Report No. 787. October, 2000.

Consolidation in U.S. Meatpacking (with Michael Ollinger, Kenneth Nelson, and Charles Handy). U.S. Department of Agriculture, Economic Research Service. Agricultural Economics Report No. 785. February, 2000.

User Fee Financing of USDA Meat and Poultry Inspection (with Fred Kuchler, Jean Buzby, Lorna Aldrich, and Fitzroy Lee). U.S. Department of Agriculture, Economic Research Service. Agricultural Economics Report No. 775. March 1999.

Food Procurement by USDA's Farm Service Agency (with Charles R. Handy and Gerald E. Plato). U.S. Department of Agriculture, Economic Research Service. Agricultural Economics Report No. 766. September, 1998.

Do the Poor Pay More? Item Selection and Price Differences Affect Low-Income Food Costs (with P. Kaufman, S. Lutz, D. Smallwood, and J. Blaylock). U.S. Department of Agriculture, Economic Research Service. Agricultural Economics Report No. 759. December, 1997.

Bacterial Foodborne Disease: Medical Costs and Productivity Losses (with Jean C. Buzby, Tanya Roberts, and C-T. Jordan Lin). U.S. Department of Agriculture. Economic Research Service. Agricultural Economics Report No. 741. August 1996.

Effects of Railroad Deregulation on Grain Transportation. U.S. Department of Agriculture. Economic Research Service. Technical Bulletin No. 1759. June 1989.

An Analysis of Produce Transportation: A Florida Case Study (with Richard Beilock and Nicholas Powers). U.S. Department of Agriculture, Economic Research Service, National Economics Service, National Economics Division, Agricultural Economics Report No. 587. November 1988.

Food Cost Variations: Implications for the Food Stamp System (with P. E. Nelson). U.S. Department of Agriculture, Economic Research Service. Technical Bulletin No. 1737. February 1988.

"Developments in Grain Rail Rates and Services Since Deregulation", in *Transportation and Competitiveness of U.S. Agricultural Products in World Markets: Proceedings of a Research Symposium*, October 1986, Economic Research Service, U.S. Department of Agriculture, Staff Report No. AGE5870612.

"Food Manufacturing," in Anthony E. Gallo, et al., *Food Marketing Review 1985*. U.S. Department of Agriculture, Economic Research Service, National Economics Division. Agricultural Economics Report No. 549. March 1986.

Increased Foreign Investment in U.S. Food Industries (with Scott A. Weimer). U.S. Department of Agriculture, Economic Research Service, National Economics Division. Agricultural Economics Report No. 540. September 1985.

Product Diversification Trends in U.S. Food Manufacturing. U.S. Department of Agriculture, Economic Research Service, National Economics Division. Agricultural Economics Report No. 521. March 1985.

Other Research Reports:

"Regulating Contracts in Poultry Production." *The Regulatory Review*. A Publication of the University of Pennsylvania Program on Regulation. June 20, 2022.

The Agricultural Economic Landscape in Hawai'i and the Potential for Future Economic Viability (with Sarah Rehkamp and Michael Roberts). University of Hawai'i Economic Research Organization (UHERO). UHERO Brief. June 11, 2021.

Innovation, Agricultural Productivity Growth, and Sustainability in the United States (major contributor). Organization for Economic Cooperation and Development. OECD Food and Agriculture Reviews, OECD Publishing, Paris. November, 2016.

"Structural Transformation in North America: What Does It Mean for Agricultural Statistics?" Modernization of Agricultural Statistics in Support of the Sustainable Development Agenda: Proceedings of the Seventh International Conference on Agricultural Statistics. Rome. October, 2016.

Cross-Country Comparison of Farm Size Distribution (major contributor). Organization for Economic Cooperation and Development. TAD/CA/APM/WP(2015)21/FINAL. May, 2016.

"Strategies for the Future of Public Sector Data" (with Kathy Ott). U.S. Department of Agriculture. National Agricultural Statistics Service. Case study on NASS prepared for executive education programs. January 2013.

"Agricultural Resource Management Survey: Broiler Highlights". U.S. Department of Agriculture. National Agricultural Statistics Service. January, 2013.

"U.S. Agriculture and the Disappearing Middle" (with Robert Hoppe). USDA White Paper. June, 2010.

"The Impact of Payment Limitations and Income Caps on Farm Households". USDA White Paper. February, 2009.

"Productivity Measures for Incentive Regulation in Telecommunications" (with J. R. Norsworthy and S. L. Jang). Report to the New York State Public Service Commission, October 1992.

"Rail Rates and the Availability of Water Transportation: The Missouri Valley Region" (with Mark L. Burton and John W. Mayo). Report to the Tennessee Valley Authority, September 1991.

"Effect of Railroad Deregulation on Export-Grain Transportation Rate Structures" (with Stephen W. Fuller, David Bessler, and Michael Wohlgenant). Texas Agricultural Experiment Station Bulletin No. B-1583. College Station, Texas. June 1988.

U.S. Department of Agriculture Nonrefereed General Publications:

"Corn and Soybean Farmers Combine Futures, Options and Marketing Contracts to Manage Financial Risks." *Amber Waves*, November 2, 2020.

"Organic Dairy Farms Realized Higher Costs, But Also Higher Net Returns, Than Conventional Dairy Farms." *Amber Waves*, September 1. 2020

"Scale Economies Provide Advantages to Large Dairy Farms." Amber Waves, August 3, 2020.

"Consolidation in U.S. Agriculture Continues." Amber Waves (February 3, 2020).

"Marketing and Production Contracts are Widely Used in U.S. Agriculture" (with Christopher Burns) *Amber Waves* (July 1, 2019).

"Mergers in Seeds and Chemicals: What Happened?" Amber Waves (February 15, 2019).

"Cropland Consolidation: Widespread, Substantial, and Persistent" (with Robert Hoppe). USDA Blog: Research and Science. April 26, 2018.

"Examining Consolidation in U.S. Agriculture" (with Robert Hoppe). *Amber Waves* (March 14, 2018).

"U.S. Cropland is Consolidating into Larger Farms" (with Robert Hoppe). *Amber Waves* (December 19, 2017).

"Mergers and Competition in Seed and Agricultural Chemical Markets." *Amber Waves* (April 3, 2017).

"Large Family Farms Continue to Dominate U.S. Agricultural Production" (with Robert Hoppe). *Amber Waves* (March 6, 2017).

"Understanding America's Diverse Family Farms" (with Robert Hoppe). *Amber Waves* (February 1, 2016).

"Milk Production Continues Shifting to Larger Farms" (with Doris Newton). *Amber Waves* (December 1, 2014).

"Financial Risks and Incomes in Contract Broiler Production". Amber Waves, (August 4, 2014).

"Family Farming in the United States". Amber Waves, (March 4, 2014)

"Cropland Consolidation and the Future of Family Farms". Amber Waves, (September 3, 2013).

"The Revised ERS Farm Typology: Classifying U.S. Farms to Reflect Today's Agriculture" (with Robert Hoppe). *Amber Waves*, (May 6, 2013).

"Changing Farming Practices Accompany Major Shifts in Farm Structure" (with Erik O'Donoghue, Utpal Vasavada, and Patrick Sullivan). *Amber Waves* (November, 2011): 30-37.

"Contracting Expands for Field Crops". Amber Waves (March, 2011): 9.

"Broiler Producers Search for Alternatives to Antibiotics" (with Sun-Ling Wang). *Amber Waves* (December, 2009): 6.

"Small Farms Still Important in Broiler Production". Amber Waves (September, 2008): 9.

"Growth in Agricultural Productivity Limits Price Increases" (with Kathleen Kassel). *Amber Waves*, (September, 2008).

"Productivity Growth Drives Expanded Agricultural Production" (with Kathleen Kassel and Sun Ling Wang). *Amber Waves*, (September, 2008).

"Producers Rely on Contracts to Manage Increased Price Risks" (with Penni Korb). *Amber Waves*, (April, 2008).

"Low Costs Drive Production to Large Dairy Farms" (with William F. McBride and Erik J. O'Donoghue). *Amber Waves* (September, 2007): 30-35.

"Experience Counts: Farm Business Survival in the U.S." (with Robert Hoppe and Penni Korb). *Amber Waves* (April, 2007): 11-15.

"Agricultural Contracting: Trading Autonomy for Risk Reduction" (with Nigel Key). *Amber Waves* (February, 2006): 26-32.

"Financial Assistance to Farmers is Evolving". Amber Waves (November, 2005): 8.

"Mandatory Livestock Price Reporting: More Transparent?" (with Janet Perry). *Amber Waves* (November, 2005): 2.

"Growing Farm Size and the Distribution of Commodity Payments" (with Robert Hoppe and David Banker). *Amber Waves* (February, 2005): 10-11.

"Contract Use Continues to Expand" (with Janet Perry). Amber Waves (December, 2004): 5.

"Consolidation in Meatpacking: Causes and Concerns" (with Michael Ollinger). *Agricultural Outlook* 272 (June-July 2000): 23-26.

"Poultry Plants Lowering Production Costs and Increasing Variety" (with Michael Ollinger and Milton Madison). *FoodReview* 23 (May 2000): 2-7.

"Cargill's Acquisition of Continental Grain: Anatomy of a Merger". *Agricultural Outlook* 265 (September 1999): 21-24.

"Concentration, Competition, and Federal Policy in the Food Sector". *Agricultural Outlook* 261 (May 1999): 26-29.

"U.S. Meat Slaughter Consolidating Rapidly" (with Michael Ollinger). *FoodReview* 20 (May-August 1997): 22-27.

"Improving the Safety of Meat and Poultry" (with Jean C. Buzby). *Agricultural Outlook* 230 (July 1996).

"Consumer Price Index Overstates Food-Price Inflation." *FoodReview* 18 (September-December 1995): 28-32.

"Freight Rates: Their Importance to Fresh Produce Prices" (with Richard Beilock and Nicholas Powers). *National Food Review* 44 (Fall 1988).

"Rail Rates and Competition." Agricultural Outlook 122 (August 1986).

"Foreign Investment in the U.S. Food Industry." National Food Review 32 (Summer 1985).

"Product Diversification in Food Manufacturing." National Food Review 24 (Summer 1983).

"Labor Productivity and Labor Force Growth." National Food Review 16 (Spring 1981).

"Advertising: A Measure of Product Quality?" National Food Review 15 (Winter 1981).

Book Reviews:

Ruth Rama. *Multinational Agribusiness*. Review appears in *Agribusiness* 22 (Summer 2006): 297-299.

Royer, Jeffrey S., and Richard T. Rogers. *The Industrialization of Agriculture: Vertical Coordination in the U.S. Food System*. Review appears in *Agribusiness* 16 (Summer 2000): 381-383.

Connor, John M., and William A. Schick. Food Processing: An Industrial Powerhouse in Transition. Appears in American Journal of Agricultural Economics 81 (February 1999): 252-253.

Pohl, Hans, and Wilhelm Treue. *The Concentration Process in the Entrepreneurial Economy since the Late 19th Century*. Review appears in *Journal of Economic History* 50 (March 1990).

Cavanaugh, John, and Frederick F. Clairmonte. *Alcoholic Beverages: Dimensions of Corporate Power*. Review appears in *Journal of Economic History* 46 (June 1986).

Greig, W. Smith. *Economics and Management of Food Processing*. Review appears in *American Journal of Agricultural Economics* 67 (February 1985).

Domberger, Simon. Industrial Structure, Pricing, and Inflation. Review appears in Southern Economic Journal 51 (October 1984).

Sponsored Research

State of Maryland, Department of Agriculture. "Maryland Animal Waste Techology Assessment and Strategy Planning." \$714,294. July 1, 2022 - September 30, 2023. Co-PI

Honors and Awards:

2016, 2015, 2001: Secretary's Abraham Lincoln Honor Award, U.S. Department of Agriculture

2015 Fellow, Agricultural and Applied Economics Association

2015, 2013: Certificate of Merit Award, USDA Undersecretary for Research, Economics and Education.

2010 Fred Woods Public Policy Award, USDA Economists Group.

Teaching, Extension, Mentoring, and Advising

<u>Courses Taught</u> AREC 433: Food and Agricultural Policy (Spring 2020: 5 students) (Spring 2021: 13 students) (Spring 2022: 11 students) (Spring 2023: 12 students)

AREC 427: Commodity Pricing and Markets (Fall 2020: 15 students) (Fall 2021: 13 students) (Fall 2022: 16 students)

AREC 210: Food Chain—What Happens as Your Food Goes From Farm to Table (Spring 2021: 48 students) (Spring 2022: 76 students) (Spring 2023: 60 students)

Course Development

I created AREC 210 ("Food Chain—What Happens as Your Food Goes from Farm to Table") as an I-series course aimed at freshman and sophomores. We draw on four books and weekly videos to explore four major challenges facing the global food system. They are: 1) meeting the food demand of a growing global population with increasing protein consumption; while 2) reducing the environmental damages arising from agricultural production; and 3) managing the dietary and health threats arising from obesity and malnutrition; 4) in the face of climate change. The course is writing-intensive, with grade based primarily on 10 short (2-3 page) essays. I currently teaching the course for the third time.

Service and Outreach

Editorial Boards

Guest editor, Review of Industrial Organization. 2023. Solicited submissions for a special issue on the Industrial Organization of Food and Agriculture. Selected and edited six for publication.

Associate Editor: Agribusiness (1997-2014); American Journal of Agricultural Economics (2003-2005).

Reviewing Activities for Journals

Agribusiness, Agricultural and Resource Economics Review, American Journal of Agricultural Economics, Applied Economics Perspectives and Policy, Contemporary Economic Policy, Encyclopedia of Animal Science, Fiscal Studies, Food Policy, Industrial and Labor Relations Review, International Food and Agribusiness Management Review, International Journal of Industrial Organization, Journal of Agricultural and Applied Economics, Journal of Agricultural and Resource Economics, Journal of Consumer Policy, Journal of Econometrics, Journal of Economic History, Journal of Industrial Economics, Journal of International Economics, Journal of Regulatory Economics, Journal of the Transportation Research Forum, Managerial and Decision Economics, Precision Agriculture, RAND Journal of Economics, Renewable Agriculture and Food Systems, Review of Agricultural Economics, Review of Economics and Statistics, Review of Industrial Organization, Review of Regional Studies, Social Science Quarterly, Solutions, Southern Economic Journal, Transportation Research (Series E).

Reviewing Activities for Agencies and Foundations

National Academy of Sciences, National Science Foundation, Organization for Economic Cooperation and Development, USDA Economic Research Service, USDA Agricultural Marketing Service

<u>Committees, Professional and Campus Service</u> Department: AREC Awards Committee, 2022-2023 AGNR: PTK promotion review committees (2)

Agricultural and Applied Economics Association (AAEA):

Quality of Communications Committee (chair), 2019-2022; Trust Committee, 2017-2019; Fellows Selection Committee, 2016-2021; Chair, Senior Section, 2020-21; Director, 2009-2012; Finance Committee, 2010-2012; Membership Committee, 2011-2012; Chair, Food and Agricultural Marketing and Policy Section, 2007-8; Quality of Research Discovery Award Committee, 2003-05; Selected Papers Committee, 1992, 1997 (co-chair).

AgEcon Search: Advisory Board, 2021-23.

National Institute on Statistical Sciences, Expert Panel on Women and Beginning Farmers, 2015.

Organization for Economic Cooperation and Development (OECD):

Network on Farm Level Analysis, 2010-2020.

U.S. Delegate, Agriculture Committee, 2004-05.

Executive Committee, NE-165 Regional Research Committee, 1998-2000.

Committee on Freight Transportation Regulation, Transportation Research Board, 1991-2002. Student Paper Committee, Transportation Research Forum, 1992-1994.

Public Media

"COVID-19 and Meatpacking." NPR Marketplace with David Brancaccio. April 29, 2020

"Meatpacking's Coronavirus Problem." BBC *The Food Chain* with Tamasin Ford, August 13, 2020

It's a Small World After All." Heritage Radio Network, *Eating Matters*, Podcast interview (#113) with Jennifer Liut. August 5, 2018.

"The Future of Farming." *Wall Street Journal* Global Food Forum. New York City. September 27, 2018.

Public Engagement, Scholarship, and Practice

<u>Media Appearances and Interviews:</u> In addition to the radio interviews noted above, I gave 40 interviews to print, television, and radio reporters over 2020-2023, including reporters from the New York Times, The Wall Street Journal, The Washington Post, Bloomberg, and NBC News.

Advisory Involvement with Public Agencies:

During 2020-2021, I provided extensive advice to staff at the U.S. Department of Agriculture and the U.S. Department of Justice in the preparation of a proposed rule on transparency in poultry contracting.

In 2022, I provided advice to U.S. Department of Justice staff concerning an antitrust investigation of poultry processing firms.

I provide continuing (2020-2023) advice to the Economic Research Service of the U.S. Department of Agriculture on survey design and administration.