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Introduction

Mario Miranda is Professor of Agricultural, Environmental & Development Economics at The Ohio State University and Fellow of the Agricultural and Applied Economics Association. His research has focused on the modeling of stochastic dynamical systems in economics with application to international economic development, agricultural finance and insurance, agricultural and environmental policy, food security, international trade, commodity pricing and industrial organization. His research has produced one book, which has been adopted for courses offered by seven of the top ten ranked doctoral programs in Economics in the world and over 80 peer-reviewed articles, two of which are among the three most frequently cited articles on “agricultural insurance”. He has advised twenty-eight doctoral students to completion, including two winners and two honorable mention recipients of the Applied and Agricultural Economics Association Outstanding Doctoral Dissertation Award.

Professor Miranda served seven years as Director of Graduate Programs in the Department of Agricultural, Environmental & Development Economics at The Ohio State University, ranked by the National Research Council as the leading program in its field in the USA. Miranda has served as an Associate Editor of the Journal of Economic Dynamics and Control, the American Journal of Agricultural Economics and Computational Economics. He has also served as a consultant to the World Bank, U.S. Agency for International Development, the Food and Agriculture Organization of the United Nations, the International Food Policy Research Institute, the U.S. National Aeronautics and Space Administration, the Chicago Board of Trade, the U.S. Department of Agriculture, the International Water Management Institute, and numerous private corporations. He has made over 170 presentations to professional and academic audiences and has worked on major research projects or taught courses in Bolivia, China, Colombia, Costa Rica, Ghana, Honduras, Mexico, Morocco, Nicaragua, Peru, South Africa and Tanzania.

Education

- Ph.D. Economics & Industrial Engineering, University of Wisconsin-Madison, 1985
- M.S. Economics, University of Wisconsin - Madison, 1984
- B.A. Mathematics, College of Wooster, 1976

Employment

- Professor, Department of Agricultural, Environmental & Development Economics, The Ohio State University, 1998-Present.
- Visiting Research Scholar, Development Research Group, World Bank, 2012.
- Assistant/Associate Professor, Department of Agricultural, Environmental & Development Economics, The Ohio State University, 1988-1998.
- Assistant Professor, School of Business Administration, University of Connecticut, 1986-1988.
- Post-Doctoral Fellow, Mathematics Research Center, University of Wisconsin-Madison, 1985-1986.

Editorial Service

- Associate Editor, Journal of Economic Dynamics and Control, 2000-2016.
- Associate Editor, American Journal of Agricultural Economics, 1996-2001.
- Associate Editor, Computational Economics, 1998-present.

Honors

- Fellow of the Agricultural and Applied Economics Association, 2017.
- Andersons Professor of Agricultural Finance and Risk Management, The Ohio State University, 2006-2013.
- Outstanding Teaching Award, College of Food, Agricultural & Environmental Sciences, The Ohio State University, 2001.
- Outstanding Research Award, Ohio Agricultural Research & Development Center, 1999.
- Rodney F. Plimpton Outstanding Teacher Award, College of Food, Agricultural and Environmental Sciences, The Ohio State University, 1998.
- Gamma Sigma Delta Research Award of Merit, The Ohio State University, 1997.
- Harold O. Wilson Prize in Mathematics, The College of Wooster, 1976.

Book

- Miranda, Mario J. and Paul L. Fackler. 2002. *Applied Computational Economics and Finance*. Cambridge, MA: MIT Press.

Articles Published in Peer Reviewed Journals

- Aina, Ifedotun, Opeyemi Ayinde, Djiby Thiam, and Mario J. Miranda. 2023. "Risk Adaptation through Livestock Insurance in West Africa: Evidence from a Pilot Program in Nigeria." Forthcoming, *Climate and Development*.
- Aina, Ifedotun, Opeyemi Ayinde, Djiby Thiam, and Mario J. Miranda. 2023. "Crop Index Insurance as a Tool for Climate Resilience: Lessons from Smallholder Farmers in Nigeria." Forthcoming, *Natural Hazards*.

- Ongudi, Silas, Djiby Thiam, Mario J. Miranda and Abdoul Sam. 2023. "The Direct and Indirect Effects of Cash Transfer Program on the Consumption of Nutrients: Evidence from Kenya." Forthcoming, *Agricultural Economics*.
- Mishra, Khushbu, Richard A. Gallenstein, Abdoul G. Sam, Mario J. Miranda, Patricia Toledo, and Francis Mulangu. 2023. "Does Bundling Credit with Index Insurance Boost Agricultural Technology Adoption? Evidence from Ghana." *Agricultural Economics* 54(6):778-792.
- Chaudhry, Muhammad Imran and Mario J. Miranda. 2023. "Endogenous Price Fluctuations – Theory and Evidence from the Chicken Supply Chain in Pakistan." Published on-line, forthcoming in print in *American Journal of Agricultural Economics*.
- Wu, Ruohan and Mario J. Miranda. 2023. "Dynamic Impacts of Intermittent Trade Conflicts on Chinese Manufacturers." *The World Economy* 46(3):681-701.
- Wu, Ruohan, Mario J. Miranda, and Meng-Fen Yen. 2021. "The Wage Premium and Market Structure: Theory and Empirical Evidence from Chilean Manufacturers." *Journal of Economic Studies* 49(2):290-302.
- Miranda, Mario J. and Joseph W. Glauber. 2021. "A Model of Asynchronous Bi-Hemispheric Production in Global Agricultural Commodity Markets." *American Journal of Agricultural Economics* 104(2):812-830.
- Mishra, Khushbu K., Richard A. Gallenstein, Mario J. Miranda, Abdoul G. Sam, Patricia Toledo and Francis M. Mulangu. 2021. "Insured Loans and Credit Access: Evidence from a Randomized Field Experiment in Northern Ghana." *American Journal of Agricultural Economics* 103(3):923-943.
- Mishra, Khushbu K., Abdoul G. Sam, Gracious M. Diiro and Mario J. Miranda. 2020. "Gender and the Dynamics of Technology of Adoption: Empirical Evidence from Uganda." *Agricultural Economics* 50(6):857-870.
- Chaudhry, Muhammad Imran and Mario J. Miranda. 2020. "Price Transmission in Pakistan's Poultry Supply Chain." *Journal of Agricultural and Resource Economics* 45(2):282-298.
- Dougherty, John P., Jon Einar Flatnes, Richard A. Gallenstein, Mario J. Miranda and Abdoul G. Sam. 2020. "Climate Change and Index Insurance Demand: Evidence from a Framed Field Experiment in Tanzania." *Journal of Economic Behavior and Organization* 175(July):155-184.
- Kemeze, Francis H., John K. M. Kuwornu, Mario J. Miranda and Henry Amin-Somuah. 2020. "Smallholder Farmer's Risk Attitudes in Northern Ghana: Experimental Evidence." *The Journal of Development Studies* 56(10):1894-1908.
- Yen, Meng-Fen, Mario J. Miranda and Ani Katchova. 2020. "The Effects of Capital Constraints on the Growth of Agricultural Cooperatives." *Agricultural Economics* 66(1):27-33.
- Yen, Meng-Fen, Ruohan Wu and Mario J. Miranda. 2019. "A General Equilibrium Model of Bilateral Trade with Strategic Public Investment in Commercial Infrastructure." *The Journal of International Trade and Economic Development* 28(6):712-731. *Awarded Best Paper of 2019 by the journal.*

- Miranda, Mario J., Francis M. Mulangu and Francis H. Kemeze. 2019. "Warehouse Receipt Financing for Smallholders in Developing Countries: Challenges and Limitations." *Agricultural Economics* 50(5):629-641.
- Liu, Xianglin, Yingmei Tang, Jihong Ge and Mario J. Miranda. 2019. "Does Past Experience in Natural Disasters Affect Willingness-to-Pay for Weather Index Insurance? Evidence from China." *International Journal of Disaster Risk Reduction* 33(February):33-43.
- Gallenstein, Richard A., Khushbu K. Mishra, Abdoul G. Sam, and Mario J. Miranda. 2019. "Willingness to Pay for Insured Loans in Northern Ghana." *Journal of Agricultural Economics* 70(3):640-662.
- Chaudhry, Muhammad Imran and Mario J. Miranda. 2018. "Complex Price Dynamics in Vertically Linked Cobweb Markets." *Economic Modelling* 72(C):363-378.
- Mulangu, Francis M., Mario J. Miranda and Eugenie W.H. Maiga. 2017. "Cocoa Pricing Options and Their Implications for Poverty and Industrialization in Ghana." *Agricultural Economics* 48(4):481-490.
- Farrin, Katie and Mario J. Miranda. 2015. "A Heterogeneous Agent Model of Credit-Linked Index Insurance and Farm Technology Adoption." *Journal of Development Economics* 116(5):199-211.
- Wu, Ruohan and Mario J. Miranda. 2015. "Exports, Innovation and Production Growth: A Dynamic Heterogeneous Firm Model with Learning and Entry Costs." *The Journal of International Trade and Economic Development* 24(8):1037-1053.
- Guizar, Isaí, Claudio González-Vega and Mario J. Miranda. 2015. "Un Análisis Numérico de Inclusión Financiera y Pobreza." *EconoQuantum* 12(2):7-24.
- Miranda, Mario J. and Katie Farrin. 2012. "Index Insurance for Developing Countries." *Applied Economic Perspectives and Policy* 34(3):391-427.
- Miranda, Mario J. and Claudio Gonzalez-Vega. 2011. "Systemic Risk, Index Insurance and Optimal Management of Agricultural Loan Portfolios in Developing Countries." *American Journal of Agricultural Economics* 93(2):399-406.
- Nadolnyak, Denis, Mario J. Miranda and Ian M. Sheldon. 2010. "Genetically Modified Crops as Real Options: Identifying Regional and Country-Specific Differences." *International Journal of Industrial Organization* 29(4):455-463.
- Makaudze, Ephias M. and Mario J. Miranda. 2010. "Catastrophic Drought Insurance Based on Remotely Sensed Normalized Difference Vegetation Index for Smallholder Farmers in Zimbabwe." *Agrekon* 49(1):418-432.
- Daigneault, Adam J., Mario J. Miranda and Brent Sohngen. 2010. "Optimal Forest Management with Carbon Sequestration Credits and Endogenous Fire Risk." *Land Economics* 86(1):155-172.
- Chen, Shu-Ling and Mario J. Miranda. 2008. "Modeling Texas Dryland Cotton Yields, with Application to Crop Insurance Actuarial Rating." *Journal of Agricultural and Applied Economics* 40(1):239-252.
- Khalil, Abedalrazq F., Hyun-Han Kwon, Upmanu Lall, Mario J. Miranda and Jerry R. Skees. 2007. "El Niño-Southern Oscillation-Based Index Insurance for Floods: Statistical Risk Analyses and Application to Peru." *Water Resources Research* 43(10):W10416.

- Vedenov, Dmitry V., Mario J. Miranda, Robert Dismukes and Joseph W. Glauber. 2006. "Portfolio Allocation and Alternative Structures of the Standard Reinsurance Agreement." *Journal of Agricultural and Resource Economics* 31(1):57–73.
- Katchova, Ani L., Mario J. Miranda and Claudio Gonzalez-Vega. 2006. "A Dynamic Model of Individual and Group Lending in Developing Countries." *Agricultural Finance Review* 66(2):251–265.
- Katchova, Ani L., Ian M. Sheldon and Mario J. Miranda. 2005. "A Dynamic Model of Oligopsony and Oligopoly in the Potato Processing Industry." *Agribusiness: An International Journal* 21(3):409–428.
- Miranda, Mario J. 2005. "Teaching Computational Economics in an Applied Economics Program." *Computational Economics* 25(3):229–254.
- Vedenov, Dmitry V., Mario J. Miranda, Robert Dismukes and Joseph W. Glauber. 2004. "Economic Analysis of Standard Reinsurance Agreement." *Agricultural Finance Review* 64(2):119–134.
- Katchova, Ani L. and Mario J. Miranda. 2004. "Two-Step Econometric Estimation of Farm Characteristics Affecting Marketing Contracts Decisions." *American Journal of Agricultural Economics* 86(1):88–102.
- Miranda, Mario J. and Dmitry V. Vedenov. 2001. "Innovations in Agricultural and Natural Disaster Insurance." *American Journal of Agricultural Economics* 83(3):650–655.
- Vedenov, Dmitry V. and Mario J. Miranda. 2001. "Numerical Solution of Dynamic Oligopoly Games with Capital Investment." *Economic Theory* 18(1):237–261.
- Makki, Shiva S., Luther G. Tweeten and Mario J. Miranda. 2001. "Storage-Trade Interactions under Uncertainty: Implications for Food Security." *Journal of Policy Modeling* 23(2):127–140.
- Skees, Jerry R., Peter B.R. Hazell and Mario J. Miranda. 2000. "Nuovi Approcci per le Assicurazioni in Agricoltura nei Paesi in via di Sviluppo." *Rivista di Economia Agraria* 43(1/2):31–52.
- Miranda, Mario J. 1998. "Numerical Strategies for Solving the Nonlinear Rational Expectations Commodity Market Model." *Computational Economics* 11(1/2):71–87.
- Miranda, Mario J. and Xiongwen Rui. 1997. "Maximum Likelihood Estimation of the Nonlinear Rational Expectations Asset Pricing Models." *Journal of Economic Dynamics and Control* 21(8-9):1493–1510.
- Miranda, Mario J. and Joseph W. Glauber. 1997. "Systemic Risk, Reinsurance and the Failure of Crop Insurance Markets." *American Journal of Agricultural Economics* 79(1):206–215.
- Makki, Shiva S., Luther G. Tweeten and Mario J. Miranda. 1996. "Wheat Storage and Trade in an Efficient Global Market." *American Journal of Agricultural Economics* 78(4):879–90.
- Yavus, Fahri, Carl Zulauf, Gary D. Schnitkey and Mario J. Miranda. 1996. "A Spatial Equilibrium Analysis of Regional Structural Change in the U.S. Dairy Industry." *Review of Agricultural Economics* 18(4):693–703.

- Rui, Xiongwen and Mario J. Miranda. 1996. "Solving Nonlinear Dynamic Games via Orthogonal Collocation: An Application International Commodity Markets." *Annals of Operations Research* 68(1-4):89-108.
- Miranda, Mario J. and Joseph W. Glauber. 1995. "Solving Stochastic Models of Competitive Trade and Storage by Chebychev Collocation Methods." *Agricultural and Resource Economics Review* 24(1):70-77.
- Miranda, Mario J. and Gary D. Schnitkey. 1995. "An Empirical Model of Asset Replacement in Dairy Production." *Journal of Applied Econometrics* 10(S):S41-S55.
- Sun, Theresa Y., Mario J. Miranda and C.S. Kim. 1994. "Commodity Market Dynamics under Rational Expectations and Government Price Support Program." *Journal of Economics* 20(1).
- Miranda, Mario J., Frank Novak and Mel Lerohl. 1994. "Acreage Response under Canada's Western Grains Stabilization Program." *American Journal of Agricultural Economics* 76(2):270-76.
- Coltman, Russell T., Gary D. Schnitkey and Mario J. Miranda. 1994. "Scheduling Efficiencies of Farm-to-Plant Milk Collection in Western Ohio." *Agribusiness: An International Journal* 10(2):179-191.
- Miranda, Mario J. and Joseph W. Glauber. 1993. "Estimation of Dynamic Nonlinear Rational Expectations Models of Primary Commodity Markets with Private and Government Stockholding." *Review of Economics and Statistics* 75(3):463-70.
- Schnitkey, Gary D. and Mario J. Miranda. 1993. "The Impact of Pollution Controls on Livestock-Crop Producers." *Journal of Agricultural and Resource Economics* 18(1):25-36.
- Miranda, Mario J. and Joseph W. Glauber. 1993. "Intraseasonal Demand for Fall Potatoes under Rational Expectations." *American Journal of Agricultural Economics* 75(1):104-112.
- Miranda, Mario J. and Joseph W. Glauber. 1991. "Providing Crop Disaster Assistance through a Modified Deficiency Payment Program." *American Journal of Agricultural Economics* 73(4):1233-1243.
- Miranda, Mario J. 1991. "Area-Yield Crop Insurance Reconsidered." *American Journal of Agricultural Economics* 73(2):233-242.
- Miranda, Mario J. and Joseph W. Glauber. 1990. "The Effects of Price Supports on the Valuation of Options on Agricultural Futures Markets." *Review of Futures Markets* 9(1):108-125.
- Glauber, Joseph W., Peter G. Helmberger and Mario J. Miranda. 1989. "Four Approaches to Commodity Market Stabilization: A Comparative Analysis." *American Journal of Agricultural Economics* 71(2):326-337.
- Miranda, Mario J. and Peter G. Helmberger. 1988. "The Effects of Commodity Price Stabilization Programs." *American Economic Review* 78(1):46-58.
- Lowry, Mark N., Joseph W. Glauber, Mario J. Miranda and Peter G. Helmberger. 1987. "Pricing and Storage of Field Crops: A Quarterly Model with Application to Soybeans." *American Journal of Agricultural Economics* 69(4):740-749.

Manuscripts Undergoing Peer Review

- Chen, Jian and Mario J. Miranda. 2023. "Systemic Risk, Index Insurance and the Sustainability of Agricultural Joint Liability Group Credit." Revise and resubmit, undergoing revision for resubmission to *American Journal of Agricultural Economics*.
- Yen Meng-Fen Yen, Yuh-Yuh Li and Mario J. Miranda. 2023. "Leverage, Liquidity, and Agricultural Cooperative Profitability". Under review at *Annals of Public and Cooperative Economics*.
- Martey, Edward, John K.M. Kuwornu, Francis H. Kemeze, Prince Maxwell Etwire, Emmanuel K. Apiors and Mario J. Miranda. 2023. "Non-cognitive Skills and Willingness to Participate in Drought Index Crop Insurance in Ghana." Under review at *Ecological Economics*.
- Chen, Jian, Jon Einar Flatnes, Richard A. Gallenstein, Mario J. Miranda and Yingmei Tang. 2023. "Group Lending without Joint Liability: The Role of Cognitive Social Capital in Microfinance." Rejected by *Development and Cultural Change*, undergoing revision for submission to *Agricultural Economics*.
- Kemeze, Francis H., Mario J. Miranda and John K. M. Kuwornu. 2023. "Risk Attitudes, Subjective Beliefs and Adoption of Improved Production Technologies among Smallholder Farmers in Ghana." Under review at *Journal of Development Studies*.

Book Chapters

- Miranda, Mario J. and Denis A. Nadolnyak. 2023. "Index Insurance for Developing Countries: A Primer." In *Handbook of Microfinance, Financial Inclusion and Development*, Valentina Hartarska and Robert Cull, eds., Edward Elgar Publishing, Northampton, MA. In press.
- González Vega, Claudio, Isaí Guízar and Mario J. Miranda. 2020. "Credit or Deposits? Influences on the Adoption and Retention of Advanced Technologies" in *Essays in Honor of Miguel Ángel Rodríguez Echeverría*. Academia of Central America, San Jose, Costa Rica.
- Glauber, Joseph W. and Mario J. Miranda. 2016. "The Effects of Southern Hemisphere Crop Production on Trade, Stocks and Price Integration." In *Food Price Volatility and its Implications for Food Security and Policy*, Matthias Kalkuhl, Joachim von Braun and Maximo Torero, eds. Springer-Verlag.
- Miranda, Mario J. and Francis M. Mulangu. 2016. "Index Insurance for Agricultural Transformation in Africa" in *African Center for Economic Transformation Biennial Report 2016: Transforming Africa's Agriculture*. African Center for Economic Transformation, Accra, Ghana.
- Hopkins, Jeffrey W., Gary D. Schnitkey, Mario J. Miranda, Brent G. Sohngen and Luther G. Tweeten. 2003. "Farmer's Incentives to Conserve Soil Resources: A Dynamic Model Applied to the North-Central United States." In *Land Quality, Agricultural Productivity and Food Security: Biophysical Processes and Economic Choices at Local, Regional and Global Levels*. Edited by Keith Daniel Wiege. Northampton, MA: Edward Elgar.
- Schreiner, Mark, Douglas H. Graham and Mario J. Miranda. 1997. "Choices by Poor Households When the Interest Rate for Deposits Differs from the Interest Rate

- for Loans.” In *Food Security, Diversification and Resource Management: Refocusing the Role of Agriculture? Proceedings of the Twenty-third International Conference of Agriculture Economists*, edited by G. H. Peters and Joachim Von Braun. Farnham Surrey, United Kingdom: Ashgate.
- Glauber, Joseph W. and Mario J. Miranda. 1995. “Area-Yield Reinsurance.” In *Crop Insurance and the 1995 Farm Bill*. Edited by Jerry Skees and Barry Barnett. Boulder, CO: Westview Press.
 - Miranda, Mario J. 1995. “Maximum Likelihood Estimation of Nonlinear Rational Expectations Models by Orthogonal Polynomial Projection Methods.” In *Advances in Computational Economics, Volume 5*. Edited by Manfred Gilli. Norwell, MA: Kluwer Academic Publishers.
 - Glauber, Joseph W. and Mario J. Miranda. 1994. “Providing Catastrophic Yield Protection through a Target Revenue Program.” In *Economics of Agricultural Crop Insurance: Theory and Evidence*. Edited by Darrell L. Hueth and William H. Furtan. Boston, MA: Kluwer Academic Publishers.

Recent Working Papers and Manuscripts in Preparation

- Bangwan, Surewan and Mario J. Miranda. “Catastrophic Risk, Weather Index Insurance and Joint-Collateral Group Credit: The Case of the Thailand National Village Fund Program.” Working paper, Department of Agricultural, Environmental & Development Economics, The Ohio State University.
- Figueroa, Cristian, Rodrigo Harrison, Roger Lagunoff and Mario J. Miranda. “Carbon Consumption, the Carbon-Based Ecosystem and Output.” Working paper, Department of Economics, Georgetown University.
- Makaudze, Ephias M. and Mario J. Miranda. “Agricultural Catastrophic Risk Pool for the Southern African Development Community Countries.”
- Chen, Shu-Ling and Mario J. Miranda. “The Effects of Crop Insurance Participation on Upland Cotton Acreage Abandonment - A Real Options Approach.” Working paper, Department of Agricultural, Environmental & Development Economics, The Ohio State University.
- Ife, Victor, Djiby Racine Thiam, Opeyemi Ayinde, Edwin Muchapondwa and Mario J. Miranda. “Index-Based Livestock Insurance in a Developing Country Context: New Insights for Public Policy in Nigeria.” Working paper, Department of Agricultural Economics and Farm Management, University of Ilorin, Ilorin, Nigeria.
- Guizar-Mateos, Isai and Mario J. Miranda. “Financial Access, Technical Transformation and Poverty Traps among Poor Farmers in Developing Countries.” Working Paper, University of Guadalajara.
- Miranda, Mario J., Yu Zhang and Meng-Fen Yen. “Effective Risk Aversion and the Demand for Savings and Insurance.” Working paper, Department of Agricultural, Environmental & Development Economics, The Ohio State University.
- Miranda, Mario J., Donald F. Larson, Francis M. Mulangu and Katie Farrin. “Differential Effects of Food Security Policies on Subsistence Farmers and the

- Urban Poor.” Working paper, Department of Agricultural, Environmental & Development Economics, The Ohio State University.
- Romero-Aguilar, Randall and Mario J. Miranda. “Food Security for Whom? The Effectiveness of Food Reserves in Poor Developing Countries.” Working Paper, Department of Agricultural, Environmental & Development Economics, The Ohio State University.
 - Romero-Aguilar, Randall, Mario J. Miranda and Joseph W. Glauber. “Sustainability of Regional Food Reserves When Default Is Possible.” Working paper, Department of Agricultural, Environmental & Development Economics, The Ohio State University.
 - Wang, Hui, Ruohan Wu and Mario J. Miranda. “A Heterogeneous Agent Model of Strategic Credit Card Default.” Working paper, Department of Agricultural, Environmental & Development Economics, The Ohio State University.
 - Xu, Chang and Mario J. Miranda. “Covariate Risk, Index Insurance, and the Sustainability of Informal Risk Sharing Arrangements.” Working paper, Department of Agricultural, Environmental & Development Economics, The Ohio State University.
 - Zhang, Yu and Mario J. Miranda. “Household Investment Return and Childbearing Decisions in Developing Countries: Theory and Evidence from Mainland China.” Working paper, School of Insurance and Economics, University of International Business and Economics.
 - Miranda, Mario J., and Joseph W. Glauber. “Impact and Welfare Effects of Public Agricultural Stock and Production Estimates under Imperfect Information.” Working paper, Department of Agricultural, Environmental & Development Economics, The Ohio State University.

Workshops and Short-Courses

- Vedenov, Dmitry V. and Mario J. Miranda. “Applied Computational Economics.” One-day pre-conference workshop offered at the Annual Meeting of the Agricultural and Applied Economics Association, Chicago, IL, July 29, 2017.
- Miranda, Mario J. and John Dougherty. “Topics in Agricultural Risk Management and Insurance.” Three-day workshop offered at the Sokoine University of Agriculture, Morogoro, Tanzania, February 9-10, 2017.
- Miranda, Mario J. “Applied Computational Economics.” Two-week short-course offered at the Department of Agricultural Economics, University of Pretoria, South Africa, March 7-18, 2016
- Vedenov, Dmitry V. and Mario J. Miranda. “Applied Computational Economics.” One-day pre-conference workshop offered at the Annual Meeting of the Agricultural and Applied Economics Association, Boston, MA, August 3, 2016.
- Miranda, Mario J. and Dmitry V. Vedenov. “Applied Computational Economics.” One-day pre-conference workshop offered at the Triannual Conference of the International Association of Agricultural Economists, Milan, Italy, August 7-14, 2015.

- Miranda, Mario J. “Quantitative Methods for Agricultural and Environmental Policy Analysis.” Two-week course offered at the University of Ghana – Legon Campus, Accra, Ghana, June 8-19, 2015.
- Vedenov, Dmitry V., Mario J. Miranda and Randall Romero-Aguilar. “Applied Computational Economics.” One-day pre-conference workshop offered at the Annual Meeting of the Agricultural and Applied Economics Association, Minneapolis, MN, July 26, 2014.
- Miranda, Mario J. “Applied Computational Economic Dynamics.” Two-week course offered at the University of Ghana – Legon Campus, Accra, Ghana, January 27 – February 7, 2014.
- Miranda, Mario J. “Applied Computational Economic Dynamics.” Three-week course offered at the Renmin University of China International Summer School, Beijing, China, July 3-19, 2013.
- Miranda, Mario J. “Applied Computational Methods for Economic Dynamics.” Two-week course offered to the Central Bank of Costa Rica, San Jose, Costa Rica, Dec 3-9, 2012 and April 8-12, 2013.
- Miranda, Mario J. and Dmitry V. Vedenov. “Applied Computational Economics.” One-day pre-conference workshop offered at the Annual Meeting of the Agricultural and Applied Economics Association, Pittsburgh, PA, July 23, 2011.
- Miranda, Mario J. “Computational Economic and Finance.” Two-week course offered at the International Summer School in Economics, University of Los Andes, Bogota, Colombia, June 15-25, 2010.
- Miranda, Mario J. “Agricultural Index Insurance and Weather Derivatives.” One-day Workshop offered to the Masters in Microfinance Graduate Program, University of Bergamo, Bergamo, Italy, May 21, 2010.
- Miranda, Mario J. and Dmitry V. Vedenov. “Applied Computational Economics.” One-day pre-conference workshop offered at the Annual Meetings of the Agricultural and Applied Economics Association, Milwaukee, WI, July 25, 2009.
- Miranda, Mario J. “Computational Economics and Finance.” Two-week course offered at the International Summer School in Economics, University of Los Andes, Bogota, Colombia, June 23-July 7, 2009.

Computer Application Software

- Miranda, Mario J. and Paul W. Fackler. “CompEcon: A Matlab Toolbox for Analysis of Computational Economic and Financial Models.” 1994-2023.
- Miranda, Mario J., Dmitry V. Vedenov, Joseph Glauber and Robert Dismukes. “SRA-Sim: A Stochastic Dynamic Simulation Model for the Analysis of the U.S. Standard Reinsurance Agreement.” 1997-2002.
- Miranda, Mario J., Dmitry V. Vedenov, Gary Schnitkey and Scott H. Irwin. “AgRisk: Decision Support for Agricultural Risk Management.” 1996-2002.
- Miranda, Mario J. and Joseph W. Glauber. “ComSim: A Suite of Stochastic Simulation Programs for the Analysis of Agricultural Policies under Production and Price Uncertainty.” 1988-1995.

- Miranda, Mario J. “Y-Opt: A User-Friendly Program to Price Chicago Board of Trade Corn Reinsurance Options.” 1994.

Doctoral Advisees Graduated

- Ali, Asif. 2012. “Financial Policies and Income and Wealth Inequality: A Kuznetsian Story of Financial Deepening and Human Capital Accumulation.” (Co-Advisor). Director, Financial Stability Department, State Bank of Pakistan, Karachi, Pakistan.
- Bangwan, Sureewan. 2018. “The Effects of Catastrophic Risk on the Performance of the Thailand National Village and Urban Community Fund Program and Prospects for Managing it Through the Use of Weather Index Insurance.” Research Economist, Office of Agricultural Economics, Thailand Ministry of Agriculture and Cooperatives, Bangkok, Thailand.
- Chaudhry, Muhammad Imran. 2016. “Essays on Agricultural and Financial Markets in Pakistan.” *Honorable Mention, Agricultural and Applied Economics Association Outstanding Doctoral Dissertation Award 2017*. Assistant Professor, Dawood School of Business, Lahore University of Management Sciences, Lahore, Pakistan.
- Chen, Jian. 2019. “Systemic Risk and the Sustainability of Joint Liability Group Lending.” Research and Development Analyst, Data Science and Analytics Department, SafeAuto Insurance, Columbus, OH.
- Chen, Shu-Ling. 2007. “Three Essays on Agricultural and Catastrophic Risk Management.” Associate Professor, Department of Finance & Cooperative Management, National Taipei University, Taipei, Taiwan.
- Chen, Yong. 2009. “Three Essays on the Interactions between Regional Development and Natural Amenities.” Associate Professor, Department of Applied Economics, Oregon State University, Corvallis, OR.
- Collier, Benjamin L. 2013. “Financial Inclusion and Natural Disasters.” (Co-Advisor). *Recipient, Agricultural and Applied Economics Association Outstanding Doctoral Dissertation Award 2014*. Assistant Professor, Department of Risk, Insurance & Healthcare Management, Fox School of Business, Temple University, Philadelphia, PA.
- Dougherty, John P. 2018. “Three Essays on the Economic Sustainability of Drought Insurance and Soil Investment for Smallholder Farmers in the Developing World.” Assistant Professor, Department of Economics, Loyola University Maryland, Baltimore, MD.
- Farrin, Kathleen M. 2013. “Escape from Poverty Traps: Three Essays on the Effects of Policy Intervention on Agricultural Productivity and Welfare among the Rural Poor.” Economist, Department of Policy and Evaluation, Millennium Challenge Corporation, Washington, DC.
- Foroutan, Pirouz V. 2003. “Agent-Based Modeling of Raccoon Rabies Epidemic and Its Economic Consequences.” Economist, US Food & Drug Administration, College Park, MD.

- Gallenstein, Richard T. (Tony). 2017. “Three Essays on Agricultural Microfinance and Risk Management.” Assistant Professor, Department of Economics, Catholic University of America, Washington, DC.
- Guizar-Mateos, Isai. 2013. “Financial Development, the Dynamics of Technology Choices, and Poverty Traps.” Professor of Economics & Finance, Universidad de Guadalajara, Guadalajara, Mexico.
- Jun, Min Su. 2016. “Three Essays on Complex Contractual Networks of Farmers.” Research Fellow, Department of Industry & Strategy, Samsung Economic Research Institute, Seoul, South Korea.
- Katchova, Ani L. 2001. “Three Essays on Agricultural Decisionmaking.” Associate Professor and Farm Income Enhancement Chair, Department of Agricultural, Environmental & Development Economics, The Ohio State University, Columbus, OH.
- Kemeze, Francis H. 2016. “Drought Risk Management Using Index Insurance and Supplemental Irrigation among Smallholder Farmers in Northern Ghana.” (Co-Advisor). Research Economist, African Development Bank, Abidjan, Côte d’Ivoire.
- Li, Yiting. 2017. “Three Essays on Risk Coping and Risk Management in Developing Countries.” Senior Research Consulting Statistician, College of Public Health, The Ohio State University, Columbus, OH.
- Liu, Pu. 2010. “Dependence Structure in Agricultural Index Insurance Design and Product Development.” Principal Forecast Analyst, American Electric Power, Columbus, OH.
- Liu, Xianglin. 2016. “Three Essays in Agricultural Insurance.” Vice President, Citi Financial Services, Trenton, NJ.
- Mishra, Khushbu K. 2017. “Three Essays on Gender and Development Economics: Pathways to Close Gender-Related Economic Gaps in Developing Agrarian Economies in Areas of Asset, Risk, and Credit Constraints.” (Co-Advisor). Assistant Professor, Department of Economics, Stetson University, DeLand, FL.
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- Miranda, Mario J. "Estimation of Nonlinear Rational Expectations Models using Polynomial Projection Methods." Conference on Computational Economics, sponsored by the International Federation of Automatic Control, Amsterdam, The Netherlands, June, 1994.
- Miranda, Mario J. "Recent Advancements in Numerical Solution Methods for Dynamic Agricultural Decision Models." Annual Meeting of the Nordic Research Project on Risk and Structural Change, Oslo, Norway, May, 1994.
- Miranda, Mario J. and Gary D. Schnitkey. "Structural Estimation of Dynamic Stochastic Discrete Choice Models in Agriculture." The University of Wisconsin, Madison, Wisconsin and Iowa State University, Ames, Iowa, March 1993; Purdue University, West Lafayette, Indiana and the University of Illinois, Champaign, Illinois, March 1994; North Carolina State University, Durham, North Carolina, April 1994.
- Miranda, Mario J. and Joseph W. Glauber. "Estimation of Rational Risk Response Models for Storable Commodities." Presented at Annual Meeting of the SR-232 Conference on Applied Risk Analysis, San Antonio, Texas, March 1991.
- Glauber, Joseph W. and Mario J. Miranda. "Providing Catastrophic Yield Protection through a Modified Deficiency Payment Program." Presented at the University of Maryland - University of Saskatchewan Conference for the Improvement of Crop Insurance, Regina, Saskatchewan, April 1990.
- Miranda, Mario J. "Analysis of Rational Expectations Models for Agricultural Markets Subject to Government Intervention." Presented at The World Bank, March 1986.

Selected Paper Presentations

- Kuwornu, John K.M., Francis H. Kemeze, and Mario J. Miranda. "Non-Cognitive Skills and Willingness to Participate in Drought Index Crop Insurance in Ghana." Presented at the Evidence to Action Conference, Addis Ababa, Ethiopia, September 24-28, 2023.
- Miranda, Mario J. and Meng-Fen Yen. "A Critique of Agricultural Risk Management Research: Effective Risk Aversion and the Demand for Insurance." Selected

- presentation, Annual Meeting of the Agricultural and Applied Economics Association, Anaheim, CA, July 31-August 2, 2022.
- Kemeze, Francis H. and Mario J. Miranda. "Pairing Small-scale Irrigation and Index Insurance to Manage Drought Risk in Developing Countries." Selected presentation, Annual Meeting of the Agricultural and Applied Economics Association, Anaheim, CA, July 31-August 2, 2022.
 - Mishra, Khushbu, Richard Gallenstein, Abdoul G. Sam, Mario J. Miranda, Patricia Toledo, and Francis M. Mulangu. "Do Index-Insured Loans Spur Technology Adoption? Evidence from a Randomized Control Trial in Northern Ghana." Selected presentation, Annual Meeting of the Agricultural and Applied Economics Association, Anaheim, CA, July 3-August 2, 2022.
 - Ayinde, Opeyemi Eytayo, Mario J. Miranda, and Matthew Olaniyi Adwuni. "Building Women's Resilience to Climate Shocks through Stress Tolerant Maize for Africa: Constraints and Prospects." Selected paper presentation, Africa Climate Week Conference, United Nations Framework Convention on Climate Change, Libreville, Gabon, August 29 – September 2, 2022.
 - Ayinde, Opeyemi Eytayo, Oluwefemi Amos Oyedeji, and Mario J. Miranda. "New Approaches to Resilience Measurement: A Case of Farmer Resilience Index Framework from Nigeria". Selected presentation, Evidence to Action Conference, Makerere University, Kampala, Uganda, September 26-30, 2022.
 - Miranda, Mario J. and Meng-Fen Yen. "Leverage, Liquidity, and Agricultural Cooperative Profitability Selected presentation, Annual Meeting of the Agricultural and Applied Economics Association, Austin TX, August 1-3, 2021.
 - Ayinde, Opeyemi Eytayo, Mario J. Miranda, and Matthew Olaniyi Adwuni. "Financial System Hazard in a Developing Country Context: Effect of Agricultural Insurance on Credit, Risk and Efficiency in Nigeria." Selected paper presentation, Sixth International Conference of the African Association of Agricultural Economists, Abuja, Nigeria, September 23-26, 2019.
 - Chen, Jian, Jon Einar Flatnes, Richard A. Gallenstein, Mario J. Miranda and Yingmei Tang. "Group Lending without Joint Liability: Behavioral Insights from a Framed Field Experiment in Rural China." Selected presentation, Annual Meeting of the Agricultural and Applied Economics Association, Atlanta, GA, July 21-23, 2019.
 - Miranda, Mario J., Francis M. Mulangu and Francis H. Kemeze. "Warehouse Receipt Financing for Smallholders in Developing Countries: Short on Logic, Long on Imagination." Poster presentation, Annual Meeting of the Agricultural and Applied Economics Association, Atlanta, GA, July 21-23, 2019.
 - Yen, Meng-Fen and Mario J. Miranda. "A General Equilibrium Model of Bilateral Trade with Strategic Public Investment in Commercial Infrastructure." Poster presentation, Annual Meeting of the Agricultural and Applied Economics Association, Atlanta, GA, July 21-23, 2019.
 - Sant'Anna, Ana Claudia, Mario J. Miranda and Ani Katchova. "Land Values and Farm Debt Accumulation: A Dynamic Model." Poster presentation, Annual Meeting of the Agricultural and Applied Economics Association, Atlanta, GA, July 21-23, 2019.

- Ayinde, Opeyemi E., Tahirou Abdoulaye, Mario J. Miranda, Abdoul G. Sam, and Gbadebo Olaoye. "Women's Access to Improved Seed: Does it Matter for Small-Scale Maize Farms' Productivity in Nigeria." Poster presentation, Annual Meeting of the Agricultural and Applied Economics Association, Atlanta, GA, July 21-23, 2019.
- Mishra, Khushbu K., Richard A. Gallenstein, Abdoul G. Sam and Mario J. Miranda. "Does Willingness to Pay for Insured Loans Differ Between Male and Female Farmers? Evidence from Ghana." Selected paper, Annual Meeting of the Southern Economics Association, Washington, DC, November 18-20, 2018.
- Mishra, Khushbu K., Richard A. Gallenstein, Abdoul G. Sam and Mario J. Miranda. "The Impact of Index-Insured Loans on Technology Adoption in Northern Ghana." Selected paper, Annual Meeting of the Agricultural and Applied Economics Association, Washington, DC, August 5-7, 2018.
- Aina, Ifedotun, Opeyemi Eytayo Ayinde, Djiby Thiam and Mario J. Miranda. "Willingness to Pay for Index-Based Livestock Insurance: Perspectives from West Africa." Selected paper, Triennial Conference of the International Association of Agricultural Economists, Vancouver, Canada, July 28 – August 2, 2018.
- Mishra, Khushbu K., Richard A. Gallenstein, Mario J. Miranda, Francis M. Mulangu, Abdoul G. Sam and Patricia T. Toledo. "You are Approved! Insured Loans Increase Credit Access and Technology Adoption of Ghanaian Farmers." Selected paper, Second International Conference on Globalization and Development, Göttingen, Germany, May 3-4, 2018.
- Mishra, Khushbu K., Abdoul G. Sam, Richard A. Gallenstein, Mario J. Miranda and Patricia T. Toledo. "You are Approved! Insured Loans Increase Credit Access and Technology Adoption of Ghanaian Farmers." Selected paper, Annual Meeting of the Southern Economic Association, Tampa, FL, November 17-19, 2017.
- Dougherty, John, Jon Einar Flatnes, Richard A. Gallenstein, Mario J. Miranda and Abdoul G. Sam. "Investigating the Impacts of Climate Change on the Demand for Index Insurance." Selected paper, Annual Meeting of the Agricultural and Applied Economics Association, Chicago, IL, July 29 - August 1, 2017.
- Gallenstein, Richard A., Jon Einar Flatnes, Mario J. Miranda, John Dougherty and Abdoul G. Sam. "The Interaction of Index Insurance and Joint Liability in Insured Loans" Selected paper, Annual Meeting of the Agricultural and Applied Economics Association, Chicago, IL, July 29 - August 1, 2017.
- Mishra, Khushbu K., Richard A. Gallenstein, Mario J. Miranda and Abdoul G. Sam. "Gender and Willingness to Pay for Insured Loans: Empirical Evidence from Ghana." Selected paper, Annual Meeting of the Agricultural and Applied Economics Association, Chicago, IL, July 29 - August 1, 2017.
- Zhang, Yu and Mario J. Miranda. "A Life Cycle Model of Childbearing and Saving Decisions with Incomplete Financial Markets and Sex Selection." Selected poster, Annual Meeting of the Agricultural and Applied Economics Association, Chicago, IL, July 29 - August 1, 2017.
- Guizar-Mateos, Isai, Mario J. Miranda and Abdoul Sam. "Theory and Empirics of Formal Savings, Adoption of Non-Divisible Production Technologies and

- Agricultural Income Growth.” Selected paper, Fifth International Agricultural Risk, Finance and Insurance Conference, Paris, France, June 7-9, 2017.
- Chen, Jian and Mario J. Miranda. “Joint Liability Group Credit Linked with Index Insurance: A Dynamic Game Framework.” Selected poster, Annual Meeting of the Agricultural and Applied Economics Association, Chicago, IL, July 29 - August 1, 2017.
 - Chen, Jian and Mario J. Miranda. “Performance of Joint Liability Group Credit in the Presence of Systemic Risk: A Dynamic Game Framework.” Selected paper, Annual Meeting of the Midwest Economics Association, March 31-April 2, 2017.
 - Mishra, Khushbu, Richard Gallenstein, Mario J. Miranda and Abdoul G. Sam. “Can Index Insurance Improve Credit Access and Technology Adoption Among Smallholder Farmers?” Selected paper, Annual Meeting of the Midwest Economics Association, March 31-April 2, 2017.
 - Gallenstein, Richard, Mario J. Miranda, John Dougherty, Jon Einar Flatnes and Abdoul Sam. “Impact of Social Capital on Risk Taking in Joint Liability Lending Contracts: Evidence from Theory and a Field Experiment.” Selected paper, Annual Meeting of the Midwest Economics Association, March 31-April 2, 2017.
 - Xu, Chang and Mario J. Miranda. “Sustainability of Informal Risk Sharing Agreements in the Presence of Systemic Risk.” Selected paper, Annual Meeting of the Midwest Economics Association, March 31-April 2, 2017.
 - Zhang, Yu and Mario J. Miranda. “A Life Cycle Model of Childbearing and Saving Decisions with Incomplete Financial Markets and Sex Selection.” Selected paper, North America Conference of the Chinese Economics Society, Tuscaloosa, Alabama, March 10-11, 2017.
 - Mulangu, Francis M., Mario J. Miranda, Don F. Larson and Katie Farrin. “Differential Effects of Food Security Policies on Subsistence Farmers and the Urban Poor.” Selected paper, African Economic Conference, Abuja, Nigeria, December 5-7, 2016.
 - Kemeze, Francis H., John K. M. Kuwornu, Mario J. Miranda and Henry Amin-Somuah. “Drought Index Insurance versus Supplemental Irrigation: A Randomized Controlled Trial Experimental Evidence in Northern Ghana.” Selected paper, African Economic Conference, Abuja, Nigeria, December 5-7, 2016.
 - Miranda, Mario J. and Jian Chen. “Group Loan or Individual Loan? A Dynamic Framework with Systemic Risk.” Selected paper, Annual Meeting of the Agricultural and Applied Economics Association, Boston, MA, August 3, 2016.
 - Mishra, Khushbu, Richard Gallenstein, Mario J. Miranda, Abdoul G. Sam and Patricia Toledo. “Gender Differential Impacts of Index-Based Rainfall Insurance on Technology Adoption: Evidence from Ghana.” Selected paper, Annual Meeting of the Agricultural and Applied Economics Association, Boston, MA, August 3, 2016.
 - Xu, Chang and Mario J. Miranda. “The Crowd-In Effect of Index Insurance on Informal Risk Sharing.” Selected paper, Annual Meeting of the Agricultural and Applied Economics Association, Boston, MA, August 3, 2016.
 - Dougherty, John, Richard Gallenstein, Khushbu Mishra, Mario J. Miranda and Jon Einar Flatnes. “Index Insurance and Moral Hazard in a Microfinance Context.”

- Selected paper, Annual Meeting of the Agricultural and Applied Economics Association, Boston, MA, August 3, 2016.
- Kemeze, Francis H., Mario J. Miranda, John K.M. Kuwornu and Henry Anim-Somuah. “Optimal Management of Runoff Reservoir Supply: The Case of Tono Reservoir in Northern Ghana.” Selected paper, Annual Meeting of the Agricultural and Applied Economics Association, Boston, MA, August 3, 2016.
 - Li, Yiting and Mario J. Miranda. “Replanting Guarantee in Developing Countries.” Selected paper, Annual Meeting of the Agricultural and Applied Economics Association, Boston, MA, August 3, 2016.
 - Chaudhry, Muhammad Imran, Ani Katchova and Mario J. Miranda. “Examining Pricing Mechanics in the Poultry Value Chain - Empirical Evidence from Pakistan.” Selected paper, Annual Meeting of the Agricultural and Applied Economics Association, Boston, MA, August 3, 2016.
 - Glauber, Joseph W. and Mario J. Miranda. “The Effects of Southern Hemisphere Crop Production on Trade, Stocks and Price Integration.” Selected paper, Triennial Conference of the International Association of Agricultural Economists, Milan, Italy, August 8-14, 2015.
 - Chaudhry, Muhammad I. and Mario J. Miranda. “Structural Determinants of Adoption of Artificial Insemination among Livestock Farmers in Pakistan”, Selected paper, Annual Meeting of the Agricultural and Applied Economics Association, San Francisco, CA, July 26-28, 2015.
 - Liu, Xianglin, Yingmei Tang and Mario J. Miranda. “Does Past Experience with Natural Disasters Affect Willingness-to-Pay for Weather Index Insurance? Evidence from China”, Selected paper, Annual Meeting of the Agricultural and Applied Economics Association, San Francisco, CA, July 26-28, 2015.
 - Gallenstein, Richard A., Khushbu Mishra, Mario J. Miranda and Abdoul G. Sam. “Willingness to Pay for Rainfall Index Insurance Backed Loans and Basis Risk in Northern Ghana”, Selected paper, Annual Meeting of the Agricultural and Applied Economics Association, San Francisco, CA, July 26-28, 2015.
 - Romero-Aguilar, Randall and Mario J. Miranda. “Sustainability of Regional Food Reserves When Default Is Possible”, Selected paper, Annual Meeting of the Agricultural and Applied Economics Association, San Francisco, CA, July 26-28, 2015.
 - Mishra, Khushbu, Abdoul G. Sam, Mario J. Miranda and Gracious Diiro. “Gender and Dynamics of Agricultural Technology Adoption: Evidence from Uganda”, Selected paper, Annual Meeting of the Agricultural and Applied Economics Association, San Francisco, CA, July 26-28, 2015.
 - Li, Yiting and Mario J. Miranda. “Mitigation Index Insurance for Developing Countries: Insure the Loss or Insure the Signal? Selected paper”, Selected poster, Annual Meeting of the Agricultural and Applied Economics Association, San Francisco, CA, July 26-28, 2015.
 - Guizar, Isai, Mario J. Miranda and Claudio Gonzalez-Vega. “Financial Intermediation and Poverty Trap Dynamics over the Life Cycle.” Selected paper, Annual Meeting of the Agricultural and Applied Economics Association, San Francisco, CA, July 26-28, 2015.

- Guizar, Isai, Claudio Gonzalez-Vega and Mario J. Miranda. “Uneven Influence of Credit and Savings Deposits on the Dynamics of Technology Decisions and Poverty Traps.” Selected paper, Fourth European Research Conference on Microfinance, Geneva, Switzerland, June 1-3, 2015.
- Liu, Xianglin, Yingmei Tang and Mario J. Miranda. “Does Past Experience in Natural Disasters Affect Willingness-to-Pay for Weather Index Insurance? Evidence from China”, Presented at the Annual Meeting of the Midwest Economic Association, Minneapolis, MN, March 26-29, 2015.
- Farrin, Kathleen M. and Mario J. Miranda. “Premium Benefits? A Heterogeneous Agent Model of Credit-Linked Index Insurance and Farm Technology Adoption.” Presented at the Annual Meeting of the Agricultural and Applied Economics Association, Washington, DC, August 4-6, 2013.
- Romero Aguilar, Randall S., Shu-Ling Chen, Xianglin Liu and Mario J. Miranda. “The Global Food Price Crisis and China-World Rice Market Integration: A Spatial-Temporal Rational Expectations Equilibrium Model.” Presented at the Annual Meeting of the Agricultural and Applied Economics Association, Washington, DC, August 4-6, 2013.
- Yen, Meng-Fen and Mario J. Miranda. “The Wage Premium and Market Structure: The Case of South Korea and Taiwan.” Presented at the Annual Meeting of the Agricultural and Applied Economics Association, Washington, DC, August 4-6, 2013.
- Guizar-Mateos, Isai, Mario J. Miranda and Claudio Gonzalez-Vega. “The Role of Credit and Savings in the Dynamics of Technology Decisions and Poverty Traps.” Presented at the Annual Meeting of the Agricultural and Applied Economics Association, Washington, DC, August 4-6, 2013.
- Miranda, Mario J., Kathleen M. Farrin, Donald F. Larson and Shu-Ling Chen. “Differential Effects of Food Security Policies on Subsistence Farmers and the Urban Poor.” Presented at the Annual Meeting of the Agricultural and Applied Economics Association, Washington, DC, August 4-6, 2013.
- Miranda, Mario J. and Kathleen M. Farrin. “A Heterogeneous Agent Model of Credit-Linked Index Insurance and Farm Technology Adoption.” Presented at the International Agricultural Risk, Finance and Insurance Conference, Vancouver, Canada, June 16-18, 2013.
- Collier, Benjamin, Jerry R. Skees and Mario J. Miranda. “On the Efficient Management of Natural Disaster Risk Using Credit and Index Insurance.” 2012 Annual Meeting of the Agricultural and Applied Economics Association, Seattle, WA, August 12-14, 2012.
- Liu, Pu and Mario J. Miranda. “Tail Dependence among Agricultural Insurance Indices: The Case of Iowa County-Level Rainfalls.” Presented at the Agricultural & Applied Economics Association 2010 Annual Meeting, Denver, Colorado, July 25-27, 2010.
- Miranda, Mario J. “Systemic Risk, Index Insurance and Optimal Management of Agricultural Loan Portfolios in Developing Countries”, Presented at the Conference of the African Association of Agricultural Economists, Cape Town, South Africa, Sep 22, 2010.

- Chen, Shu-Ling and Mario J. Miranda. "Effects of Insurance on Farmer Crop Abandonment." Presented at the Annual Conference of the American Agricultural Economics Association, Portland, Oregon, July 2007.
- Chen, Shu-Ling and Mario J. Miranda, "Dynamic Analysis of Farmer's Crop Insurance Decision." The Taiwan Economic Association - Chinese Economic Association in North America Joint Conference, Taipei, Taiwan, December 17, 2006.
- Chen, Shu-Ling and Mario J. Miranda. "Modeling Yield Distribution in High Risk Counties: Application to Texas Upland Cotton", American Agricultural Economics Association Annual Meetings, Long Beach, CA, July 23-26, 2006.
- Chen, Shu-Ling and Mario J. Miranda. "Modeling Multivariate Extreme-Event Crop Yield Densities", Presented at Annual Meeting of the American Agricultural Economics Association, Denver, Colorado, August 2004.
- Vedenov, Dmitry V., Mario J. Miranda, Joseph W. Glauber and Robert Dismukes. "Economic Analysis of the Standard Reinsurance Agreement", Presented at Annual Meeting of the American Agricultural Economics Association, Denver, Colorado, August 2004.
- Vedenov, Dmitry V. and Mario J. Miranda. "Portfolio Allocation and Alternative Structures of the Standard Reinsurance Agreement", Presented at Annual Meeting of the American Agricultural Economics Association, Denver, Colorado, August 2004.
- Vedenov, Dmitry V. and Mario J. Miranda. "Long-Term Agricultural Risk Management: Crop Insurance vs. Savings and Borrowings." Presented at the Conference on Risk in Agriculture and Resource Management, Gulf Shores, Alabama, March 27, 2004.
- Katchova, Ani L., Mario J. Miranda and Claudio Gonzalez-Vega. "A Dynamic Model of Microlending in the Developing Countries." Presented at Annual Meeting of the American Agricultural Economics Association, Chicago, Illinois, August 2001.
- Vedenov, Dmitry V. and Mario J. Miranda, "Rainfall Insurance for Midwest Crop Production", Presented at Annual Meeting of the American Agricultural Economics Association, Chicago, Illinois, August 2001.
- Katchova, Ani L., Ian M. Sheldon and Mario J. Miranda, "A Dynamic Model of Oligopsony and Oligopoly in the Potato Processing Industry", Presented at Annual Meeting of the American Agricultural Economics Association, Tampa, Florida, August 2000.
- Hopkins, Jeffrey, Gary D. Schnitkey, Mario J. Miranda and Luther Tweeten. "Optimal Cropland Degradation with Reversible and Irreversible Components." Presented at Annual Meeting of the American Agricultural Economics Association, Salt Lake City, Utah, August 2-5, 1998.
- Makki, Shiva and Mario J. Miranda. "Self-Insurance and the Utility of Standard Risk Management Contracts." Presented at Annual Meeting of the American Agricultural Economics Association, Salt Lake City, Utah, August 2-5, 1998.
- Makki, Shiva, Luther Tweeten and Mario J. Miranda. "Wheat Storage-Trade Interactions under Domestic and Production Uncertainty." Presented at Annual Meeting of the American Agricultural Economics Association, Toronto, Canada, July 27-30, 1997.

- Schreiner, Mark, Doug Graham and Mario Miranda. "Choices by Poor Households When the Interest Rate for Deposits Differs from the Interest Rate for Loans." Presented at Annual Meeting of the International Agricultural Economics Association, Sacramento, California, August 1997.
- Schreiner, Mark, Doug Graham and Mario Miranda. "The Effects of the Interest Rates for Lending and Borrowing on Subsistence Households." Presented at Annual Meeting of the International Agricultural Economics Association, Sacramento, California, August 1997.
- Schreiner, Mark, Doug Graham and Mario Miranda. "The Effects on Peasant Households of Access to Formal Deposits and Loans." Presented at Annual Meeting of the American Agricultural Economics Association, San Antonio, Texas, July 1995.
- Makki, Shiva, Mario J. Miranda and Luther Tweeten. "Storage-Trade Interactions in Commodity Markets." Presented at Annual Meeting of the American Agricultural Economics Association, Indianapolis, Indiana, August 1995.
- Hentchel, Eva, Mario J. Miranda and Allan Randall. "Enforcing Pollution Control Regulation Using Two Types of Inspections, a Reputation Indicator and Self Reports." Presented at Annual Meeting of the American Agricultural Economics Association, Indianapolis, Indiana, August 1995.
- Rui, Xiongwen and Mario J. Miranda. "Salvaging the Nonlinear Rational Expectations Commodity Storage Model." Presented at Annual Meeting of the American Agricultural Economics Association, Indianapolis, Indiana, August 1995.
- Miranda, Mario J. and Xiongwen Rui. "Maximum Likelihood Estimation of Nonlinear Rational Expectations Asset Pricing Models." Presented at The First Annual Conference of the Society for Computational Economics, Austin, Texas, May 1994.
- Miranda, Mario J. and Gary D. Schnitkey. "Structural Estimation of Dynamic Stochastic Discrete Choice Models in Agriculture." Presented at Annual Meeting of the American Agricultural Economics Association, Orlando, Florida, August 1993.
- Sun, Theresa Y. and Mario J. Miranda. "Wheat Market Dynamics under Rational Expectations and Government Price Support Programs." Presented at the Annual Meeting of the Missouri Valley Economic Association, Memphis, Tennessee, February 1993.
- Schnitkey, Gary D. and Mario J. Miranda. "The Impact of Pollution Controls on Livestock-Crop Producers." Presented at Annual Meeting of the American Agricultural Economics Association, Baltimore, Maryland, August 1992.
- Miranda, Mario J. and Joseph W. Glauber. "Intraseasonal Demand for Fall Potatoes Under Rational Expectations." Presented at Annual Meeting of the American Agricultural Economics Association, Baltimore, Maryland, August 1992.
- Miranda, Mario J. and Joseph W. Glauber. "Estimation of Dynamic Nonlinear Rational Expectations Models of Primary Commodity Markets with Private and Government Stockholding." Presented at Annual Meeting of the American Agricultural Economics Association, Manhattan, Kansas, August 1991.

- Miranda, Mario J. "Area-Yield Crop Insurance Reconsidered." Presented at Annual Meeting of the American Agricultural Economics Association, Vancouver, British Columbia, August 1990.
- Miranda, Mario J. and Joseph W. Glauber. "The Effects of Price Supports on the Valuation of Options on Agricultural Futures Markets." Presented at the Chicago Board of Trade Fall Research Seminar, Durham, North Carolina, December 1989.
- Miranda, Mario J. and Joseph W. Glauber. "International Trade, Speculative Storage and Commodity Price Stability." Presented at The International Commodity Market Modeling Conference, The World Bank, Washington, DC, October 1988.
- Glauber, Joseph W. and Mario J. Miranda. "Enhancing U.S. Exports: A Comparison of Marketing Loans and Export Subsidies." Presented at Annual Meeting of the American Agricultural Economics Association, Knoxville, Tennessee, August 1988.
- Glauber, Joseph W. and Mario J. Miranda. "A Rational Expectations Model of Inventory Holding Under Risk and Uncertainty." Presented at Annual Meeting of the American Agricultural Economics Association, Reno, Nevada, July 1986.

Other Presentations

- Gallenstein, Richard A., Khushbu Mishra, Abdoul G. Sam and Mario J. Miranda. "Using Index Insurance to Improve Access to Credit among Smallholder Farmers in Northern Ghana", Presented at the BASIS Annual Meeting in Berkeley, CA, October 29-30, 2015.
- Miranda, Mario J. "Credit, Savings and Insurance in Agricultural Risk Management." US Department of Agriculture, Economic Research Service, Washington, DC, January 20, 2015.
- Miranda, Mario J. "Managing Microfinance Institution Agricultural Portfolio Risk using Weather Index Insurance." Association of Rural Banks – Northern Chapter (ARB), Tamale, Ghana, July 24, 2014.
- Miranda, Mario J. "How to Prepare for the Job Market." Ohio State University Department of Agricultural, Environmental & Development Economics PhD Seminar Roundtable, January 27, 2009.
- Miranda, Mario J. "Teaching Computational Economics in an Applied Economics Graduate Program". Presented at Annual Conference of the Society for Computational Economics, Amsterdam, Netherlands, July 11, 2004.
- Vedenov, Dimitry V., Mario J. Miranda, J.W. Glauber and R. Dismukes, "Economic Analysis of the Standard Reinsurance Agreement", Risk Management Agency, U.S. Department of Agriculture, Kansas City, MO, August 5, 2003.
- Miranda, Mario J. "Numerical Methods for the Solution of Nonlinear Dynamic Economic Models", presented to the Department of Economics, The Ohio State University, March 25, 2002.
- Miranda, Mario J. "Challenges faced by University Teachers." Presented to the Department of Agricultural, Environmental & Development Economics, The Ohio State University, April 5, 2000.

- Miranda, Mario J. "Optimal Index Insurance Design." Presented to the World Bank Research Group, Washington, DC, June 18, 2000.
- Miranda, Mario J. "The Standard Reinsurance Historical Simulator." Presented to the Crop Insurance Industry Actuarial Research Group, Chicago, Illinois, January 13, 2000.
- Miranda, Mario J. and Paul W. Fackler. "Hybrid Methods for Continuous Space Dynamic Programming". Presented at Annual Conference of the Society for Computational Economics, Boston, Massachusetts, June 24-26, 1999.
- Rui, Xiongwen and Mario J. Miranda. "Salvaging the Nonlinear Rational Expectations Commodity Storage Model." Presented at the NCR-134 Conference on Applied Commodity Price Analysis, Forecasting and Market Risk Management, Chicago, Illinois, April 1995.
- Miranda, Mario J. "Systemic Risk, Reinsurance and the Failure of Crop Insurance Markets." Presented at the First Annual Conference on Risk in Agriculture and Resource Management, Gulf Shores, Alabama, March 1994.
- Blue, Neil, Joao Martines-Filho, Mario J. Miranda and Scott Irwin. "Dynamic Hedging Strategies for Soybean Producers." Presented at the NCR-134 Conference on Applied Commodity Price Analysis, Forecasting and Market Risk Management, Chicago, Illinois, April 1994.
- Miranda, Mario J. and Gary D. Schnitkey. "Structural Estimation of Dynamic Stochastic Discrete Choice Models in Agriculture." Presented to the Department of Agricultural Economics and Rural Sociology, The Ohio State University, February 1993.
- Schnitkey, Gary D. and Mario J. Miranda. "The Impact of Pollution Controls on Livestock-Crop Producers." Presented to the Department of Agricultural Economics and Rural Sociology, The Ohio State University, January 1992.
- Miranda, Mario J. "Area-Based Crop Insurance." Presented to the Department of Agricultural Economics and Rural Sociology, The Ohio State University, May 1991.
- Miranda, Mario J. "Area-Based Agricultural Insurance." Presented at the Second Annual Conference on Farm Income Enhancement, Columbus, Ohio, February 1991.
- Miranda, Mario J. and Joseph W. Glauber. "Estimation of Dynamic Nonlinear Rational Expectations Models of Primary Commodity Markets with Private and Government Stockholding." Presented at the NCR-134 Conference on Applied Commodity Price Analysis, Forecasting and Market Risk Management, Chicago, Illinois, April 1991.
- Miranda, Mario J. "Estimation of Dynamic Nonlinear Rational Expectations Models of Price Formation in Markets for Storable Commodities Subject to Government Price Supports." Presented to the Department of Agricultural Economics and Rural Sociology, The Ohio State University, October 1990.
- Sun, Theresa Y. and Mario J. Miranda. "The Dynamics of Supply, Demand and Price for Wheat Programs under Rational Expectations." Presented at the NCR-134 Conference on Applied Commodity Price Analysis, Forecasting and Market Risk Management, Chicago, Illinois, April 1990.

- Miranda, Mario J. "The Economic Efficiency of the Proposed Area Loss Plan for Federal Crop Insurance." Presented to the Federal Crop Insurance Task Force, U.S. Department of Agriculture Economic Research Service, September 1989.
- Miranda, Mario J. and Joseph W. Glauber. "The Effects of Price Supports on the Valuation of Options on Agricultural Futures Contracts." Presented at the NCR-134 Conference on Applied Commodity Price Analysis, Forecasting and Market Risk Management, Chicago, Illinois, April 1989.
- Glauber, Joseph W. and Mario J. Miranda. "Subsidized Put Options as Alternatives to Price Supports." Presented at the NCR-134 Conference on Applied Commodity Price Analysis, Forecasting and Market Risk Management, Chicago, Illinois, April 1989.
- Miranda, Mario J. and Joseph W. Glauber. "Subsidized Put Options as Alternatives to Price Supports." Presented at the Symposium on Options, Futures and Agricultural Commodity Programs, Washington, DC, February 1988.
- Miranda, Mario J. "A Computable Rational Expectations Model for Agricultural Price Stabilization Programs." Presented at Bi-Annual Joint Meeting of The Operations Research Society of America and The Institute of Management Science, Miami Beach, Florida, December 1987.
- Glauber, Joseph W. and Mario J. Miranda. "The Effects of Marketing Loans on Agricultural Markets." Presented at the NCR-134 Conference on Applied Commodity Price Analysis, Forecasting and Market Risk Management, Chicago, Illinois, April 1987.
- Miranda, Mario J. "Analysis of Rational Expectations Models for Agricultural Markets Subject to Government Intervention." Presented to the Department of Agricultural Economics, University of Wisconsin--Madison, January 1986.

Major Consulting Assignments - Domestic

- U.S. National Aeronautics and Space Administration and Earth Observations for Food Security and Agriculture Consortium, "The Value of USDA Crop Condition Reports and World Agricultural Supply and Demand Estimates." 2018-2022.
- U.S. Department of Agriculture Risk Management Agency, Multiyear Insurance, Inc. and The Iowa Corn Growers Association, Actuarial Certification of Multiyear Plan of Insurance for Corn and Soybean Producers, 2015.
- Hudson Insurance, "Actuarial Assessment of Area Revenue Combo Insurance", 2011.
- U.S. Department of Agriculture Risk Management Agency and FarmRisk, Inc., Actuarial Certification of Livestock Gross Margin for Swine Contract, 2006.
- U.S. Department of Agriculture Risk Management Agency and FarmRisk, Inc., Actuarial Certification of Livestock Gross Margin for Dairy Cattle Contract, 2006.
- U.S. Department of Agriculture Risk Management Agency and FarmRisk, Inc., Actuarial Certification of Livestock Gross Margin for Cattle Contract, 2005.
- U.S. Department of Agriculture Risk Management Agency and AgForce, Inc., Actuarial Certification of Pasture, Rangeland and Forage Vegetation Temperature-Constrained NDVI Index Contract, 2005.

- U.S. Department of Agriculture Risk Management Agency and AgForce, Inc., Actuarial Certification of Pasture, Rangeland and Forage Vegetation Seasonal-Constrained Rainfall Index Contract, 2005.
- U.S. Department of Agriculture Risk Management Agency and Iowa Farm Bureau, “Actuarial Certification of Ethanol Insurance Contract,” 2004.
- Risk Management Agency and Great American Insurance Co., “Actuarial Rating of Area Yield Indemnity Contract”, 2003.
- Risk Management Agency and NAU Insurance, “Actuarial Certification of Group Risk Income Protection Harvest Revenue Option”, 2003.
- The Chicago Board of Trade, “Analysis of the Iowa Corn Reinsurance Options Contract”, 1994.

Major Consulting Assignments - International

- International Food Policy Research Institute. “Warehouse Receipts and Financial Practices: The Case of Ghana”, 2016-2017.
- The Food and Agriculture Organization of the United Nations and the Association of Latin American Development Banks (ALIDE). “Agricultural Credit Insurance in Latin America”, 2015.
- The World Bank Agricultural Rural Development Department. “Review of Agricultural and Rural Development Department Research and Development Activities in Weather Risk Management, 2004-2010”, 2012.
- The World Bank Agricultural Rural Development Department. “Ghana Agricultural Sector Risk Assessment”, 2011.
- The World Bank Agricultural Rural Development Department. “Honduras Agricultural Sector Risk Assessment”, 2011.
- U.S. Agency for International Development, PREMIER Project, “Economic and Actuarial Analysis of Catastrophic Drought Insurance for Bolivian Agriculture”, 2005-2007.
- U.S. Agency for International Development, Development Alternatives, Inc. and GlobalAgRisk, Inc., “Hedging Weather-Driven Portfolio Risk for Microfinance Institutions in Peru: The El Nino–Southern Oscillation Index Insurance Contract”, 2004-2007.
- The World Bank and Agricultural Risk Management Consulting, Inc., “Rainfall Insurance Contracts for Nicaragua”, 1998-2001.
- The World Bank and Agricultural Risk Management Consulting, Inc., “Weather-Based Index Insurance: A Feasibility Study for Drought Insurance for Morocco”, 2000.

Research Grants

- Received over \$5,200,000 in extramural funding since joining profession.
- Kuwornu, John K.M., Francis H. Kemeze and Mario J. Miranda. \$ 396,247 (OSU share \$65,497). *Bundling Small-Scale Irrigation and Drought Index Insurance to Manage Smallholder Income Risk and Expanding Their Access to Agricultural Credit*. U.S.

- Agency for International Development, Advancing Local Leaderships, Innovation & Networks Program. Mar 2020 – Sep 2023.
- Ayinde, Opeyemi Eytayo, Tahirou Abdoulaye, and Mario J. Miranda. \$430,434 (OSU share \$43,664). *Building Resilience among West African Women Smallholders by Promoting Greater Access to Insurance, Financing and Advanced Agricultural Technologies*. U.S. Agency for International Development, Advancing Local Leaderships, Innovation & Networks Program. Mar 2020 – Sep 2023.
 - Miranda, Mario J. *Macro Linkages between Crop Insurance and Agricultural Credit System*. \$30,000. US Department of Agriculture, Economic Research Service, October 2019 - September 2021.
 - Miranda, Mario J. *Warehouse Receipts in Ghana*. \$48,748. International Food Policy Research Institute. Jun 2016 - Feb 2017.
 - Miranda, Mario J. *Effects and Welfare Benefits of Public Agricultural Commodity Market Information and the Sustainability of International Buffer Stock Agreements*. \$75,000. US Department of Agriculture, Office of the Chief Economist. Jan 2016 - Dec 2016.
 - Miranda, Mario J. and Abdoul G. Sam. *Promoting Financial Inclusion and Technical Transformation among Smallholders in Tanzania: A Capacity-Building Exercise*. \$402,974. US Agency for International Development, Innovative Agricultural Research Initiative Project. Aug 2015 - Feb 2017.
 - Miranda, Mario J. *Credit, Savings and Insurance in Agricultural Risk Management: Theory and Empirical Evidence*. \$120,000. US Department of Agriculture, Market and Trade Economics Division. Aug 2015-Feb 2017.
 - Miranda, Mario J., Abdoul G. Sam and Francis M. Mulangu. *Promoting Adoption of Improved Production Technologies among Smallholders in Ghana via Coupled Credit and Index Insurance Contracts*. US Agency for International Development, BASIS Assets and Market Access Research Program. \$811,085. Jul 2013 - Sep 2016.
 - Miranda, Mario J. *The Global Food Price Crisis and China World Rice Market Integration*. OSU Office for International Affairs Research Seed Grant. \$7,000. Apr 2013 - Jun 2014.
 - Miranda, Mario J. *Public Reserves, Price Volatility and Sustainability of Multilateral Buffer Stock Agreements*. U.S. Department of Agriculture Office of the Chief Economist. \$184,017. Sep 2012 - Dec 2013.
 - Miranda, Mario J. *Optimal Management of Catastrophic Climate Risk: The Case of Peru*. OSU Office for International Affairs Study Grant. \$4,000. Jul 2009 - Jun 2010.
 - Miranda, Mario J. *Analysis of the Standard Reinsurance Agreement*. U.S. Department of Agriculture Economic Research Service. \$72,836. Sep 2002 - Sep 2004.
 - Miranda, Mario J. and Brian Roe. *AgRisk Online: Internet Delivery of Crop and Livestock Risk Management Tools*. National Institute of Food & Agriculture. \$50,000. Sep 2001 - Sep 2003.
 - Miranda, Mario J. *Risk Management Policy Analysis and Modeling*. U.S. Department of Agriculture Economic Research Service. \$29,000. Sep 2000 - Sep 2002.

- Miranda, Mario J., Gary Schnitkey and Scott H. Irwin. *Development of AgRisk 2000*. University of Illinois. \$204,000. Oct 1998 - Sep 2000.
- Miranda, Mario J. *A Comprehensive Risk Management Education Program*. Purdue University. \$37,500. Feb 1998 - Feb 2003.
- Miranda, Mario J. *Market Based Solutions to the Risk Management Problems of Rural America*. U.S. Department of Agriculture Fund for Rural America Planning Grant. \$25,000. Sep 1997 - Sep 1998.
- Miranda, Mario J. *Analysis of Agricultural Risk and Insurance*. U.S. Department of Agriculture Economic Research Service. \$551,370. Jul 1997 - Sep 2002.
- Miranda, Mario J. and Gary Schnitkey. *AgRisk: A Real-Time Risk Assessment Tool for Farmers*. U.S. Department of Agriculture. \$160,000. Jun 1997 - Sep 1998.
- Miranda, Mario J. *Actuarial Soundness of Crop Reinsurance Agreement*. U.S. Department of Agriculture Economic Research Service. \$150,000. Sep 1996 - Sep 2002.
- Miranda, Mario J. *Analysis of Revenue Insurance Based on Shortfalls in Per Acre Revenue*. U.S. Department of Agriculture Economic Research Service. \$50,000. Sep 1993 - Sep 1997.
- Miranda, Mario J. *Structural Determinants of U.S. Competitiveness in the World Soybean Complex*. National Institute of Food & Agriculture. \$100,000. Sep 1993 - Sep 1996.
- Miranda, Mario J. *Effect of Alternative Government Programs on the Distribution of Government Outlays*. U.S. Department of Agriculture Economic Research Service. \$27,500. Jun 1992 - Dec 1993.
- Miranda, Mario J. *Estimation of Dynamic Rational Expectations Models of Primary Commodity Markets*. OARDC Research Seed Grant. \$12,420. Sep 1991 - Sep 1992.
- Miranda, Mario J. *Stochastic Dynamic Programming Algorithms for Commodity Stabilization Policy Analysis*. OARDC Research Challenge Grant. \$9,310. Sep 1990 - Sep 1991.
- Miranda, Mario J. and Thomas Sporleder. *New Uses for Agricultural Products*. National Institute of Food & Agriculture. \$126,084. Jul 1989 - Jun 1992.
- Miranda, Mario J. *Use of Target Revenues versus Target Prices in Stabilizing Producer Income*. U.S. Department of Agriculture Economic Research Service. \$22,500. Apr 1989 - Sep 1992.
- Miranda, Mario J. *The Effects of Mandatory Production Controls on Public and Private Stockholding*. U.S. Department of Agriculture Economic Research Service. \$5,000. Sep 1987 - Sep 1988.
- Miranda, Mario J. *Use of Futures and Options Markets as Alternatives to Government Commodity Programs*. U.S. Department of Agriculture Economic Research Service. \$27,500. Sep 1986 - Sep 1987.
- Miranda, Mario J. *An Economic Analysis of the Effects of Government Price Support Programs*. U.S. Department of Agriculture Economic Research Service. \$38,000. Sep 1985 - Sep 1986.

University Courses Taught

- Undergraduate: Managerial Economics, Introductory Statistics, Microcomputer Methods, Production Analysis, Quantitative Methods
- Graduate: Applied Mathematics for Economists, Applied Economic Dynamics, Frontiers Seminar in International Development, Introduction to Computational Economics, Advanced Computational Economics, Finance and Risk Management

Service to Profession (Non-editorial)

- Proposal Review Panel, National Institute of Food and Agriculture, 2014.
- Advisory Board, Society for Computational Economics, 1996-1998, 2002-2005
- Outstanding Dissertation Award Selection Committee, American Agricultural Economics Association, 1993-96, 2002-5, Chair in 2005.
- Selected Papers and Poster Review Committee, American Agricultural Economics Association, 1990, 1994, 1995, 1999 and 2000.
- Session Moderator, Annual Meeting of the American Agricultural Economics Association: 1994 and 1995.
- Manuscript Reviewer: *Agribusiness: An International Journal*, *Agricultural Economics*, *Agricultural Finance Review*, *American Economic Review*, *American Journal of Agricultural Economics*, *Applied Economic Perspectives & Policy*, *Canadian Journal of Agricultural Economics*, *European Review of Agricultural Economics*, *Food Policy*, *Geneva Papers on Risk and Insurance*, *Human and Ecological Risk Assessment*, *International Development Bank Working Papers*, *International Economic Review*, *International Journal of Disaster Risk Reduction*, *International Journal of Economics*, *International Review of Economics and Finance*, *Journal of Agricultural and Applied Economics*, *Journal of Agricultural and Resource Economics*, *Journal of Agricultural Economics*, *Journal of Applied Econometrics*, *Computational Economics*, *Journal of Development Economics*, *Journal of Economic Analysis and Policy*, *Journal of Economic and Environmental Management*, *Journal of Economic Dynamics and Control*, *Journal of Economic Integration*, *Journal of Financial Econometrics*, *Journal of Integrative Agriculture*, *Journal of Production Agriculture*, *Journal of Public Economics*, *Journal of Risk Analysis and Crisis Response*, *Journal of Risk and Insurance*, *Journal of Testing and Evaluation*, *Land Economics*, *Review of Agricultural Economics*, *Review of Economics and Statistics*, *The B.E. Journal of Economic Analysis and Policy*, *The Geneva Risk and Insurance Review*, *The International Food and Agribusiness Management Review*, *The Review of Economic Studies*, *Weather, Climate, and Society*, *Western Journal of Agricultural Economics*, *World Development*.
- Book Reviewer: *American Journal of Agricultural Economics*, *Canadian Journal of Agricultural Economics*, Oxford Academic Press, Cambridge Academic Press and Kluwer Academic Press.

Service to Department

- Departmental Chair Search Committee 2018-2019.
- Department Chair Search Committee, 1998, 2009-2010, 2014-2019.
- Graduate Studies Committee, 1991-1993, 1996-2000, 2017-2019.

- Development Economics Assistant Professor Search Committee (Chair) 2014-2015.
- Research and Graduate Program Leader, 2001-2004, 2008-2011.
- Standing Search Committee, 1999-2004, 2006-2010.
- Awards and Alumni Relations Committee, 2002-2010.
- Departmental Council, 1996-1998, 2008-2009.
- Andersons Chair Search Committee, 2003-2005.
- Masters Program Reform Committee (Chair), 1997-1998.
- Seminar Committee, 1993-1997, Chair 1997.
- Doctoral Dissertation Award Committee, 1990, 1997.
- Strategic Planning Committee, 1995-1997.
- Computer Resources Committee, 1990-1996.
- Doctoral Qualifying Examination Committee, 1991-1992.
- Ad Hoc Committee on Undergraduate Curriculum Reform, 1990-1991.
- Agribusiness Master's Program Curriculum Reform Committee, 1989-1991.

Service to College and University

- The Ohio State University, Graduate Studies Committee, Latin American Studies Program, Member, 2012-present.
- The Ohio State University, Advisory Board, Center for Latin American Studies, Member, 2012-present.
- Ohio State University Presidential Fellowship Committee, 2003-2010.
- Ohio State University Promotion & Tenure Committee, 2007-2010.
- College of Food, Agricultural & Environmental Sciences Promotion & Tenure Committee, 2004-2007, Chair, 2006-2007.
- Krauss Director's Fellowship Committee, 2007.
- Ohio State University Foreign Language Area Studies Fellowship Committee, 2004-2006.
- John Glenn Institute for Public Policy, Oversight Committee, 2000-2004.
- Program Committee, Battelle Endowment for the Humanities and Arts, 1994-1997.
- Hispanic Awareness Week, Host and Participant, 1988-1990, 1994.

Biographical Listings

- Outstanding Young Men of America
- Who's Who in Finance and Industry

Academic Honoraries

- Sigma Xi, 1985
- Phi Kappa Phi, 1990
- Sigma Delta, 1985

Professional Associations

- The American Agricultural Economics Association
- The American Economic Association
- Society for Computational Economics

Languages

- Fluent English and Spanish