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EDUCATION

Ph.D., 1996, Agricultural, Resource and Managerial Economics, Cornell University
Major: Agricultural Marketing and Production Economics
Minors: Quantitative Methods, Economics, Animal Science
M.S., 1990, Agricultural Economics, Cornell University
B.A., 1982, Economics, with High Honors, University of California, Davis
Minor: Statistics

ACADEMIC POSITIONS HELD

2022-present	Associate Professor, Agricultural and Applied Economics and Animal and Dairy Sciences, University of Wisconsin-Madison
2020-2023	Adjunct Associate Professor, School of Integrative Plant Science, Cornell University, Ithaca, New York
2020-2021	Associate Professor, Methods Group, Nijmegen School of Management, Radboud University, Nijmegen, Netherlands
2010-2020	Adjunct Associate Professor, Charles H. Dyson School of Applied Economics and Management, Cornell University, Ithaca, New York
2013-2018	Editor in Chief, <i>Agricultural Systems</i> (Elsevier interdisciplinary journal)
2012-2017	Clinical Associate Professor of Supply Chain Management, Department of Supply Chain and Information Systems, The Pennsylvania State University, University Park, PA
2009-2012	Associate Professor, Department of Agribusiness, California Polytechnic State University, San Luis Obispo
2000-2009	Senior Research Associate, Charles H. Dyson School of Applied Economics and Management, Cornell University, Ithaca, NY
1998-2000	Assistant Professor, Department of Community Development and Applied Economics, University of Vermont
1998	Visiting Agricultural Economist, International Livestock Research Institute (ILRI), Nairobi, Kenya
1995-1997	Rockefeller Foundation Social Science Research Fellow, International Food Policy Research Institute (IFPRI) and International Livestock Research Institute (ILRI), Addis Ababa, Ethiopia

AWARDS AND HONORS

Distinguished Extension/Outreach Program Award—Group, Agricultural and Applied Economics Association (AAEA), 2015

University Professor Recognition Award, 2013 Homecoming Committee, Penn State University

Rockefeller Foundation Social Science Research Fellowship, 1995

RESEARCH

Refereed Journal Articles

- 80 Chavas, J. P., **Nicholson, C. F.** 2025. Evolving Price Volatility: The Case of US Dairy Product Markets. In preparation for *Agricultural Economics*.
- 79 Pupo, M., **Nicholson, C. F.**, Ferraretto, L. F. 2025. Effects of feeding 3-NOP for methane emissions reduction on income over feed costs in the United States. In press, *Journal of Dairy Science*.
- 78 Ayinde, T., **Nicholson, C. F.** 2025. Is Controlled Environment Agriculture a Practicable Option for Net Zero Emissions in Northern Nigeria? Submitted to *Discover Agriculture (Springer Nature)*.
- 77 Ozturk, G., **Nicholson, C. F.**, Hartel, R. W. 2025. Towards the Future of Next-Generation Dairy Foods: A Processing Perspective and Economic Analysis. Submitted to the *Journal of Dairy Science Communications*.
- 76 Krasovskaia, E., Gomez, M. I., Li, J., **Nicholson, C. F.**, Sauer, C. M. 2025. Consumer Evaluation of Organic, Local and CEA-grown Leaf Lettuce. Submitted to *Agricultural Economics*.
- 75 **Nicholson, C. F.**, Stephenson, M., Wolf, C. A. 2025. USDA's Recommended Decision on Milk Pricing and Its Potential Farm Milk Price Impacts. In press, *Choices*.
- 74 **Nicholson, C. F.**, Bales, A., Lock, A. 2025. Economic Analysis of High Oleic Soybeans in Dairy Rations: Dose-Response and Raw-Roasted Comparisons. In preparation for the *Journal of Dairy Science*.
- 73 Simões, A. R. P., F. Bankuti, J. Borges, M. Roschel, and **C. F. Nicholson**. 2024. Dairy farmers' satisfaction with the price paid by processors in competitive markets. *Journal of Dairy Science*, <https://doi.org/10.3168/jds.2024-25737>
- 72 Verteramo Chiu, L., Nicholson, C. F., Gómez, M. I., Mattson, N. S. 2024. A meta-analysis of yields and environmental performance of controlled-environment production systems for tomatoes, lettuce and strawberries. *Journal of Cleaner Production*, 469, 143142. <https://doi.org/10.1016/j.jclepro.2024.143142>
- 71 Li, J., W. González, E. Monterrosa, M. I. Gómez and **C. F. Nicholson**. 2024. Choice Experiments and Value-Chain Modeling of Attribute Improvements to Increase Vegetable Consumption in Kenya. *Food Policy*, 127:102682
- 70 Dias Paes Ferreira, M., A. R. P. Simões, C. F. Nicholson, L. Pegorini Daniel. 2024. Compost-Bedded Pack Barns as an Intensification Strategy of Brazilian Dairy Farms: Assessing the impacts on productive efficiency, *Agribusiness: An International Journal*. <https://doi.org/10.1002/agr.21979>

- 69 **Nicholson, C. F.**, M. W. Stephenson, L. Armentano and K. Harvatine. 2024. Economic Analysis of High-Oleic Soybeans in Dairy Rations. *Journal of Dairy Science*, In Press <https://doi.org/10.3168/jds.2023-23738>
- 68 **Nicholson, C. F.** and E. C. Monterrosa. 2023. Analyzing the Potential Impacts of Three Interventions on Fruit and Vegetable Consumption in Urban Kenya Using Participatory Systems Modeling. *Public Health Nutrition*, doi:10.1017/S1368980023002033
- 67 **Nicholson, C. F.**, M. Eaton, M. I. Gómez, N. S. Mattson. 2023. Economic and Environmental Performance of Controlled-Environment Supply Chains for Leaf Lettuce. *European Review of Agricultural Economics*, doi: <https://doi.org/10.1093/erae/jabd016>.
- 66 Ayinde, T. B. **C. F. Nicholson**, B. Ahmed. 2023. Multiple-year farm-level assessments of trade-offs between GHG emissions and income: case examples of two farming systems in Northern Nigeria. *Environmental Science and Pollution Research* <https://doi.org/10.1007/s11356-023-27534-9>
- 65 Simões, A. R. P., **C. F. Nicholson** and G. Carvalho. 2023. Components of farm milk price behavior in Brazil from 2005 to 2020. *Revista Brasileira de Zootecnia*, <https://doi.org/10.37496/rbz5220220116>
- 64 Hawkins, J., A. M. Komarek, E. Kihoro, **C. F. Nicholson**, A. Omore, G.C. Schoneveld, G. Yesuf, P. J. Ericksen and M. C. Rufino. 2022. Improved animal genetics deliver low emissions development for East Africa's dairy sector. *NatureFood*, <https://doi.org/10.1038/s43016-022-00633-5>.
- 63 **Nicholson, C. F.**, K. C. McRoberts, B. Suleyman Öz, B. Kopainsky. 2022. A Dynamic Systems Analysis of Factors Affecting Success of Identity-Preserved Products: the Case of High-Oleic Soybeans. *International Food and Agribusiness Management Review* 26 (1): 159-174, DOI: 10.22434/IFAMR2021.0132
- 62 **Nicholson, C. F.**, E. Monterrosa, and J. L. Garrett. 2021. Food value chain interventions and nutritional outcomes: A review of evidence and recommendations for future assessments. *Current Opinion in Biotechnology*, 2021, 70:61–67, <https://doi.org/10.1016/j.copbio.2020.11.015>.
- 61 **Nicholson, C. F.**, E. C. Stephens, B. Kopainsky, A. Jones, D. Parsons and J. L. Garrett. 2021. Food Security Outcomes in Agricultural Systems Models: Current Status and Recommended Improvements. *Agricultural Systems* 188 103028 doi.org/10.1016/j.agsy.2020.103028
- 60 **Nicholson, C. F.**, E. C. Stephens, A. Jones, B. Kopainsky, D. Parsons, J. L. Garrett and P.K. Thornton. 2021. Food Security Outcomes in Agricultural Systems Models: Case Examples and Priority Information Needs. *Agricultural Systems*, 188 103030 doi.org/10.1016/j.agsy.2020.103030
- 59 Weersink, A., M. von Massow, N. Bannon, J. Ilft, J. Maples, K. McEwen, M. McKendree, **C. F. Nicholson**, A.M. Novakovic, A. Rangarajan, T. Richards, B. Rickard, J. Rude, M. Schipanski, G. Schnitkey, L. Schultz, D. Schuurman, K. Schwartzkopf-Genswein, M. W. Stephenson, J. Thompson, K. Wood. 2021. COVID-19 and the Agri-Food System in the United States and Canada. *Agricultural Systems*, doi.org/10.1016/j.agsy.2020.103039.

- 58 Simões, A. R. P., **C. F. Nicholson**, J. D. dos Reis, R. M. Protil, A. L. J. Ferraz, and D. M. de Oliveira. 2021. Determinants of the loyalty of farmers to dairy processors in Minas Gerais, Brazil. *Ciência Rural*, Santa Maria, v.51:5, e20200340. doi.org/10.1590/0103-8478cr202003410
- 57 Villena, V. H., **C. F. Nicholson**, A.M. Novakovic and M.W. Stephenson. 2021. Management Lesson from the US Dairy Sector's Pandemic Response. *Supply Chain Management Review*. September/October 2021, pp. 24-31.
- 56 Simões, A.R. P., N. Paulo Bueno, F.M. de Souza Almeida, **C. F. Nicholson**, J.D. dos Reis, F. de Paula Leonel. 2020. Public policies for enhancing diffusion of technology: a network analysis for a dairy farmer community in Minas Gerais Brazil. *Revista Brasileira de Zootecnia*, 49:e20190207, 2020<https://doi.org/10.37496/rbz4920190207>
- 55 Ayinde, T., **C. F. Nicholson**, B. Ahmed, A. Ayantunde, M. Akinola, O Yusuf. 2020. Income and Greenhouse Gas (GHG) Emissions Trade-offs in Smallholder Farms at Two Sites Northern Nigeria. *African Journal of Agricultural and Resource Economics*, 15:325-355.
- 54 **Nicholson, C. F.**, E. C. Stephens, A. Jones, B. Kopainsky, D. Parsons, J. L. Garrett and E. L. Phillips. 2020. Conceptual frameworks linking agriculture and food security. *NatureFood*, 1:541-551 doi.org/10.1038/s43016-020-00142-3
- 53 Steenhuis, T. S., S. A. Tilahun, A. S. Collick, F. A. Zimale, C. D. Guzman, M. Moges, **C. F. Nicholson**, T. Enku and A. N.Pell. 2020. Intricacies of an effective global “Rooted” collaboration in soil and water research. *Geoderma*, 373:114301. <https://doi.org/10.1016/j.geoderma.2020.114300>
- 52 H.T. Kassahun, J. B. Jacobsen and **C. F. Nicholson**. 2020. Revisiting money and labor for valuing environmental goods and services in developing countries. *Ecological Economics*, 177:106771.
- 51 Rueda, B. I., K. C. McRoberts, R. W. Blake, **C. F. Nicholson**, E. C. M. Fernandes and J. F. Valentim. 2020. Nutrient Status of Cattle Grazing Systems in the Western Brazilian Amazon. *Cogent Food and Agriculture*, 6: 1722350 <https://doi.org/10.1080/23311932.2020.1722350>
- 50 Simões, A. R. P., **C. F. Nicholson**, A. M. Novakovic and R. M. Protil. 2019. Dynamic impacts of farm-level technology adoption on the Brazilian dairy supply chain. *International Food and Agribusiness Management Review*, 23(1) DOI: 10.22434/IFAMR2019.0033 DOI: 10.22434/IFAMR2019.0033.
- 49 **Nicholson, C. F.**, A. P. R. Simões, A. LaPierre, and M. E. Van Amburgh. 2019. ASN-ASAS SYMPOSIUM: FUTURE OF DATA ANALYTICS IN NUTRITION: Modeling Complex Problems with System Dynamics: Applications in Animal Agriculture. *Journal of Animal Science*, 97:1903-1920.
- 48 Raffrenato, E., **C. F. Nicholson**, M. E. Van Amburgh. 2019. Development of a mathematical model to predict pool sizes and rates of digestion of 2 pools of digestible neutral detergent fiber and an undigested neutral detergent fiber fraction within various forages. *Journal of Dairy Science*, 102:351-364.
- 47 Stephenson, M. W. and **C. F. Nicholson**. 2018. Regional Values for Milk are Changing. *Choices*, Quarter 4.

- 46 Ayele, G. K., M. B. Addisie, N. H. Tegegne, S. A. Tilahun, E. J. Langendoen, **C. F. Nicholson** and T. S. Steenhuis. 2018. Evaluating Participatory and Government Sponsored Watershed Erosion Control in the Highlands of Ethiopia: The Ene-Chilala Watershed. *Earth Surface Processes and Landforms*, 43:2835–2843. DOI: 10.1002/esp.4436.
- 45 **Nicholson, C. F.**, S. Armenia, and A. S. Atzori. 2018. Overview of the Special Issue on Urban Food Systems. *Agricultural Systems*, 160:96-97.
- 44 Parsons, D. and **C. F. Nicholson**. 2017. Assessing policy options for livestock development: a case study of Mexico's sheep sector. *Cogent Food and Agriculture*, 3(1), 1313360.
- 43 McRoberts, K. C., David Parsons, L. V. Nam, N. X. Ba, Q. M. Ketterings, **C. F. Nicholson** and D. J. R. Cherney. 2017. Urea and composted cattle manure affect forage yield and nutritive value in sandy soils of South-Central Vietnam. *Grass and Forage Science*. DOI: 10.1111/gfs. 12289.
- 42 McRoberts, K. C., **C. F. Nicholson**, D. Parsons, L. V. Nam, N. X. Ba, Q. M. Ketterings, & D. R. R. Cherney. 2017. Structure and impact of cattle manure trade in crop–livestock systems of Vietnam. *Renewable Agriculture and Food Systems*, 1-16.
- 41 Schroeter, C., **C. F. Nicholson** and M. G. Meloy. 2016. Consumer Value of Organic and Conventional Milk: Does Shelf Life Matter? *Journal of Food Distribution Research*, 47:118-133.
- 40 McRoberts, K., Q. Ketterings, D. Parsons, T. T. Hai, N. H. Quan, N. X. Ba, **C. F. Nicholson**, and D. J. Cherney. 2016. Impact of Forage Fertilization with Urea and Composted Cattle Manure on Soil Fertility in Sandy Soils of South-Central Vietnam. *International Journal of Agronomy*, <http://dx.doi.org/10.1155/2016/4709024>
- 39 H.T. Kassahun, **C. F. Nicholson**, J. B. Jacobsen and T. S. Steenhuis. 2016. Accounting for User's Expectations in the Valuation of Reliable Irrigation Water Access in the Ethiopian Highlands, *Agricultural Water Management*, 168:45-55.
- 38 Ayele, G., M. Addissie, T. Tebebu, E. Langendoen, **C. F. Nicholson** and T. S. Steenhuis. 2016. Biophysical and Economic Assessment of a Community-Based Rehabilitated Gully in the Ethiopian Highlands. *Land Degradation and Development*, 27:270-280.
- 37 **Nicholson, C. F.**, X. He, M. I. Gómez, H. O. Gao and E. Hill. 2015. Environmental and Economic Analysis of Regionalizing Fluid Milk Supply Chains in the Northeastern U.S. *Environmental Science and Technology*, 49:12005–12014. DOI: 10.1021/acs.est.5b02892.
- 36 **Nicholson, C. F.**, and M. W Stephenson. 2015. Price Cycles in the U.S. Dairy Supply Chain and their Management Implications. *Agribusiness: An International Journal*, 31:507-520. DOI: 10.1002/ agr.21416
- 35 **Nicholson, C. F.**, and M. W Stephenson. 2015. Dynamic Market Impacts of the Dairy Margin Protection Program. *Journal of Agribusiness*, 32:165-192.
- 34 Ayele, G. K., A. A. Gessess, M. B. Addisie, S. A. Tilahun, D. B. Tenessa, E. Langadoen, T.S. Steenhuis and **C. F. Nicholson**. 2015. The economic cost of upland and gully erosion on subsistence agriculture for a watershed in the Ethiopian highlands. *African Journal of Agricultural and Resource Economics*, 10:265-278.

- 33 McRoberts, K. M., **C. F. Nicholson**, R. W. Blake, T. W. Tucker and G. Diaz Padilla. 2013. Group Model Building to Assess Rural Dairy Cooperative Feasibility in South-Central Mexico. *International Food and Agribusiness Management Review*, 16:55-98.
- 32 Tigabu, A.D., **C. F. Nicholson**, A.S. Collick, and T. S. Steenhuis. 2013. Determinants of household participation in the management of rural water supply systems: a case from Ethiopia. *Water Policy*, 15:985–1000.
- 31 Absalón-Medina, V. A., R. W. Blake, D.G. Fox, F. I. Juárez-Lagunes, **C. F. Nicholson**, E. G. Canudas-Lara and B. L. Rueda-Maldonado. 2012. Limitations and potentials of dual-purpose cow herds in Central Coastal Veracruz, Mexico. *Tropical Animal Production and Health*, 44:131-1142.
- 30 Absalón-Medina, V. A., **C. F. Nicholson**, C. NR. W. Blake, D. G. Fox, F. I. Juárez-Lagunes & E. G. Canudas-Lara and B. L. Rueda-Maldonado 2012. Economic analysis of alternative nutritional management of dual-purpose cow herds in central coastal Veracruz, Mexico. *Tropical Animal Production and Health*, 44:143-1150.
- 29 Stephens, E. C., **C. F. Nicholson**, D. R. Brown, D. Parsons, C. B. Barrett, J. Lehmann, D. Mbugua, S. Ngoze, A. N. Pell, S. J. Riha. 2012. Modeling the impact of natural resource-based poverty traps on food security in Kenya: The Crops, Livestock and Soils in Smallholder Economic Systems (CLASSES) model. *Food Security*. 4:423-439.
- 28 **Nicholson, C. F.**, M. I. Gómez and Oliver H. Gao. 2011. The Costs of Increased Localization for a Multiple-Product Food Supply Chain: Dairy in the United States. *Food Policy*, 36:300-310.
- 27 Whitman, T., **C. Nicholson**, D. Torres and J. Lehmann. 2011. Climate Change Impact of Biochar Cook Stoves in Western Kenyan Farm Households: System Dynamics Model Analysis. *Environmental Science & Technology*, 45:3687-3694.
- 26 Parsons, D., Q. M. Ketterings, J. H. Cherney, and **C. F. Nicholson**. 2011. Effects of weed control and manure application on nutrient fluxes in the shifting cultivation milpa system of Yucatán. *Archives of Agronomy and Soil Science*, 57: 273-292.
- 25 Parsons, D., **C. F. Nicholson**, R. W. Blake, Q. M. Ketterings, L. Ramírez-Aviles, J. H. Cherney, and D. G. Fox. 2011. Application of a simulation model for assessing integration of smallholder shifting cultivation and sheep production in Yucatán, Mexico. *Agricultural Systems*, 104:1-12
- 24 Parsons, D., **C. F. Nicholson**, R. W. Blake, Q. M. Ketterings, L. Ramírez-Aviles, D. G. Fox, L.O. Tedeschi, and J. H. Cherney. 2011. Development and evaluation of an integrated simulation model for assessing smallholder crop–livestock production in Yucatán, Mexico. *Agricultural Systems*, 104:13-19.
- 23 Tedeschi, L. O., **C. F. Nicholson** and E. Rich. 2010. Using the System Dynamics modelling approach to develop management tools for animal production with emphasis on small ruminants. *Small Ruminant Research*, 98:102-110.
- 22 Parsons, D., L. Ramírez Aviles, J. H. Cherney, Q. M. Ketterings, R. W. Blake and **C. F. Nicholson**. 2009. Managing Maize Production in Shifting Cultivation Milpa Systems in Yucatán Through Weed Control and Manure Application. *Agriculture, Ecosystems and Environment*, 133:123-134.
- 21 **Nicholson, C. F.**, and H. M. Kaiser. 2008. Dynamic Impacts of Generic Dairy Advertising. *Journal of Business Research*, 61:1125-1135.

- 20 Randolph, T. F., E. Schelling, D. Grace, **C. F. Nicholson**, J. L. Leroy, D. C. Cole, M. W. Demment, A. Omere, J. Zinsstag, and M. Ruel. 2007. Role of Livestock in Human Nutrition and Health for Poverty Reduction in Developing Countries. *Journal of Animal Science*, 85:2788-2800.
- 19 Reynoso-Campos O, D. G. Fox, R. W. Blake, M. C. Barry, L. O. Tedeschi, **C. F. Nicholson**, H. M. Kaiser, and P. A. Oltenacu. 2004. Predicting Nutritional Requirements and Lactation Performance of Dual-purpose Cows Using a Continuous Model. *Agricultural Systems*, 80:67-83.
- 18 **Nicholson, C. F.**, P. K. Thornton, and R. W. Muinga. 2004. Household-Level Impacts of Dairy Cow Ownership in Coastal Kenya. *Journal of Agricultural Economics*, 55:175-195.
- 17 Holloway, G., **C. Nicholson**, C. Delgado, S. Staal, and S. Ehui. 2004. A Revised Tobit Procedure for Mitigating Bias in the Presence of Non-zero Censoring with an Application to Milk-Market Participation in the Ethiopian Highlands. *Agricultural Economics*, 31:97-106.
- 16 Lucas, M. T. and **C. F. Nicholson**. 2003. Subsidized Vehicle Acquisition and Earned Income in the Transition from Welfare to Work. *Transportation*, 30:483-501.
- 15 Reuda, B. L., R. W. Blake, **C. F. Nicholson**, D. G. Fox, L. O. Tedeschi, A. N. Pell, E. C. M. Fernandes, J. F. Valetim, and J. C. Carneiro. 2003. Production and Economic Potentials of Cattle in Pasture-based Systems of the Western Amazon Region of Brazil. *Journal of Animal Science*, 81:2923-2937.
- 14 **Nicholson, C. F.**, R. W. Blake, R. S. Reid, and J. Schelhas. 2001. Environmental Impacts of Livestock in the Developing World. *Environment*, March 2001, 7-17.
- 13 **Nicholson, C. F.**, Q. Wang, and D. Lass. 2001. Impacts of the Northeast Interstate Dairy Compact on Supply, Retail Prices, and the WIC Program: An Introduction. *Agricultural and Resource Economics Review*, 30(1):81-82.
- 12 **Nicholson, C. F.**, B. Resosudarmo, and R. Wackernagel. 2001. Impacts of the Northeast Interstate Dairy Compact on New England Milk Supply. *Agricultural and Resource Economics Review*, 30(1):93-103.
- 11 Wang, Q., Z. Anne, C. Halbrendt, **C. F. Nicholson**, and J. Sung. 2001. Impacts of the Compact on the WIC Program. *Agricultural and Resource Economics Review*, 30(1):104-112.
- 10 Holloway, G., **C. Nicholson**, C. Delgado, S. Staal, and S. Ehui. 2000. Agro-industrialization Through Institutional Innovation: Transactions Costs, Cooperatives, and Milk Market Development in the Ethiopian Highlands. *Agricultural Economics*, 23:279-288.
- 9 Weersink, A., **C. Nicholson** and J. Weerhewa. 1998. Multiple Job Holdings Among Dairy Farm Families in New York and Ontario. *Agricultural Economics*, 18:127-143.
- 8 Weersink, A., **C. Nicholson**, P. Coughler, and A. Novakovic. 1997. Comparison of Dairy Farm Family Support Systems in New York and Ontario. *Canadian Journal of Regional Science*, 20:419-434.
- 7 Staal, S., C. Delgado, and **C. Nicholson**. 1997. Smallholder Dairying Under Transactions Costs in East Africa. *World Development*, 25(5):779-794.

- 6 Nagurney, Anna, **C. F. Nicholson**, and P.M. Bishop. 1996. Massively Parallel Computation of Large-Scale Spatial Price Equilibrium Models with Discriminatory Ad Valorem Tariffs, *The Annals of Operations Research* 68:281-300, Special Issue on Computational Economics.
- 5 Weersink, A., **C. Nicholson**, P. H. Coughler, and A. M. Novakovic. 1995. Comparative Evaluation of Farm Inputs and Services Networks in New York and Ontario. *Journal of International Food and Agribusiness Marketing*, 7:65-88.
- 4 **Nicholson, C. F.**, R. W. Blake, and D. R. Lee. 1995. Livestock, Deforestation and Policy Making: Intensification of Cattle Production Systems in Central America Revisited. *Journal of Dairy Science*, 78:719-734.
- 3 **Nicholson, C. F.**, R. W. Blake, C. I. Urbina, D. R. Lee, D.G. Fox and P. J. Van Soest. 1994. Economic Comparison of Nutritional Management Strategies for Venezuelan Dual-Purpose Cattle Systems. *Journal of Animal Science*, 72:1680-1696.
- 2 **Nicholson, C. F.**, D. R. Lee, R. N. Boisvert, R. W. Blake, and C. I. Urbina. 1994. An Optimization Model of the Dual-Purpose Cattle Production System in the Humid Lowlands of Venezuela. *Agricultural Systems*, 46:311-334.
- 1 **Nicholson, C. F.** and W. A. Knoblauch. 1993. A Comparison of New York and Ontario Dairy Farms. *Journal of Dairy Science*, 76:2050-2055.

Book Chapters (Refereed)

- 9 **Nicholson, C. F.** and M. I. Gómez. 2022. “Market and Supply Chain Models for Analysis of Food Systems”, in C. Peters and D. Thilmany (eds.), *Food Systems Modeling: Tools for Assessing Sustainability in Food and Agriculture*. Elsevier / Academic Press.
- 8 Ayinde, T., B. Ahmed and **C. F. Nicholson**. 2021. “Farm-Level Impacts of Greenhouse Gas Reductions for the Predominant Production Systems in Northern Nigeria.” In W. L. Filho et al., eds., *African Handbook of Climate Change Adaptation*. Springer.
- 7 **Nicholson, C. F.**, K. Harbick, N. M. Mattson and M. I. Gómez. 2020. “An Economic and Environmental Comparison of Conventional and Controlled Environment Agriculture (CEA) Supply Chains for Leaf Lettuce to US Cities”, in E. Aktas and Michael. Bourlakis (eds.) *Food Supply Chains in Cities: Modern Tools for Circularity and Sustainability*. Palgrave.
- 6 G. K. Ayele, S. A. Tilahun, D. B. Tenessa, **C. F. Nicholson**, T. S. Steenhuis. 2015. “Participatory Community-Based Gully Rehabilitation on the Ethiopian Highlands: The Case of Birr Watershed.” in *Water Smart Agriculture Sourcebook*, IWMI and Care Ethiopia.
- 5 Paggi, M. and **C. F. Nicholson**. 2013. “Federal and State Marketing Orders”, in *US Programs Affecting Food and Agricultural Marketing*, W. J. Armbruster and R. D. Knutson (eds.), New York: Springer. [Natural Resource Management and Policy, 38]
- 4 Gómez, M. I., **C. F. Nicholson** and P. E. McNamara. 2009. “Changing Food Supply, Demand and Marketing Issues: What Affects Price and Affordability?”, in *Adequate Food for All: Culture, Science and Technology of Food in the 21st Century*, W. Pond, B. Nichols, and Dan Brown (eds.). Boca Raton, FL: Taylor and Francis.

- 3 Bourn, D., J. Maitima, B. Motsamai, R. Blake, **C. Nicholson** and F. Sundstøl. 2005. “Livestock and the Environment”, pp. 145-165 in E. Owen, A. Kitalyi, N. Jayasuriya and T. Smith, eds., *Livestock and Wealth Creation: Improving the Husbandry of Animals Kept by Resource-poor People in Developing Countries*. Nottingham: Nottingham University Press.
- 2 Blake, R. W. and **C. F. Nicholson**. 2004. “Livestock, Land Use Change and Environmental Outcomes in the Developing World”, pp. 133-154 in Owen, E. et al., eds., *Responding to the Livestock Revolution*, Nottingham: Nottingham University Press.
- 1 Nagurney, A., **C. F. Nicholson**, and P. M. Bishop. 1996. “Spatial Price Equilibrium Models with Discriminatory Ad Valorem Tariffs: Formulation and Comparative Computation Using Variational Inequalities”, in J.C.J.M. van den Bergh, P. Nijkamp, and P. Rietveld (eds.), *Recent Advances in Spatial Economic Modelling: Methodology and Applications*, Heidelberg: Springer-Verlag.

Published Proceedings

- 9 **Nicholson, C. F.** 2024. Dynamic Analyses of Proposed Supply Chain Coordination Programs for the US Dairy Industry. *Proceedings of the 2024 International System Dynamics Conference*, Bergen, Norway, 4-8 August 2024.
- 8 **Nicholson, C. F.**, Jie Li, Miguel Gómez, Wendy Gonzalez and Eva Monterrosa. 2024. Integrating Consumer Choice Experiments and SD Supply Chain Modeling to Increase Vegetable Consumption in Kenya. *Proceedings of the 2024 International System Dynamics Conference*, Bergen, Norway, 4-8 August 2024.
- 7 **Nicholson, C. F.**, and E. Monterrosa. 2021. Assessing the Impacts of Three Potential Interventions on Fruit and Vegetable Consumption in Urban Kenya Using Participatory Systems Modeling. *Proceedings of the 2021 International System Dynamics Conference*, Chicago, IL, 26-30 July.
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- 5 **Nicholson, C. F.**, P.M. Bishop, and A. Nagurney. 1994. Using Variational Inequalities to Solve Spatial Price Equilibrium Models with Ad Valorem Tariffs and Activity Analysis. Working Paper 94-14, Department of Agricultural, Resource, and Managerial Economics, Cornell University.
- 4 **Nicholson, C.**, F. Howard, M. Doyon, A. Novakovic and A. Weersink. 1995. Family Services for New York and Ontario Dairy Farm Families. Dairy Marketing Notes, Department of Agricultural, Resource and Managerial Economics, Cornell University. [1995, No. 2]

- 3 **Nicholson, C.**, F. Howard, M. Doyon, A. Novakovic and A. Weersink. 1995. Household Performance of New York and Ontario Dairy Farm Families. Dairy Marketing Notes, Department of Agricultural, Resource and Managerial Economics, Cornell University. [1995, No. 1]
- 2 **Nicholson, C.**, F. Howard, M. Doyon, A. Novakovic and A. Weersink. 1994. Off-Farm Employment and Income Patterns of New York and Ontario Dairy Farm Families. Dairy Marketing Notes, Department of Agricultural Economics, Cornell University. [1994, No. 3]
- 1 **Nicholson, C. F.**, P.M. Bishop, and A. Nagurney. 1994. Using Variational Inequalities to Solve Spatial Price Equilibrium Models with Ad Valorem Tariffs and Activity Analysis. Working Paper 94-14, Department of Agricultural, Resource, and Managerial Economics, Cornell University.

Refereed Journal Articles in Review

- 4 Ozturk, G., **C. Nicholson** and R. Hertel. 2024. Towards the Future of Next-Generation Dairy Foods: A Processing Perspective and Economic Analysis, submitted to the *Journal of Dairy Science*, November.
- 3 Pupo, M., L. F. Ferraretto and **C. F. Nicholson**. 2024. Effects of feeding 3-NOP for methane emissions reduction on income over feed costs in the United States. Second revision submitted to *Journal of Dairy Science*, November.
- 2 **Nicholson, C. F.**, Daniel Mason-D'Croz, Philip K. Thornton, Erica .L Phillips, Laura Cramer, James L. Garrett, Miguel I. Gómez, Mario Herrero, Andrew D. Jones, Birgit Kopainsky, Eva Monterroas, David Parsons, Robert Zougmore, Marie Spiker, Emma C. Stephens, Michel Wattiaux and Sandra Yanni. 2023. Participatory Systems Modeling of Value Chains Can Fill Knowledge Gaps to Enhance Food and Nutrition Security Under Climate Change. Submitted to *Global Food Security*, September.
- 1 **Nicholson, C. F.**, E. C. Stephens and P.K. Thornton. 2023. Can Participatory Systems Modeling of Food Value Chains Improve Food and Nutrition Security Under Climate Change? Submitted to *Agricultural Systems*, August.

Research Support (Funded Research Projects)

- Development of an Economically Viable Computer Vision System to Monitor Metabolic Disorders in Dairy Cows During Transition Period, USDA/NIFA Interdisciplinary Engagement in Animal Systems, Co-PI, \$999,998
- Assessing Barriers to Wisconsin Dairy Product Exports, DATCP Agricultural Export Expansion Grants (2022-25), PI, \$39,101.
- Assessing and Addressing Barriers to Dairy Product Exports by Small- and Medium-Sized Wisconsin Manufacturers, Short-term, High-Impact Project, Dairy Innovation Hub, UW-Madison (2022-23), PI, \$15,996.
- Cost of Production Assessment and Analysis for Wisconsin Dairy Farms, Special Project, Dairy Innovation Hub (Collaborative with Kevin Bernhardt, UW-Platteville and Luis Peña-Lévano, 2022-23), PI, \$49,046.
- Collaboratively Mentored Graduate Student Assistantship Program, Dairy Innovation Hub Collaborative with Luis Peña-Lévano and Shaheer Burney, UWRF, (2022-2024), PI.

- Participatory Systems Modeling to Improve Food and Nutrition Security Under Climate Change, Global Health Institute Seed Grant Program, UW-Madison (2022-23), PI, \$19,963.
- Consumer, Economic and Environmental Evaluation of Organic, Local and Controlled-Environment Produce, USDA Economic Research Service (2021-2024), PI, \$63,000.
- Review of Nutrition Research by the Climate Change, Agriculture and Food Security Programme of the CGIAR, International Livestock Research Institute, (2021), PI, \$31,600
- Environmental and Nutritional Outcomes of Dairy Value Chains in Tanzania, International Livestock Research Institute (ILRI), (2021-22), PI, \$35,000
- Modeling Dynamics of Identity-Preserved High-Oleic Soybeans, United Soybean Board, (2021), PI, \$15,000
- Analysis of Dairy Growth Management Programs, Center for Integrated Agricultural Systems, University of Wisconsin, (2021), PI, \$10,000
- Participatory System Dynamics Modeling to Improve the Impact of Health Campaigns in Zimbabwe, Bill and Melinda Gates Foundation Challenge Grant, (2020-2021), co-PI, \$100,000
- Using System Dynamics Modeling to Assess Leverage Points for Increasing Dietary Diversity in Urban Areas of East Africa, Global Alliance for Improved Nutrition, (2019-2020), PI, \$11,500
- Stakeholder Group Model Building to Enhance Resource Allocation Priority Setting, United Soybean Board, (2019-2020), PI, \$192,000
- Assessment of Supply Management Programs for the US Dairy Industry, Wisconsin Farmers Union, (2019), PI, \$20,000
- Strategic FEW and Workforce Investments to Enhance Viability of Controlled Environment Agriculture in Metropolitan Areas, National Science Foundation INFEWS Program, (2018-2021), co-PI, \$2,423,477
- Development of a Working Paper on Setting Priorities to Address the Research Gaps Between Agricultural Systems Analysis and Food Security Outcomes in Low- and Middle-income Countries, Climate Change Agriculture and Food Security Programme (CGIAR), ILRI, (2018), PI, \$9,600
- Evaluation of Strategic Options to Promote Growth and Competitiveness of the Pennsylvania Dairy Industry, Pennsylvania Department of Agriculture, Center for Dairy Excellence, (2017-2018), PI, \$53,000
- Economic Analyses of a New Georgia Milk Plant, Georgia Milk Producers, Inc., (2017), co-PI, \$25,000
- Decision Support for the Margin Protection Program-Dairy, USDA, Farm Services Agency, (2015-2018), co-PI, \$25,000
- System Dynamics (SD) Economic Model of the World Dairy Market, US International Trade Commission, (2015-2017), PI, \$53,894
- Analysis of Alternative Forms of Price Regulation among Buyers and Sellers of Farm Milk, USDA, Agricultural Marketing Service, (2015-2017), co-PI, \$150,000
- Economics of Tree-Crop-Livestock Intensification Amongst Smallholder Farming Systems in Northwestern Nigeria, Borlaug LEAP Fellowship Program, (2015-2016), PI, \$19,778

- Analysis of Dairy Price Cycles and Projections, Farm Credit East Knowledge Exchange, (2015), co-PI, \$2,000
- Spatial Economic Impacts of Increased Greek Yogurt Production in New York, New York Dairy Promotion Order, (2014), PI, \$25,000
- Structural and Economic Analysis of the US Dairy Sector, Co-Bank, Knowledge Exchange Division, (2011), co-PI, \$42,000
- Analysis of a Market Cow Bonus Program, Dairy Policy Action Committee, (2011), co-PI, \$5,000
- Evaluating the Financial Feasibility of Businesses Comprising a Local Food System Model in San Luis Obispo County, Central Coast Ag Network, (2011-2012), PI, \$3,000
- State and Federal Marketing Orders Book Chapter, Farm Foundation, (2010), co-PI, \$3,000
- Financial Performance of Farmstead and Artisanal Dairy Processing Enterprises, Cal Poly Agricultural Research Initiative, (2010), PI, \$40,000
- Potential Use of Vermicompost as a Substitute for Synthetic Inputs to Horticulture and Nursery Production, New York Farm Viability Institute, (2009-2010), co-PI, \$119,998
- Market Impacts of a Growth Management Plan, Holstein Association, (2009), co-PI, \$10,000
- Evaluating the Potential of Existing and New Milk Protein Fractionates to Enhance Dairy Farmer Incomes, New York Dairy Promotion Order, (2009), co-PI, \$10,000
- Assessment of the Potential for US Casein(ates) and Milk Protein Concentrate Production, Dairy Management, Inc, (2008), co-PI, \$55,000
- Collaborative Work Agreement Between International Livestock Research Institute and Cornell University, ILRI, (2008), co-PI, \$401,213
- An Analytical Review of a Voluntary Herd Retirement and Export Subsidy Plan for Dairy Producers, Dairy Farmers Working Together, (2007), co-PI, \$15,000
- Understanding aflatoxin accumulation in maize and evaluating strategies to reduce human exposure in East Africa, Academic Venture Fund, Atkinson Center for a Sustainable Future, (2007), co-PI, \$96,880
- Dairy Competitiveness in Central America, ILRI, (2007), PI, \$7,500
- An Analysis of Spatial Milk Values in the Southeastern US, Dairy Cooperative Marketing Association, Inc., (2006), co-PI, \$25,000
- The Dairy Program of the National Institute for Livestock and Dairy Policy, USDA-CSREES, 2005-2007, co-PI, 592,586
- Review of Modeling Options for Rural Livelihood Systems Evolution, ILRI, (2005-2006), PI, \$17,325
- Financial Performance and Other Characteristics of On-Farm Dairy Processing Enterprises in New York, Vermont and Wisconsin, USDA, Risk Management Agency, (2005-2006), co-PI, \$24,000
- Market Impacts of an Initiative to Promote High-Protein Whey Products: Who Would Benefit and How Much?, Dairy Management, Inc, (2005), co-PI, \$47,650

Decision Support of Ruminant Livestock Systems in the Gulf Region of Mexico, USAID, Higher Education for Development, TIES Program, (2004-2007), co-PI, \$299,786

A State-of-the-Art Review of the Impact of Livestock Keeping on Human Nutritional Well-being in Resource-Poor Populations, ILRI, (2004-2005), PI, \$32,000

The Dairy Program of the National Institute for Livestock and Dairy Policy, USDA-CSREES, 2004-2005, co-PI, 166,631

Cornell System Dynamics Network, Gift of Allen Boorstein, (2004-2007), PI, \$100,000

Community-level Assessment of Food-Feed Crop Traits: Targeting Options to Promote Sustainable Livelihood for Poor Livestock Keepers, ILRI, (2004), PI, \$12,000

The Dairy Program of the National Institute for Livestock and Dairy Policy, USDA-CSREES, (2003-2004), co-PI, \$186,962

Business Performance of Small Scale Dairy Processing Enterprises, Towards Sustainability Foundation, (2003), co-PI, \$6,000

The Dairy Program of the National Institute for Livestock and Dairy Policy, USDA-CSREES, (2002-2003), co-PI, \$174,326

Comparative analysis of impacts of smallholder dairy production on the nutrition of pre-school children in Kenya and Ethiopia, ILRI, (2002), co-PI, \$24,000

Small-Scale Organic Value-Added Dairy Processing in New York: Business Performance Review and Case Study, Cornell Cooperative Extension, (2002), co-PI, \$14,500

Analysis of Alternative Classified Pricing Options Under Federal Milk Marketing Orders, Kraft Foods, Inc, (2002), PI, \$20,000

The Dairy Program of the National Institute for Livestock and Dairy Policy, USDA-CSREES, (2001-2002), co-PI, \$164,362

Nutritional Impacts of Dairy Technology Adoption in East Africa, ILRI, (2001-2002), PI, \$23,500

Impacts of Technological Change and Trade Liberalization on International Dairy Markets, USDA-CSREES, (2001-2002), PI, \$40,000

Analysis of the Impacts of Policy on Price Volatility in US Dairy Markets, USDA, Economic Research Service, (2001-2002), PI, \$25,000

The Dairy Program of the National Institute for Livestock and Dairy Policy, USDA-CSREES, (2000-2001), co-PI, \$148,121

Assessing the Impacts of the Northeast Interstate Dairy Compact on New England Milk Supply and Milkshed Composition, Northeast Dairy Compact Commission, (1998), co-PI, \$58,121

Social Science Research Fellowship (with ILRI and IFPRI), Rockefeller Foundation, (1995-1997), PI, \$150,000

Recent Poster Presentations

Dashti, H., M. Chen and **C. F. Nicholson**. 2024. Assessing the Impact of Climate Actions on US Dairy Industry. Dairy Summit, November 20, 2024.

Pupo, M., L. F. Ferraretto and **C. F. Nicholson**. 2024. Effects of Feeding 3-NOP for Methane Emissions Reduction on Income Over Feed Costs in the United States. Dairy Summit, November 20, 2024.

Myers, J. S. and **C. F. Nicholson**. 2024. Impacts on Farm Milk Prices of Proposed Changes to Pricing Formulas Under Federal Milk Marketing Orders. Dairy Summit, November 20, 2024.

Bolinger, N., D. Stroinski, A. Euerle, A. Gruman, G. Lewis, S. Rankin and **C. Nicholson**. 2024. Lactose-free Ice Cream: Evaluation of Economic Feasibility and Physiochemical Properties. Dairy Summit, November 20, 2024.

Beaudry, J., S. Burney, L. Peña-Lévano and **C. Nicholson**. 2024. Use of Automated Milking Systems on Wisconsin Dairy Farms. Dairy Summit, November 20, 2024.

Recent Research Presentations

"International Dairy Outlook to 2030" International Workshop and Roundtable, World Dairy Expo, October 3, 2024.

"Proposed Changes in Class I Differentials in the Recommended Decision" National Workshop: USDA's Proposed Changes to Milk Prices Under Federal Milk Marketing Orders, September 18, 2024.

"Economic Analysis of High-Oleic Soybeans in Dairy Rations," High-Oleic Conference 2024, Pau, France, (Remote), September 4, 2024.

"Dynamic Analyses of Proposed Supply Chain Coordination Programs for the US Dairy Industry", International System Dynamics Conference, Bergen NORWAY, August 7, 2024.

"Integrating Consumer Choice Experiments and SD Supply Chain Modeling to Increase Vegetable Consumption in Kenya" International System Dynamics Conference, Bergen NORWAY, August 6, 2024.

"Economic Status of Organic Dairy," Organic Trade Association Annual Meeting, Washington, DC, May 18, 2024.

"Can participatory systems modeling of food value chains improve food and nutrition security under climate change?" 5th Global Food Security Conference, KU Leuven, Leuven, Belgium, April 9, 2024.

"Coordination in Dairy Supply Chains," National Workshop for Dairy Economists and Policy Analysts, Madison, WI, October 24, 2023.

"Challenges for CEA: Cost, Environment and Consumer Acceptance", WORKSHOP ON ADVANCING CONTROLLED ENVIRONMENT AGRICULTURE ON LAND AND IN SPACE IN THE NEXT 20 YEARS, Toledo, OH, June 28, 2023.

Potential for Participatory Systems Modeling to Improve Food and Nutrition Security Under Climate Change", Workshop to Assess the Potential for Participatory Systems Modeling to Improve Food and Nutrition Security Under Climate Change, September 12-13, 2022, Madison, Wisconsin.

"Consumer Choice Experiments for Vegetable Attributes in Kenya," GAIN Workshop on Promotion of Health Diets, Nairobi, Kenya, July 4, 2022 (remote participation)

High-oleic soybeans in dairy rations: what are the farm and market-level economic impacts?
Dairy Innovation Hub Faculty Seminar, April 20, 2022.

“The Impact of Location and Automation on the Landed Cost and Environmental Performance of Controlled Environment Agriculture Supply Chains for Leaf Lettuce”, INFORMS Annual Meeting, Anaheim, CA, 24-27 October 2021.

“Assessing the Impacts of Three Potential Interventions on Fruit and Vegetable Consumption in Urban Kenya Using Participatory Systems Modeling”, Paper presentation at the International System Dynamics Conference, Chicago, IL, 26-30 July 2021.

“What Constrains ‘Identity-Preserved’ Product Growth?” Work in Progress presentation at the International System Dynamics Conference, Chicago, IL, 26-30 July 2021.

“Evidence on the Economic and Environmental Performance of Controlled Environment Agriculture”, invited presentation to the Amazon Devices and Services Sustainability team, 17 June 2021.

“Working Group on Economics (Market, Operation and Product)” Group facilitator and presenter, Mini Technical Assistance Workshop on Controlled Environment Agriculture and Inner-City Adaptation, 9 June 2021, sponsored by the Urban Land Institute (uli.org; remote via Zoom)

“Modeling Dairy Growth Management Programs” presentation to the Wisconsin Farm Bureau Federation and Wisconsin Farmers Union, 17 February 2021 (remote via Zoom)

“Conceptual Frameworks Linking Agriculture and Food Security”. Invited presentation to the Alliance of Bioversity International (Rome) and the Centro Internacional de Agricultura Tropical (CIAT; Cali Colombia and Nairobi Kenya), 19 January 2021 (remote via Zoom)

TEACHING AND GRADUATE ADVISING

Courses Taught

I have developed and successfully implemented numerous courses, especially during the past five years. Areas of instruction include agricultural economics, systems modeling, supply chain management and business administration. These courses are summarized below.

University of Wisconsin-Madison, Agricultural and Applied Economics

AAE 319 The International Agricultural Economy (2022)

AAE 422 Food Systems and Supply Chains (2022-)

University of Wisconsin-Madison, Animal and Dairy Sciences

ANSCI/DYSCI 370 Livestock Production and Health in Agricultural Development (2023-)

Radboud University, Nijmegen School of Management, Nijmegen, NETHERLANDS

Business Analytics Master’s (BAM) Program:

MAN-MBAM006 Systems Thinking for Systemic Change (2020)

Systems modeling theory and practice for assessment of interventions to accomplish sustained improvements in business, social and environmental outcomes.

MAN-MBAM002 Modeling for Stakeholder Engagement (2020)

Theory and practice of group model building with stakeholders in business organizations.

Business Administration Bachelor's Program:

MAN-BPRO363 Business Analysis for Responsible Organizations (2nd year BA course, 2020)

Application of systems modeling to assessment of tradeoffs among multiple business sustainability metrics

MAN-BCU019B Intervention Methodology (3rd year BA course, 2020)

Theory and practice of intervention methods to address “messy problems” for business organizations including brainstorming, group model building, multiple scenario development and multiple-criteria decision analysis.

MAN-MOR002 Methods of Research and Intervention (1st year BA course, 2020)

Introduction to research methods and intervention approaches for business problems.

Cornell University, Applied Economics and Management

AEM 3430 Principles of Supply Chain Management (2015-2017)

AEM 4180 Introduction to System Dynamics Modeling (2005-2008)

AEM 4970 Supply Chain Case Analysis (2016)

AEM 4310 Agricultural and Food Policy (2010)

AEM 6180 System Dynamics Applications (MS course in systems modeling; 2006-2009)

AEM 6940 Economic Analysis of Agriculture-based Livelihood Systems (2008, 2010)

Penn State University, Supply Chain and Information Systems

SCM 301 Introduction to Supply Chain Management (resident and online versions, 2013, 2015)

SCM 404 Demand Fulfillment (2012-2017)

SCM 497A Logistics Case Study Analysis (2013)

SCM 546 Strategic Procurement (MBA program elective; 2013)

Cornell University, International Agriculture and Rural Development, Biological Sciences

BIOSM 2250 Sustainability in the 21st Century (*Field course at Shoals Marine Laboratory with students from Cornell and University of New Hampshire; 2006-2007*)

IARD 6020 International Agriculture in Developing Nations II (*Interdisciplinary field study course in the Gulf coast region of Mexico; 2005-2007*)

Cal Poly San Luis Obispo, Agribusiness

AGB 312 Agricultural Policy Analysis (2009-2012)

AGB 313 Agricultural Economic Analysis (Managerial Economics; 2010-2012)

AGB 461 Senior Project (2009-2012)

AGB 543 Agricultural Program and Policy Analysis (2012)

University of Vermont, Community Development and Applied Economics

CDAE 166 Introduction to Small Business Management (1999-2000)

CDAE 175 Farm Credit Fellows Practicum (1999-2000)

CDAE 253 Intermediate Macroeconomics (1999-2000)

CDAE 395 Graduate Research Methods (1999)

NOTABLE INSTRUCTIONAL ACCOMPLISHMENTS

- Organized and implemented Teaching and Learning Conversations program to facilitate discussions and improvement of instructional practice by SC&IS faculty at Penn State
- Consistently high student evaluations (6.0+ in Penn State's 7-point evaluation system; 4.5+ in Cornell and Cal Poly's 5-point evaluation systems)
- Incorporated systems modeling concepts and simulation into agricultural policy (AGB 312 at Cal Poly) and supply chain management courses (SCM 404 at PSU)
- Developed and implemented active learning approaches in undergraduate and graduate courses
- Attended numerous teaching workshops on active learning, assessment, and course evaluation interpretation
- Organized case competition tryouts and advised undergraduate and MBA logistics case competition teams at Penn State, 2012 to 2017
- Smeal College of Business Teaching Award Nominee, 2014
- Selected by students to represent university faculty at Penn State Homecoming, Fall 2013
- Recipient of Textbook Hero Award, Penn State University, Fall 2012
- Twice nominated for College of Food, Agriculture and Environmental Sciences Teaching Award, Cal Poly San Luis Obispo (2011 and 2012)

Short Courses, Workshops and Webinars

Workshop on Participatory systems modeling to employ a food systems approach to improving nutrition for children in Kenya. Collaboration with UNICEF Kenya Country Office and UNICEF Eastern and Southern Africa Regional Office, June 4-5, 2024.

Workshop to Assess the Potential for Participatory Systems Modeling to Improve Food and Nutrition Security Under Climate Change, September 12-13, 2022, Madison Wisconsin.

A5 Universities Food Systems Webinar Series "Participatory systems modeling of interventions to increase vegetable consumption in Nairobi". Offered in Association with the Wageningen URV& University of Sao Paulo-Escola Superior de Agricultura "Luiz de Queiroz" Summer School Program, July 30, 2021.

ULI New York mini Technical Assistance Panel on Controlled Environment Agriculture – City Adaptation, June 9, 2021.

"Supply Chain Management and Its Application to Renewable Energy in Sub-Saharan Africa", Pre-competition Workshop component for the 3rd African Grand Challenge, Nelson Mandela African Institute of Science and Technology, Arusha, Tanzania, January 26-27, 2018.

“Food System Modeling Introductory Short Course”, Cornell University, June 5-9, 2017 (36 hours)

“Dinámica de sistemas, economía y el manejo de tierra y otros recursos naturales” (“System Dynamics Modeling Applications to Agricultural Systems and Natural Resources,” Universidad Nacional de Colombia, Sede Palmira, March 9-13, 2015. (36 hours)

Short Course on Aplicaciones Agropecuarios de la Dinamica de Sistemas, Universidad Veracruzana, Veracruz, Mexico, April 9-13, 2005. (in Spanish)

Short course on Bio-economic Analysis of Agricultural Technologies and the Dynamics of Agricultural Systems, Universidad Autónoma de Yucatán, November 15-19, 2004 (in English and Spanish).

PhD Advisory Committee Membership

- 1 Bertha Rueda-Maldonado, PhD, Animal Science, Nutrient dynamics and productivity potentials of pasture-based cattle systems in the western Amazon of Brazil, Cornell, 2002, Field (i.e., representing the field of Applied Economics and Management as minor member)
- 2 Othon Reynoso-Campos, PhD, Animal Science, Nutritional Management of Dual Purpose Cattle Herds in Mexico, Cornell, 2004, Field
- 3 Phillip Bishop, PhD, Agricultural Economics, Impacts of Milk Protein Concentrate Imports and Policy Alternatives, Cornell, 2004, Minor
- 4 Emma Stephens, PhD, Economics, Essays on commodity market participation and dynamics in three African countries, Cornell, 2007, Minor (Instructional mentor for this student also)
- 5 Mamadou Chetima, PhD, Animal Science, Pastoralism and Food Security in Niger Republic, Cornell, 2007, Field
- 6 David Parsons, PhD, Crop and Soil Science, Dynamics of Smallholder Crop-Livestock Systems in Yucatán, Mexico, Cornell, 2008, Field
- 7 Paswel Marenja, PhD, Agricultural Economics, Three essays on the effect of ex-ante soil fertility on smallholder fertilizer use behavior, Cornell, 2008, Minor
- 8 Andres Blanco-Blanco, PhD, City and Regional Planning, The Formal Determinants of Informal Settlements in Bogotá, Colombia, Cornell, 2010, Field
- 9 Emiliano Raffrenato, PhD, Animal Science, Physical, chemical and kinetic factors associated with fiber digestibility in ruminants and models describing these relationships, Cornell, 2011, Field
- 10 Allison Jack, PhD, Plant Pathology, Vermicompost suppression of *Pythium aphanidermatum* seedling disease: practical applications and an exploration of the mechanisms of disease suppression, Cornell, 2012, Field
- 11 Getaneh Kebede, PhD, Hydrology and Watershed Management, Essays on Participatory Watershed Management in the Ene Chilala Watershed, Ethiopia, Bahir Dar University, Ethiopia, 2014, External

- 12 Keenan McRoberts, PhD, Animal Science, On-farm forage fertilization and cattle manure value chain characterization in Vietnam, low-infrastructure fiber technique, and image analysis for alfalfa-grass harvest management, Cornell, 2015, Field
- 13 Andre Rozemberg Peixoto Simões, PhD, Agricultural Economics, The Impacts of Technological Adoption on Farm-Level Profitability and Market Dynamics in the Dairy Sector of Brazil., Federal University of Viçosa, Minas Gerais, Brazil, 2018, External
- 14 Larissa DiMarzo, PhD, Food Science, Alternative tests of milk composition and their implications for commercial dairy processing, Cornell, 2018, Field
- 15 Taiwo Ayinde Bintu, PhD, Agricultural Economics, The Economics of Tree-Crop-Livestock Intensification and their Greenhouse Gas Emissions in Smallholder Farming Systems in Northwestern Nigeria, Ahmadu Bello University, Zaria, Nigeria, 2018, External (Borlaug LEAP Fellowship Program Advisor)
- 16 Dessalew Worku, PhD, Hydrology and Watershed Management, Evaluation of Soil and Water Conservation Practices in the Ethiopian Highlands., Bahir Dar University, Ethiopia, 2019, External
- 17 Mathilde Blanc, PhD, Department of Agricultural Research for Northern Sweden; Crop Production Unit., Systems Analysis to Improve Integrated Crop-Livestock Systems of Northern Europe, Swedish University of Agricultural Sciences, 2019, External
- 18 Andrew LaPierre, PhD, Animal Science, Dynamic systems modeling of animal nutrition, Cornell, Field, 2021.
- 19 Yijing Gong, PhD. Animal and Dairy Sciences, UW-Madison, Minor member, 2022-
- 20 Gabriela Martínez Motta, PhD., Environment and Resources, Nelson Institute for Environmental Studies, University of Wisconsin, Minor member, 2022-
- 21 Mpumelelo Ncwadi, PhD., Environment and Resources, Nelson Institute for Environmental Studies, University of Wisconsin, Minor member, 2022-
- 22 Matheus Pupo, PhD., Animal and Dairy Sciences, Minor member, 2023-
- 23 Ben Peyer, PhD, Nelson Institute, Chair, 2024-
- 23 Jack Myers, PhD, Animal and Dairy Sciences, Chair, 2024-

MS Advisory Committee Membership

- 1 Mengistu Buta, MS, Agricultural Economics, Technology Assessment for Integrated Crop-Livestock Farms in the Ethiopian Highlands, Alemaya University of Agriculture/ILRI, Ethiopia, 1996, Chair/External
- 2 Alyssa Dodd, MS, Agricultural Economics, Best Management Practices to Reduce Phosphorus Emissions from Vermont Dairy Farms, University of Vermont, 2000, Chair
- 3 Dabin Wang, MS, Agricultural Economics, Price transmission and the role of federal dairy policy in U.S. dairy markets, Cornell, 2003, Minor
- 4 Paul Newton, MS, System Dynamics, Dairy Policy and Price Volatility, University of Bergen, Norway, 2004, External

- 5 Erica Pagel, MS, Agricultural Economics, Dynamic patterns of change in structure under different support policy regimes an examination of U.S. dairy farming, Cornell, 2005, Minor
- 6 Kotaro Baba, MS, Animal Science, Nutrition Management Decision-Making: An Intensification Strategy for Beef Cattle Systems in Tizimin, Mexico, Cornell, 2006, Field
- 7 Erin Recktenwald, MS, Animal Science, Effect of feeding corn silage-based diets predicted to be deficient in either ruminal nitrogen or metabolizable protein on nitrogen utilization and efficiency of use in lactating cows, Cornell, 2007, Field
- 8 Joseph Shultz, MS, Agricultural Economics, A dynamic participation decision model applied to the conservation security program for Northeastern United States dairy farms, Cornell, 2007, Minor
- 9 Victor Absalón-Medina, MS, Animal Science, Productivity limitations and potentials for dual-purpose cow herds in the Central Coastal (Leeward) Region of Veracruz, Mexico., Cornell, 2008, Field
- 10 Kurt Waldman, MS, Agricultural Economics, Ex-Ante Impact Assessment of Livestock Interventions In Crop-Livestock Systems In Northern Afghanistan, Cornell, 2009, Minor
- 11 Omar Cristóbal-Carballo, MS, Animal Science, Management of heifer growth in dual-purpose cattle systems in the low huasteca region of Veracruz, Mexico, Cornell, 2009, Field
- 12 Thea Whitman, MS, Crop and Soil Science, Biochar as a carbon sequestration mechanism decomposition, modelling, and policy, Cornell, 2011, Field
- 13 Desiree Danel, MS, Agribusiness, Vegetable production concentration in northwest Mexico, Cal Poly San Luis Obispo, 2012, Chair
- 14 Mindy Burris, MS, Agricultural Education, A study to determine the agricultural perceptions of high school students for the "I Love Farmers...They Feed My Soul!" organization, Cal Poly San Luis Obispo, 2012, Chair
- 15 Nicolás Girardo, MS, Agribusiness, The use of Grafting for the improvement of yields and profitability of Low-Tech Greenhouse Tomato Growers in Colombia, Cal Poly San Luis Obispo, 2012, Chair
- 16 Xiaoxiao Ma, MS, Applied Economics and Management, Assessing intra-household inequality in Body Mass Index (BMI) for China during 1989-2011 and Concentration curve-based analysis of child stunting inequality in China, Cornell, 2019, Minor
- 17 Ema Gusheva, MS, European Masters of System Dynamics, Rules for compliance in public forests: a pilot experiment, Nijmegen School of Management, Radboud University, 2020, Chair
- 18 Egle Mickaite, MS, Business Analytics Master's, Data Loss Prevention at ING, Nijmegen School of Management, Radboud University, 2020, Chair
- 19 Ben Lebowitz, MS, Environment and Resources, Nelson Institute for Environmental Studies, University of Wisconsin, Minor member, 2022-
- 20 Jalyssa Beaudry, MS, Agricultural and Applied Economics, University of Wisconsin-Madison, Chair, 2023-

Master of Professional Studies Advisory Committee Membership

- 1 Habtemariam Kassa, MPS, International Agriculture and Rural Development, The Crop-livestock Subsystem of Livelihood Dynamics in the Harar Highlands of Ethiopia, Cornell, 2003, Minor
- 2 Joseph Dever, MPS, International Agriculture and Rural Development, Enhancing Smallholder Farmer Participation in Horticultural Marketing Chains in Kenya, Cornell, 2007, Minor
- 3 Aschalew Demeke, MPS, International Agriculture and Rural Development, Determinants of household participation in water source management Achefer, Amhara region, Ethiopia, Cornell, 2009, Field
- 4 Habtamu Tilahun, MPS, International Agriculture and Rural Development, Payment for environmental service to enhance resource use efficiency and labor force participation in managing and maintaining irrigation infrastructures the case of Upper Blue Nile Basin, Cornell, 2009, Field
- 5 William Shum, MPS, Applied Economics and Management, Education and labor productivity in China Education a factory level case study, Cornell, 2009, Minor
- 6 Keenan McRoberts, MPS, International Agriculture and Rural Development, Rural development challenges system dynamics ex ante decision support for agricultural initiatives in southern Mexico, Cornell, 2010, Minor
- 7 Antonio Claudio Gusmao Lellis Vieira, MPS, International Agriculture and Rural Development, Rural development facilitation an ex ante evaluation of conservation agriculture adoption to improve dairy farming systems in the Brazilian Paraíba do Sul Valley, Cornell, 2011, Minor
- 8 Getaneh Kebede, MPS, International Agriculture and Rural Development, The impact of selected small-scale irrigation schemes on household income and the likelihood of poverty in the Lake Tana basin of Ethiopia, Cornell, 2011, Field

Supervision of Post-Doctoral Associates

- 1 Benjamin Okumu, Crop-Livestock Interactions in the Highlands of East Africa, Applied Economics and Management, Cornell University, 2005-2007
- 2 Guillaume Lhermie, Sustainable antimicrobial use in bovine practice: a system dynamics approach, Department of Population Medicine and Diagnostic Sciences, Cornell University College of Veterinary Medicine, 2016-2017
- 3 Leslie Verteramo, Meta-Analysis of Supply Chains for Lettuce, Tomatoes and Strawberries, Applied Economics and Management, Cornell University, 2019-present

Undergraduate Thesis Advising

Penn State University: Supervised one Schreyer Honors College thesis in Supply Chain Management

Cal Poly San Luis Obispo: Supervised more than 20 undergraduate senior projects

SERVICE

College and Departmental Service

Curriculum Committee, College of Agriculture and Life Sciences, UW-Madison, 2023-

Steering Committee, Dairy Innovation Hub, UW-Madison, 2022-

Advisory Council, Dairy Innovation Hub, UW-Madison, 2022-

Governance Council, Center for Integrated Agricultural Systems, UW-Madison, 2022-

Animal and Dairy Sciences, UW-Madison:

Chair, Dairy and Food Animal Management Major Committee, 2024-

Teaching Assignment Committee, 2024-

Undergraduate Committee (2023-present)

Post-Tenure Review Committee for Dr. Kent Weigel

Agricultural and Applied Economics, UW-Madison:

Undergraduate Committee (2022-present)

European Masters of System Dynamics (EMSD) Programme Advisory Committee, Radboud University, 2020.

Faculty Mentor Committee, Assistant Professor Kristan Reed, Department of Animal Science, Cornell University, 2018-2023

Organized and implemented *Teaching and Learning Conversations* program to facilitate discussions and improvement of instructional practice by Supply Chain and Information Systems faculty at Penn State, 2016-2017

Clinical Promotion Advisory Committee, Smeal College of Business, Penn State University, 2016-2017

Faculty Advisor, Minority Student Investment Club, Penn State University, 2016-2017

Presentations on supply chains, dairy pricing and dairy policy, Dairy Fellows Program, Department of Animal Science, Cornell University, 2015-2017

Executive Committee, Cornell Institute for Food Systems, 2015-2019

Provided oversight to a program designed to facilitate interdisciplinary analysis of food system issues by Cornell faculty and community partners. Designed 15-month Food System Fellowship program to facilitate interdisciplinary study of food system issues by Cornell undergraduate students.

Undergraduate and MBA Case Competition Team Advisor, Smeal College of Business, Penn State University, 2013-2017

Dairy Farmers of America Supply Chain Case Competition Organizer, Smeal College of Business, Penn State University, 2015-2016

Business Case Competition Judge, Smeal College of Business, Penn State University, 2016

Undergraduate Curriculum Committee, Supply Chain and Information Systems, 2015-2016

Undergraduate Advising and Mentoring, Supply Chain and Information Systems, 2012-2017
Policies and Procedures Committee, Agribusiness Department, Cal Poly San Luis Obispo, 2010-2011

Undergraduate Advising, Agribusiness Department, Cal Poly San Luis Obispo, 2009-2012

Guest lectures on dairy pricing and policy, Dairy Science Department, Cal Poly San Luis Obispo, 2010-2012.

Associate Director for Research, Cornell Program on Dairy Markets and Policy, 2005-2009
Managed research activities for the program, including budget and oversight of subcontracts and graduate student research.

Director, Cornell System Dynamics Network (CSDNet), 2004-2007
Directed the activities of the network, including organization of short courses, relationship management with funders, design of for-credit Cornell courses, and systems seminar series.

Faculty Advisor, Farm Credit Fellows, University of Vermont, 1999-2000

Professional (Academic Journals and Publishers)

Editor-in-Chief, *Agricultural Systems* (Elsevier), 2013-2018

Agricultural Systems is an interdisciplinary journal with substantial international content, currently ranked first among multidisciplinary journals in agriculture, per Journal Citation Index data. Editors serve in the more traditional editor role of determining final disposition, but also undertake management tasks performed by Associate Editors at other journals, handling some 800 manuscripts per year. Managed special issues on global food security, farming system design, urban food systems and climate smart agriculture.

Editorial Advisory Board, *Agricultural Systems* (Elsevier), 2006-2013, 2018-present

Member of the editorial advisory board, which includes undertaking journal reviews and providing input on the strategic direction for the journal.

Ad hoc Manuscript Reviewer

In recent years I have been a reviewer for the following journals, reviewing an average of five manuscripts per year:

Bulletin of the World Health Organization

Agricultural Systems

Food Policy

Global Food Security

Food Security

Choices

Journal of Applied Farm Economics

International Food and Agricultural Management Review (IFAMR)

American Journal of Agricultural Economics

Agricultural Economics

Agribusiness: an International Journal

World Development

Journal of Dairy Science
Journal of Animal Science
Systems Research and Behavioral Science
Livestock Science
Journal of Agricultural Science
Journal of Environmental Management
System Dynamics Review

Other Organizations

External Reviewer, Promotion Package for Dr. Leslie Verteramo Chiu, Charles H. Dyson School of Applied Economics and Management, September 2024.

Presentation on the U.S. Farm Bill to University of Guelph Ag Diploma program as a component of a week-long tour called "Intro to US Agriculture", August 29, 2024.

Testimony on Spatial Values of US Milk Prices, Hearing on Proposed Amendments to Marketing Agreements and Orders, Carmel, Indiana, Submitted September 15, 2023.

External Reviewer, Promotion Package for Dr. Houtian (Frank) Ge, Charles H. Dyson School of Applied Economics and Management, September 2023.

Presentation on the U.S. Farm Bill to University of Guelph Ag Diploma program as a component of a week-long tour called "Intro to US Agriculture", August 31, 2023.

External Reviewer, USDA ARS Food Systems Research Program, August 2023.

Expert Panel Member, Expert Panel on Atypical Food Production Technologies for Canadian Food Security at the Council of Canadian Academies (CCA), June 2023-September 2024.

External Examiner for PhD, Leonor Guariguata, Epidemiology Program, University of the West Indies, September 2, 2022 (Review of PhD dissertation and Oral Examination)

Presentation on the U.S. Farm Bill to University of Guelph Ag Diploma program as a component of a week-long tour called "Intro to US Agriculture", September 1, 2022.

Grant Application Review Panel for Vertical Farm Call for Proposals, *Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO; Dutch Research Council)*, 2021

Invited External Reviewer of Candidates for Professorship of Development Research, University of Natural Resources and Life Sciences, Vienna (Universität für Bodenkultur Wien – BOKU), 2019-2020

Invited reviewer of dairy component allocations data, USDA Economic Research Service, March 2018.

Business Case Competition Advisor and Judge, International Startup Competition and Conference in Tanzania, Startup Mission for Art/Design Responsibility and Technology (SMART), Nelson Mandela African Institute of Science and Technology, Arusha, Tanzania, January 28-February 1, 2018.

Competition Judge, African Grand Challenge Business Idea Competition, Nelson-Mandela African Institution of Science and Technology, Arusha, Tanzania, January 25-26, 2018

Analysis and presentation in response to US International Trade Commission inquiries about priority dairy trade policy provisions, November 2015.

Reviewer, papers submitted for presentation at the International System Dynamics Conference, 2014-present

Ad hoc report reviewer, USDA Animal and Plant Health Inspection Service, December 2011

Response to inquiries about the feasibility and impacts of dairy farm savings accounts, USDA Dairy Industry Advisory Committee, January 2011.

Secretary/Treasurer, Food and Agricultural Marketing Policy Section (FAMPS), Agricultural & Applied Economics Association, 2010-2012

Member, National Program on Dairy Markets and Policy, 2010-present

Contributed to coordination activities of this inter-institutional program, designed and implemented annual workshops for academic and industry agricultural economists and dairy policy analysts.

Testimony on the nature and origins of price volatility in the US dairy industry, USDA Dairy Industry Advisory Committee, October 2010.

Testimony on farm-retail price relationships in the US dairy industry, US Department of Justice and USDA Workshop on Margins in Agriculture. Washington, DC, December 8, 2010