

**Statement of Dr. Keri Jacobs**

**College of Agriculture, Food and Natural Resources (CAFNR)**

**University of Missouri**

**Before the U.S. House of Representatives Committee on Agriculture, Subcommittee on  
Livestock and Foreign Agriculture**

**July 23, 2021**

Chairman Costa, Ranking Member Johnson, and Members of the Subcommittee, thank you for this opportunity to testify regarding the potential for producer-ownership in the U.S. beef supply chain. I am an agricultural economist at the University of Missouri. As an extension specialist, I have spent 10 years working closely with producers and the cooperatives of which they are member-owners. My extension work supports the governance roles and financial acumen of cooperative directors and educates producers, students, and the public about cooperatives. My research considers the evolving agribusiness landscape as it relates to consolidation in Midwest agriculture, the challenges facing agricultural cooperatives and producers, the role and value of cooperation, and the benefits to producers as they participate more fully along their supply chains.

As an economist, I believe in the power and elegance of capitalism. The pursuit of profitability through private ownership, private control, and private returns fuels innovation and efficiency. I also believe that sustainable capitalism must take a holistic view of markets, and this requires competitive markets — where no single entity has undue control or influence on the pricing or availability of a product or service that disadvantages others in the supply chain. An equally important feature of capitalism is market efficiency — where coordination of market activities minimizes costs; permits free exchange of information; and leads to an appropriate allocation of resources, goods, and services. Although my testimony today is not about pricing, concentration, market power, information exchange, or efficiency in the beef supply chain, these are all dimensions that can be improved and sustained through producer-ownership. Cooperatives bring discipline to a supply chain, and this discipline is critical to efficient and competitive markets.

Cooperatives are a special type of corporation. They are distinguished from traditional corporations by their ownership structure, who makes the decisions and how, and who benefits from their activities. Traditional corporations are investor-owned. Investors contribute equity capital privately or buy shares of a company's stock. The value of that investment depends on the corporation's profitability. Investors benefit when the shares of their stock increase in value and when the corporation pays dividends on those shares. The more you invest, the more voting power you have and the more you benefit from the business' success. Investors expect a return on their investment, and management's job is to ensure that. No requirements stipulate that these investors are otherwise linked to the business, and most often they are not. Furthermore, the board of directors — the corporation's governing body — has no requirements to be actively involved otherwise in the supply chain. This creates a situation where the corporation makes decisions in the best interest of its investors by looking at its bottom line. Beyond ensuring that it meets the needs of suppliers and buyers, the business has little incentive to share the benefits of its activities upstream or downstream.

A supply chain — or part of a supply chain — dominated by a few very large, investor-owned firms that pay most attention to their immediate economic needs can become undisciplined and lack sustainability from a holistic market viewpoint. This was precisely the situation our nation, producers and consumers faced in the early 1900s. Producers trying to market and distribute their products were outsized and subject to unfair trade terms and pricing. Congress recognized that the supply chains in grain, dairy, and other critical sectors left producers with too little control, subjected producers to predatory pricing, and distorted the prices that consumers paid. In 1922, in response to the growing imbalances, Congress authorized producers to form associations, or cooperatives, through the law titled “An Act to Authorize Association of Producers of Agricultural Products” — more commonly known as the Capper-Volstead Act. By permitting producers to form associations to collectively process, prepare for market, handle, and market their products, Congress provided a mechanism for producers to have equal footing with the big companies with which they did business. The law did include several requirements. Those requirements, which state statutes governing cooperatives and producer associations subsequently reinforced and enumerated, are embodied in the Principles of Cooperation. Among these are the following:

1. **Open and Voluntary Membership:** There is no requirement to become a member. Producers participate voluntarily so long as they can use a cooperative's services and accept the

responsibilities of membership, regardless of race, age, religion, gender, and economic circumstances.

2. Democratic Member Control: Members actively participate in setting policies and making decisions through a democratic process that is independent of their equity contribution. The cooperative is governed by a board of directors elected by and from among the membership. The board is accountable to those members.
3. Economic Participation: Members contribute capital equitably, and the association operates for the benefit of its members. Profitability is shared with the membership proportional to members' use, and the cooperative can allocate surpluses for growth; reserves; and other activities, including investments in their communities, approved by the membership.

Capper-Volstead created a vehicle for a nearly inextricable link between producers and their supply chains — however far into it they choose to organize vis-à-vis cooperation. This structure and its requirements are precisely why we say that a cooperative brings discipline to a market. Instead of focusing on short-run profits, the cooperative seeks to aggregate and transfer the value further along the supply chain back to its producer-members. In contrast to a traditional investor-owned corporation, a cooperative's incentives are aligned with the interests of those who do business with it because they are the ones who provide equity capital, make decisions, oversee its operations, and benefit from its activities. Furthermore, those owning, controlling, and benefitting from the business live in the communities in which the cooperative operates. Producer-members have an incentive to ensure that the business acts responsibly in the community.

According to the USDA's 2019 Agricultural Cooperative Statistics Report, more than 1,700 U.S. producer-owned agricultural cooperatives operate more than 9,000 locations in the U.S. and have nearly 1.9 million voting producer-members. You may recognize cooperatives such as Land O'Lakes, Dairy Farmers of America, and Organic Valley — dairy marketing and processing cooperatives that each uniquely provide their producer-members with access to supply chains for dairy and its products. Blue Diamond Growers; Florida's Natural Growers; the Ocean Spray Cooperative; and the National Grape Cooperative Association, which owns the Welch's brand, are composed of independent growers who control and own their respective supply chains from production to product branding to retailing. Hundreds of local and federated grain marketing and input supply cooperatives including Ag Processing (AGP), CHS, GROWMARK, MFA Inc., and Southern States give grain producers sufficient scale to collectively purchase inputs, market their

grain, and expand into value-added markets. Producers even participate in financing their own operations and their cooperatives through ownership, governance, and risk- and profit-sharing in financial cooperatives such as the Farm Credit System and CoBank. Each of these cooperatives has succeeded in improving producers' control in the marketplace, facilitating greater coordination, adding value to producers' operations and income through profit- and risk-sharing, and improving their rural communities.

I want to address a common misunderstanding, too, about cooperatives and collective action by producers — that is, that big cooperatives act just like big corporations and eventually seek to maximize their own profitability. A company, even a monopolist, that is owned by producers and required to be governed by those producers and share profits with those producers will still reflect a competitive outcome. This is because the company will allocate its profits back to those producers. Even if the cooperative earns very high margins, it shares the returns with producers proportional to their business. This effectively increases the net price a producer receives for her or his or her output or decreases the price a producer pays for a product or service. Producer-owners decide how and how much of the profitability to allocate and how much to retain for investments in the cooperative's assets, relationships, and innovation that enhance producers' production, efficiency, or competitiveness in value-added markets. This is, again, what I mean when I say that cooperatives are a disciplining factor in markets. Cooperatives reflect the values and needs of their producer-members, and they do so by prioritizing people, communities, and values over maximizing profits.

We do have successful, large-scale producer-ownership in livestock, specifically in the pork industry. Triumph Foods is a producer-owned LLC, and its operation reflects the features of cooperatives I have described. In its model, each producer commits to deliver a specific number of hogs to the plant each year, and producer-members provide a proportionate share of the plant construction cost. Producers are free to deliver surplus hogs to other processors. Meat produced at the plant is marketed by Seaboard Foods, and the producer-owners are paid based on the dollars generated by these wholesale sales. The producer-owners have a long-term contract to sell hogs and effectively earn wholesale meat prices for their animals.

The question this subcommittee and the beef industry contemplates is whether producer-ownership — through cooperatives or other forms of collective action — can be a way forward for this industry. You have heard testimony about the significant scale economies that exist in beef processing, suggesting that small-scale processing to commodity markets is unlikely to be sustainable

in the long term. Country Natural Beef is a cooperative representing more than 90 family-owned ranches in the western U.S. It began in 1986 and is still operating today. The business processes approximately 500 head of cattle per day. The producer-owners collectively engage in custom processing, packaging, and marketing of their beef through local retail stores, and the ranchers capture profits from raising cattle through processing. Every rancher is an owner and serves on the board of directors. Grass Roots Farmers' Cooperative and Buckeye Valley Beef Cooperative are smaller-scale examples of beef processing for niche and value-added markets, and they sell direct to consumers as well. To my knowledge, however, there is currently no large-scale producer-ownership in beef finishing or processing to traditional markets or that can compete with the very large processors. I can only speculate about the reasons for this. Beef processing has significant scale economies due in part to labor intensity and specialization, the enormous upfront capital investment, and the requirement of a predictable daily intake of a consistent feedstock, which I understand has proven problematic due to the diversity in cattle genetics and cattle production's long biological cycle. The sum of these confounding factors is likely why a small, collective-action model has not emerged with long-term success.

There is a path forward that recognizes concentration in beef processing for traditional markets may be inexorable, even preferred, due to the scale economies that exist. Rather than working against scale economies, one option is to support producer-ownership to an efficient scale. A producer-owned supply chain from the cow-calf stage through processing that reaches a profitable minimum efficient scale in terms of per-head margins will have a different outcome in producer profitability than we see today. We need research to understand the minimum scale. Coordination along the supply chain by producers, when done at scale, can smooth variability in producer incomes by capturing income from downstream markets that are less volatile. The income producers and their cooperatives generate will flow to the rural communities where they operate instead of to investors. Importantly, this model places producers closer to consumer markets and allows coordination between consumer preferences and production decisions.

Concentration in the beef industry, particularly at the processing stage, seems inevitable from an economic sustainability lens. Through cooperation, however, producers have an opportunity to flip the script and participate in earning value that this efficiency creates. Beef producers must desire to coordinate and commit production to the effort via contracting. Challenges related to selling byproducts, such as offal and hides, and uniformity of feedstock supply through genetics must be

addressed. With this in mind, I encourage Congress to consider five actions that could improve the likelihood of adoption, success, and outcomes of beef producers participating in collective action.

1. USDA invests into research on minimum efficient scale in beef processing and the commitments needed to achieve it.<sup>1</sup>
2. Temporarily subsidize demonstrated or evidence-based scalable capacity.
3. Create a loan guarantee programs that reduce risks to lenders for producer-owned beef finishing, processing, and marketing and that ensure financing is available earlier in the investment period.
4. Preserve niche-market products and investments through labeling laws.
5. Provide technical assistance for producers to form associations or cooperatives, gain traction in the start-up period, and navigate market coordination with downstream partners.

I began my testimony by stating my belief in capitalism. Through my work with cooperatives and the producers who own and control them, I have come to appreciate the cooperative model and collective action by producers as a workhorse of capitalism in agriculture and a way of conducting business that has benefits well beyond private returns to investors. Concentration in the U.S. beef supply chain may be inevitable due to economies of scale. In this case, market discipline is critical. With temporary assistance, producers can work within the parameters of scale and benefit from it by utilizing a coordinating model, such as cooperation. This form of capitalism enables even the little guy to participate and improve her or his economic situation. This form of capitalism can improve economic conditions in rural communities. This form of capitalism pays attention to the whole of the supply chain — from producer to consumer. Through collective action, producers have the ultimate incentive to ensure the safety, security, and sustainability of their supply chains. Their livelihood depends on it.

Mr. Chairman, thank you for the opportunity to discuss the potential of producer-ownership in the beef supply chain. I look forward to your questions.

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<sup>1</sup> A 2013 USDA ERS Economic Research Report (No. 150), “Local Meat and Poultry Processing: The Importance of Business Commitments to Long-Term Viability” by Gwin, Thiboumery, and Stillman is a model for this investigation.

# CURRICULUM VITAE

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### PROFESSIONAL HISTORY

*Associate Professor of Ag and Applied Economics*  
*MFA Chair in Agribusiness, Graduate Institute of*  
*Cooperatives (GICL) Distinguished Fellow*  
Division of Applied Social Sciences, University of Missouri

Jan 2021 - present

*Associate Professor of Economics*  
*Iowa Institute for Cooperatives Endowed Economics Professor*  
Department of Economics, Iowa State University, Ames, Iowa

July 2018 – Dec 2020

*Assistant Professor of Economics*  
*Iowa Institute for Cooperatives Endowed Economics Professor*  
Department of Economics, Iowa State University, Ames, Iowa

Aug 2012 – July 2018

*Assistant Professor of Economics*  
Department of Economics, Iowa State University, Ames, Iowa

Jan 2010 – Aug 2012

*Graduate Research Assistant*  
Graduate Program in Economics, North Carolina State University,  
Raleigh, North Carolina

Aug 2003 – Dec 2009

### EDUCATION

**North Carolina State University**, Raleigh, North Carolina  
Ph.D., Economics

May 2010

Dissertation: *Determinants of the Allocation of the Conservation Reserve Program and*  
*Landowners' Enrollment Decisions*

Advisors: Walter N. Thurman, Michele C. Marra, Daniel J. Phaneuf, and Andrew J. Taylor

**Coe College**, Cedar Rapids, Iowa

May 1996

B.A., Economics and Business Administration, with Honors

Department Honors Thesis: *An Empirical Analysis of Okun's Law and the Phillips Curve by*  
*Demographic Groups: Implications for Macroeconomic Policy in the United States*

## **FIELDS OF INTEREST**

Agri. economics, cooperatives, agribusiness management and finance, agri. production and policy

## **AWARDS and HONORS**

2019 Best Paper Award in Applied Risk Analysis for 2018 paper, "Reference-Dependent Hedging: Theory and Evidence from Iowa Corn Producers," by K.L. Jacobs, Z. Li and D.J. Hayes; award by the Applied Risk Analysis Section of the Agricultural and Applied Economics Association.

2019 Distinguished Extension Program: Group Award, awarded by the Agricultural and Applied Economics Association.

2017 E.B. Knight Journal Award for 2016 paper, "The Whole is Greater than the Sum: An Empirical Analysis of the Effect of Team Based Learning on Student Achievement," by G.M. Artz, K.L. Jacobs and C.R. Boessen; awarded by North American Colleges and Teachers of Agriculture (NACTA).

2011 Gerald A. Carlson Outstanding Ph.D. Dissertation Award in Agricultural and Resource Economics, North Carolina State University.

2010 Heading South Award, awarded by the Australian Agricultural and Resource Economics Society's and the Agricultural and Applied Economics Association's Young Professionals Exchange Program.

2008 Agricultural and Applied Economics Association's Graduate Student Extension Competition, 2nd Place, awarded by the AAEA Extension Section and the Farm Foundation.

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## **RESEARCH AND PUBLICATIONS**

\* Graduate student, Chair/Co-Chair of PhD Committee

\*\* Graduate student, PhD Committee Member

### **Peer-Reviewed Journal Articles**

Hayes, D.J., L.L. Schulz, C.E. Hart, and K.L. Jacobs. "A Descriptive Analysis of the COVID-19 impacts on U.S. pork, turkey, and egg markets." *Agribusiness*. 2020;0-0.  
<https://doi.org/10.1002/agr.2167>

McKee, G., K. Jacobs, and A. Kagan. 2020. "Trade Credit Use in Agricultural Cooperatives: Pricing and Firm Performance." *Journal of Cooperatives* 35:74-101.

Boland, M.A., B. Briggeman, K. Jacobs, P. Kenkel, G. McKee, and J. L. Park. 2020. "Research Priorities for Agricultural Cooperatives and their Farmer-Members." *Applied Economic Perspectives and Policy*. DOI:10.1002/aep.13068



- Kenkel, P., G. McKee, M. Boland and K. Jacobs. 2019. "The New Role of Agricultural Cooperative in Pooling and Distributing Tax Deductions." *Western Economics Forum* 17(2): 16-23. <http://www.execinc.com/hosted/emails/waea/file/WEF17.2.pdf>
- Moore, K.J., R.P. Anex, A.E. Elobeid, S. Fei, C.B. Flora, S. Goggi, K.L. Jacobs, P. Jha, A.L. Kaleita, D.L. Karlen, D.A. Laird, A.W. Lenssen, T. Lubberstedt, M.D. McDaniel, D.R. Raman, and S.L. Weyers. 2019. "Regenerating Agricultural Landscapes with Perennial Groundcover for Intensive Crop Production." *Agronomy* 9(8): 458. <https://doi.org/10.3390/agronomy9080458>
- \*\*Li, C., D. Hayes, and K. Jacobs. 2018. "Biomass for Bioenergy: Optimal Collection Mechanisms and Pricing when Feedstock Supply Does Not Equal Availability." *Energy Economics* 76: 403-410. <https://doi.org/10.1016/j.eneco.2018.10.006>
- Jacobs, K., \*Z. Li, and D. Hayes. 2018. "Reference-Dependent Hedging: Theory and Evidence from Iowa Corn Producers." *American Journal of Agricultural Economics* 100(5): 1450-68. <https://doi.org/10.1093/ajae/aay035>
- McKee, G. and K. Jacobs. 2017. "Governance Structures and the Value of the Firm: The Case of Great Lakes Cooperative and Green Plains Renewable Energy." *Journal of Cooperatives* 32:46-58.
- \*Li, Z., D. Hayes, K. Jacobs. 2017. "The Weather Premium in the U.S. Corn Market." *Journal of Futures Markets* 38:469-71.
- Artz, G., K. Jacobs, and C. Boessen. 2016. "The Whole is Greater than the Sum: An Empirical Analysis of the Effect of Team Based Learning on Student Achievement." *NACTA Journal* 60(4): 405-411.
- \*\*Rosburg, A., J. Miranowski, and K. Jacobs. 2016. "Modeling Biomass Procurement Tradeoffs within a Cellulosic Biofuel Cost Model." *Energy Economics* 58: 77-83.
- Briggeman, B, K. Jacobs, P. Kenkel and G. McKee. 2016. "Current Trends in Cooperative Finance." *Agricultural Finance Review* 76(3): 402-410.
- \*Li, Z., K. Jacobs, and G. Artz. 2015. "The Cooperative Capital Constraint Revisited." *Agricultural Finance Review* 75(2): 253-266.
- Moore, K.J., S. Birrel, R.C. Brown, M.D. Casler, J.E. Euken, H.M. Hanna, D.J. Hayes, J.D. Hill, K.L. Jacobs, C.L. Kling, D. Laird, R.B. Mitchell, P.T. Murphy, D.R. Raman, C.V. Schwab, K.J. Shinnors, K.P. Vogel, J.J. Volenec. 2014. "Midwest Vision for Sustainable Fuel Production," *Biofuels* 5(6):687-702.
- Jacobs, K., W. Thurman, and M. Marra. 2014. "The Effect of Conservation Priority Areas on Bidding Behavior in the Conservation Reserve Program." *Land Economics* 90(1): 1-25.

### **Conference Proceedings**

Dorneich, M., S. Bickelhaupt, C. Dorius, G. Artz, H. Bender, L. Bestler, B. Caissie, S. Gahn, K. Jacobs, M. Lamm, L. Orgler, J. Rongerude, A. Smiley-Oyen, R. Stone. 2016. "Measuring the Effectiveness of Team-Based Learning Outcomes in a Human Factors Course." *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* 59(1): 337-341.

### **Working Papers**

\*\*Agarwal, S., K. Jacobs, Q. Weninger. "Elicitation of Subjective Beliefs: A Pilot Study of Farmer's Nitrogen Management Decision-Making in Central Iowa." Iowa State University, Department of Economics, Working Paper #16005. January 2016.

\*\*Rosburg, A., J. Miranowski, K. Jacobs. "Cellulosic biofuel potential under land constraints: locations, plant sizes and feedstock supply costs." Iowa State University, Department of Economics, Working Paper #16005. August 2013.

### **Other Articles and Reports**

Wiedenhoeft, M.H., R. Martinez-Feria, T.C. Kaspar, K.L. Jacobs, "Suitability of winter canola (*Brassica napus*) for enhancing summer annual crop rotations in Iowa" (2015). *Leopold Center Completed Grant Reports*. 500. [https://lib.dr.iastate.edu/leopold\\_grantreports/500/](https://lib.dr.iastate.edu/leopold_grantreports/500/)

"Competition for Land Use – Why Would a Rational Producer Grow Switchgrass for Biofuel?" Research report for CenUSA Bioenergy, a project supported by Agriculture and Food Research Initiative Competitive Grant No. 2011-68005-30411 from the National Institute of Food and Agriculture. January 2015.

"Understanding Local Level Supply Elasticities of Land Cover in the CRP." Research report for the National Pork Producers Council. July 2013.

"Drivers and Barriers to Perennial Grass Production for Biofuels." Research report for CenUSA Bioenergy, a project supported by Agriculture and Food Research Initiative Competitive Grant No. 2011-68005-30411 from the National Institute of Food and Agriculture. March 2013.

(with C. Hart). "Balancing Environmental and Feed Availability Concerns." Research report for the National Pork Producers Council. January 2012.

## Research Presentations

\* Graduate student, Chair/Co-Chair of PhD Committee

\*\* Graduate student, PhD Committee Member

**bold** denotes presenter

**Kenkel, P.**, K. Jacobs, G. McKee, M. Boland, B. Briggeman, and J. Park. "Constructing Representative Cooperatives for Policy Analysis and Stakeholder Education." Selected paper, NCERA-210 Annual Conference, St. Paul, Minnesota, November 6, 2019.

**Kenkel, P.**, G. McKee, M. Boland, and K. Jacobs. "The New Role of Agricultural Cooperatives in Pooling and Distributing Tax Deductions." Selected paper, NCERA-210 Annual Conference, St. Paul, Minnesota, November 6, 2019.

**K. Jacobs, G. McKee,** and J. Park. "Governance and Cooperative Value: Lessons from Five Texas Cooperatives." Selected paper, NCERA-210 Annual Conference, St. Paul, Minnesota, November 7, 2018.

M. Boland, K. Jacobs, **P. Kenkel**, and G. McKee. "Analyzing the Impact of Section 199A on Agricultural Cooperatives." Selected paper, NCERA-210 Annual Conference, St. Paul, Minnesota, November 7, 2018.

**K. Jacobs** and M. Boland. "Consolidation and Producer Impacts in U.S. Ag Co-ops: Is Bigger Better?" Invited paper at the International Cooperative Alliance Research Conference, Wageningen University, The Netherlands, July 5, 2018.

**K. Jacobs.** "Challenges Facing Agricultural Cooperatives: Consolidation, Efficiency and Market Power." Invited joint seminar, Department of Agricultural and Resource Economics and Centre for the Study of Co-operatives, University of Saskatchewan, Saskatoon, Canada, May 11, 2018.

\*Li, Z., D. Hayes, **K. Jacobs.** "The Weather Premium in the U.S. Corn Market." Selected Poster, Agricultural and Applied Economics Association Annual Meeting, Chicago, Illinois, July 31, 2017.

\*Li, Z, D. Hayes, and **K. Jacobs,** "Producer Price Responses in Forward Contracting." Selected Paper, Agricultural and Applied Economics Association Annual Meeting, Boston, Massachusetts, August 1, 2016.

\*\* **Agarwal, S.,** Q. Weninger, K. Jacobs, "Unfolding the Bias in Farm Nitrogen Management." Selected Paper, Agricultural and Applied Economics Association Annual Meeting, Boston, Massachusetts, August 1, 2016.

\***Li, Z.,** D. Hayes, K. Jacobs. "The Reference Price Effect on Crop Producer's Hedging Behavior." Selected Paper, NCCC-134 Conference on Applied Commodity Price Analysis, Forecasting, and Market Risk Management, St. Louis, Missouri, April 18, 2016.

Artz, G. and **K. Jacobs**, "Impact of Consolidation of Grain Cooperatives on Commodity Prices." Selected Paper, Southern Agricultural Economics Association Annual Meeting, San Antonio, Texas, February 8, 2016.

\* **Li, Z.**, H. Qian and K. Jacobs. "Pricing Under Uncertainty in Agricultural Grain Markets and the Objectives of Cooperatives: A Mixed Oligopoly Analysis." Selected Paper, NCERA-210 Annual Meeting, Minneapolis, Minnesota, November 4, 2015.

\* **Li, C.**, H. Hayes, and K. Jacobs. "Can Corn Stover Alone Meet the Cellulosic Mandate? An Optimal Pricing Mechanism for a Monopsonistic Buyer of Corn Stover." Presentation to Iowa EPSCoR Energy Policy Workshop, Iowa State University, Ames, Iowa, November 4, 2015.

\* **Li, Z.**, D. Hayes and K. Jacobs. "The Reference Price Effect on Crop Producers' Hedging Behavior." Selected Paper, Missouri Valley Economics Association's Annual Meeting, Kansas City, Kansas, October 22 – 24, 2015.

**Jacobs, K.** "Consolidation of Agricultural Farm Supply and Grain Marketing Cooperatives." Selected paper, Agricultural and Applied Economics Association's Annual Meeting, San Francisco, California, July 26 – 28, 2015.

\*\* **Agarwal, S.**, K. Jacobs, Q. Weninger. "Nitrogen Decision Making under Uncertainty: Role of Subjective Beliefs." Selected Poster, Agricultural and Applied Economics Association's Annual Meeting, San Francisco, California, July 26 – 28, 2015.

\* **Li, Z.**, K. Jacobs and D. Hayes. "The Reference Price Effect on Crop Producers' Hedging Behaviors." Selected Poster Agricultural and Applied Economics Association's Annual Meeting, San Francisco, California, July 26 – 28, 2015.

**Orgler, L.**, G. Artz, K. Jacobs, S. Bickelhaupt, C. Dorius, H. Bender, L. Bestler, B. Caissie, M. Dorneich, S. Gahn, M. Lamm, J. Rongerude, A. Smiley-Oyen. "Team-Based Learning Outcomes in Agricultural Education: Developing a Survey Instrument to Evaluate Student Learning." Selected Poster, North American Colleges and Teachers in Agriculture Conference, Athens, Georgia, June 16 – 20, 2015.

Artz, G, **K. Jacobs** and C. Boessen. "Evidence of Peer Effects in Team Based Learning." Selected Poster, Agricultural and Applied Economics Association's Annual Meeting, Minneapolis, Minnesota, July 27 – 29, 2014.

**Jacobs, K.** "Perennial grasses for bioenergy in the central United States: Updates on economics and research progress." Integrated Crop Management Conference, Ames, Iowa, December 4 – 5, 2013.

**Jacobs, K.**, W. Thurman, and M. Marra. "The Effect of Conservation Priority Areas on Bidding Behavior in the Conservation Reserve Program." Agricultural Economics Department Seminar, University of Nebraska, Lincoln, Nebraska, April 12, 2013.

- \* **Li, Z., K. Jacobs and G. Artz.** "The Relative Capital Structure of Agricultural Grain and Supply Cooperatives and Investor Owned Firms." Selected Paper, NCERA 210 Annual meeting, Minneapolis, Minnesota, November 6, 2013.
- \* **Li, Z., K. Jacobs and G. Artz.** "The Relative Capital Structure of Agricultural Grain and Supply Cooperatives and Investor Owned Firms." Selected Poster Agricultural and Applied Economics Association's Annual Meeting, Seattle, Washington, August 12 – 14, 2012.
- Jacobs, K., W. Thurman, and M. Marra.** "How Farmers Bid into the Conservation Reserve Program: An Empirical Analysis of CRP Offers Data." Selected Paper, Agricultural and Applied Economics Association's Annual Meeting, Pittsburgh, Pennsylvania, July 24-26, 2011.
- Jacobs, K., W. Thurman, and M. Marra.** "Location, Location, Location: Do Conservation Priority Area Designations Result in Higher Program Payments and Rent-Seeking Behavior in the Conservation Reserve Program?" Selected Paper, Australian Agricultural and Resource Economic Society's Annual Conference, Melbourne, Australia, February 9-11, 2011.
- Kliebenstein, J., M. Ibarburu, J. Lawrence, T. Baas, K. Prusa, K. Hansen, C. Fedler, D. Wilson, **K. Jacobs.** "Economic Analysis of Increased Levels of Intramuscular Fat in Pork: Producer and Industry Opportunities." Selected Paper, Australian Agricultural and Resource Economic Society's Annual Conference, Melbourne, Australia, February 9-11, 2011.
- Jacobs, K., W. Thurman, and M. Marra.** "Location, Location, Location: Do Conservation Priority Area Designations Result in Higher Program Payments and Rent-Seeking Behavior in the Conservation Reserve Program?" Agricultural Economics Workshop, Department of Economics, Iowa State University, Ames, Iowa, December, 2010.
- Jacobs, K.** "The Allocation of Conservation Reserve Program Acreage: A Political Economy Perspective." Department of Economics Seminar, Iowa State University, Ames, Iowa, December, 2008.
- Jacobs, K.** "Optimal Conservation Strategies for Landowners: An Extension Program to Address Conservation Decision on Agricultural Land." Graduate Student Extension Competition at the Agricultural and Applied Economics Association's annual meetings, Orlando, Florida, July 27 – 29, 2008.
- Jacobs, K.** "The Spatial Distribution of the Conservation Reserve Program: A Political Economy Approach." Selected Paper, Agricultural and Applied Economics Association's Annual meetings, Portland, Oregon, July 29 – August 1, 2007.

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## EXTENSION and OUTREACH

\* Graduate student, Chair/Co-Chair of PhD Committee

\*\* Graduate student, PhD Committee Member

### Publications / Articles

(with D.J. Hayes, C.E. Hart, L.L. Schulz and J.M. Crespi). "The Impact of COVID-19 on Iowa's Corn, Soybean, Ethanol, Pork, and Beef Sectors. *Policy Brief 20-BP*. Center for Agricultural and Rural Development, Iowa State University, Ames, Iowa. April 2020.

(with P. Kenkel, G. McKee, M. Boland, B. Briggeman, and J. Park). "Constructing Representative Cooperatives for Policy Analysis and Stakeholder Education." *Staff Paper, Oklahoma State University*, August 11, 2019.

(with \*C. Li and D. Hayes). "The 'Stover Availability versus Supply' Puzzle and Contracting Options for Cellulosic Biomass." *Agricultural Policy Review*. Center for Agricultural and Rural Development, Iowa State University, Ames, Iowa. Winter 2018.

"A Discussion of the Sec 199A Deduction and its Potential Impacts on Producers and Grain Marketing Firms." *farmdoc daily* (8): 13, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, January 26, 2018.

"Ag Cooperatives Consolidating, Too." *AgriMarketing*, April 2017, pages 16 - 18.

"Co-ops managing through low margins." *Ag Decision Maker Newsletter*, Iowa State University, Ames, Iowa. March 2017.

(with \*Z. Li and D. Hayes). "Forward Contracting by Iowa Corn Producers: Connecting Hedging with Price Movements." *Agricultural Policy Review*. Center for Agricultural and Rural Development, Iowa State University, Ames, Iowa. Fall 2016.

"Co-ops Managing Through Low Margins," *Feedstuffs*, August 8, 2016, 44.

(with \*\* S. Agarwal, Q. Weninger and J. Sawyer). "The Yield Response to Nitrogen: Subjective Belief Bias in Nitrogen Management." *Agricultural Policy Review*. Center for Agricultural and Rural Development, Iowa State University, Ames, Iowa. Spring 2016.

"The Capital Structures of Iowa's Grain and Agricultural Supply Firms: Are Cooperative Different than Their Investor-Owned Counterparts?" *Ag Decision Maker Newsletter*, Iowa State University, Ames, Iowa. May 2015.

(with S. Harlow). "Research Summary: Competition for Land Use—Why Would a rational Producers Grow Switchgrass for Biofuel?" *CenUSA Bioenergy*, January 13, 2015.  
<https://farm-energy.extension.org/research-summary-competition-for-land-use-why-would-a-rational-producer-grow-switchgrass-for-biofuel/>

(with Q. Weninger). "Nitrogen Management under Uncertainty: An Investigation of Farmers' Decision Processes." *Agricultural Policy Review*. Center for Agricultural and Rural Development, Iowa State University, Ames, Iowa. Winter 2015.

(with C. Hart). "Cooperative Grain Margins and Implications of Crop Price Movements and Market Inverses." *Ag Decision Maker Newsletter*, Iowa State University, Ames, Iowa. December 2014.

"Who Owns the Cooperative?" *Ag Decision Maker Newsletter*, Iowa State University, Ames, Iowa. February 2014.

"Perennial grasses for bioenergy in the central United States: Updates on economics and research progress." *Proceedings of the 25<sup>th</sup> Annual Integrated Crop Management Conference*. Iowa State University. Ames, Iowa. December 2013.

"Understanding the Economics of a System of Perennial Grasses for Bioenergy in the Central United States." *Proceedings of the 24<sup>th</sup> Annual Integrated Crop Management Conference*. Iowa State University, Ames, Iowa. November 2012.

#### **Published Decision Tools, Information Files and Media**

"How Patronage from Selling Grain to a Cooperative Affects Your Net Marketing Price." *Ag Decision Maker*, File A2-80, September 2019.

"The Non-Price Risks of Credit Sale Contracts: Know Your Grain Buyer." *Ag Decision Maker*, File A2-81, September 2019.

"The Section 199A Deduction: Potential Impacts on Farm Prices and Income." *Ag Decision Maker*, File A2-82, September 2019.

"Evaluating a Company's Financial Position before Selling Grain on Deferred Price Contracts." Iowa State University Extension and Outreach, Publication FMR 1893, October 2017.  
<https://store.extension.iastate.edu/product/15305>

(with R. Ginder) "Condominium Grain Storage." *Ag Decision Maker*, File A2-36, September 2017.

"Co-op 101: Historic Foundations." *Ag Decision Maker Video*, in collaboration with Iowa Institute for Cooperatives, February 2017.

"Co-op 101: Ownership and Governance." *Ag Decision Maker Video*, in collaboration with Iowa Institute for Cooperatives, February 2017.

"Co-op 101: How Cooperatives Differ." *Ag Decision Maker Video*, in collaboration with Iowa Institute for Cooperatives, February 2017.

“Co-op 101: Economic Benefits.” Ag Decision Maker Video, in collaboration with Iowa Institute for Cooperatives, February 2017.

“Co-op 101: Benefits to Employees.” Ag Decision Maker Video, in collaboration with Iowa Institute for Cooperatives, February 2017.

“Understanding Ag Cooperatives’ Equity and Patronage.” Ag Decision Maker Webinar video, collaboration with Center for Agricultural Law and Taxation, Iowa State University, December, 2016.

(with \*R. Martinez-Feria and M. Wiedenhoeft). “Estimated Costs of Production for Winter Canola in Iowa.” Ag Decision Maker, Information File and Decision Tool, File A1-24, July 2016.

(with R. Mitchell and C. Hart). “To Grow or Not to Grow: A Tool for Comparing Returns to Switchgrass for Bioenergy with Annual Crops and CRP.” Ag Decision Maker, Information File and Decision Tool, File A1-27, January 2016.

(with L. Schulz). “Managed Haying or Grazing of CRP Acres.” Ag Decision Maker, Information File and Decision Tool, File B1-60, September 2013.

### **Extension Presentations and Workshops**

“How Cooperatives Differ and Why It Matters.” MFA Oil Employee Workshop, May 12, 2021.

“Cooperatives: The Workhorse of Agriculture and Champion of Capitalist Economies.” Land O’Lakes Global Food Challenge Internship Workshop. June 29, 2020.

“Thoughts on Growth and Co-op Culture Development.” Cooperative Lunch and Learn, Texas A&M University. June 18, 2020.

“Cooperative Foundations.” Co-op Intern and New Employee Webinar, Summer 2020  
Cooperatives Course, Iowa Institute for Cooperatives. May 26, 2020.

“Leadership Challenges Unique to Ag Co-ops.” Executive MBA Leadership Speaker Series, Ivy College of Business, Iowa State University, Ames, Iowa. March 27, 2020.

“Co-op Board Strategic Engagement During Challenging Economic Conditions.” Minnesota Grain and Feed Association Annual Convention, Bloomington, Minnesota. March 4, 2020.

“Board Principles and Practices.” 21<sup>st</sup> Century Cooperative Board Retreat, Omaha, Nebraska. January 31, 2020.

“Cooperative Financial Statements and Analysis.” Phase 3, Director Certification Program, Iowa Institute for Cooperatives, Cedar Falls, Iowa. January 24, 2020.



- “Co-op 101: Organizational Structure, History, and Director Responsibilities and Roles.” Phase 1, Director Certification Program, Iowa Institute for Cooperatives, Storm Lake, Iowa. January 21, 2020.
- “Board Leadership and Strategic Planning.” Phase 2, Director Certification Program, Nebraska Cooperative Council, Kearney, Nebraska. January 8, 2020.
- “Cooperative Financial Statements and Analysis.” Phase 3, Director Certification Program, Nebraska Cooperative Council, Kearney, Nebraska. January 7, 2020.
- “State of Iowa’s Farm Economy,” Mid-Year Outlook – Plans, Priorities and Expectations in the Public and Private Marketplace, Gilbert & Cook, West Des Moines, July 18, 2019.
- “Co-op 101 and the Principles of Cooperation,” Cooperative Intern Day, Iowa Institute for Cooperatives, Huxley Learning Center, June 11, 2019.
- “Creating Awareness of the Cooperative Model in Your Labor Market,” Human Resources / Accountants Spring Conference, Iowa Association of Electric Cooperatives, West Des Moines, May 9, 2019.
- “Governance with a Focus on Strategic Financial Management,” Graduate Director Seminar, Nebraska Cooperative Council, Kearney, Nebraska, February 7, 2019.
- “Co-op 101 Organizational Structure, History, and Director Responsibilities and Roles.” Phase 1, Director Certification Program, Iowa Institute for Cooperatives, Cedar Falls, Iowa. January 31, 2019.
- “Cooperative Financial Statements and Analysis.” Phase 3, Director Certification Program, Iowa Institute for Cooperatives, Storm Lake, Iowa, January 30, 2019
- “Impact of Tax Reform and Section 199A on Agricultural Cooperatives and Members.” NCERA-210 Research Committee and eXtension Cooperatives Community of Practice Webinar, January 16, 2019. <http://dasnr.adobeconnect.com/pq0l25qjy6fv/>
- “Governance with a Focus on Strategic Financial Management.” Minnesota Cooperative Leadership Program, Cooperative Network and University of Minnesota, Morton, Minnesota, January 10, 2019.
- “Board Leadership and Strategic Planning.” Phase 2, Director Certification Program, Nebraska Cooperative Council, Kearney, Nebraska, January 9, 2019.
- “Cooperative Financial Statements and Analysis.” Phase 3, Director Certification Program, Nebraska Cooperative Council, Kearney, Nebraska, January 8, 2019.
- “Cooperative Financial Statements.” Mid Management Development – Phase I, Iowa Institute for Cooperatives, Ames, Iowa. December 18, 2018.

- “The Sec 199A Pass-Through Deduction: What it Means for Producers and Cooperatives.” Iowa State University ProAg Series, Carroll County Extension Office, Carroll, Iowa, November 11, 2018.
- “Sec 199A Pass-Through Decisions for Co-op Boards.” Iowa Institute for Cooperatives CFO/Controller Conference, Ames, Iowa, October 10, 2018.
- “Producer Cooperatives and Membership in a Dynamic Marketplace: What Does This Mean for Producers?” Iowa Women in Agriculture Annual Conference, Ankeny, Iowa, August 2, 2018.
- “Foundations of Cooperatives.” Iowa Cooperative Intern Day, Huxley, Iowa. June 14, 2018.
- “What the Sec 199A Tax Feature Means for Co-ops and Producers.” North Central Farm Management Extension Committee, Ames, Iowa, May 18, 2018.
- “What the Tax Reform Means for Your Cooperative and Its Members.” Cooperative Network’s Dairy Issues Forum, Eau Claire, Wisconsin, April 10, 2018.
- “The Cooperative Way: A Business Model.” Des Moines Area Community College, Carroll, Iowa. March 28, 2018. (with Jim Gossett, CEO, Raccoon Valley Electric Cooperative)
- “Dovetailing Member Value and Expectations with Strategic Financial Management.” Minnesota Grain and Feed Association Annual Convention, Prior Lake, Minnesota, March 7, 2018.
- “Cooperative Profits and Equity Basics.” Mid-Iowa Cooperative Associate Board Training, Conrad, Iowa. February 13, 2018.
- “Cooperative Financial Statements and Analysis.” Phase 3, Director Certification Program, Iowa Institute for Cooperatives, Cedar Falls, Iowa, February 2, 2018.
- “Co-op 101 and Director Basics.” Phase 1, Director Certification Program, Iowa Institute for Cooperatives, Storm Lake, Iowa. January 30, 2018.
- “Impact of the 2017 Tax Reform and Jobs Act on Ag Cooperatives.” NCERA-210 Research Committee and eXtension Cooperatives Community of Practice Webinar, January 29, 2018.
- “Understanding Cooperative Financials and Impacts to Your Farm.” Production and Marketing Risk Seminar, Iowa State Bank and Sac Realty & Insurance, Sac City, Iowa, January 23, 2018.
- “Governance with a Focus on Strategic Financial Management.” Advanced Director Training, Nebraska Cooperative Council, Kearney, Nebraska, January 6, 2018.

- “Board Leadership and Strategic Planning.” Phase 2, Director Certification Program, Nebraska Cooperative Council, Kearney, Nebraska, January 4, 2018.
- “Cooperative Financial Statements and Analysis.” Phase 3, Director Certification Program, Nebraska Cooperative Council, Kearney, Nebraska, January 3, 2018.
- “Consolidation and Competition in Midwest Agriculture Are These Game Changers?” University of Minnesota and Minnesota Crop Production Retailers Association Crop Pest Management Short Course, Minneapolis, Minnesota, December 13, 2017.
- “Becoming a Cooperative Board Influencer.” ISU Extension and Outreach Women in Ag Leadership Conference, Iowa State University, Ames, Iowa, November 27, 2017.
- “Pressing Issues of Ag Cooperatives and Their Producer-Members.” Pro-Ag Meeting on Management Options for Lenders and Agribusinesses, Iowa State University Extension and Outreach, Fort Dodge and Mason City, Iowa, November 16 & 17, 2017.
- “Economic Trade-offs of Agricultural Consolidation.” Farmer Cooperatives Conference, St. Paul, Minnesota, November 3, 2017.
- “The Cooperative Way: A Business Model.” Des Moines Area Community College, Carroll, Iowa. October 9, 2017. (with Jim Gossett, CEO, Raccoon Valley Electric Cooperative)
- “Board Presidents and Vice Presidents: Responsibilities and Leadership.” Board Officers Workshop, Iowa Institute for Cooperatives, Ames, Iowa, July 11, 2017.
- “Consolidation Trends among Ag Co-ops.” Nationwide Board Council Meeting on Economics and Agriculture, Des Moines, Iowa. June 8, 2017.
- “Governance Basics and Leadership Roles.” Western Iowa Dairy Alliance Workshop, Sheldon, Iowa. April 5, 2017.
- “Cooperative Challenges and Pressure on Leadership.” Master of Agribusiness’s Cooperative Symposium, Texas A&M University, College Station, Texas. March 31, 2017.
- “Co-op 101: Does the Co-op Model Fit Your Needs?” Webinar, Iowa Farmers Union, Ames, Iowa. March 20, 2017.
- “Co-op Finance and Equity Basics: Generating Value.” Mid-Iowa Cooperative CEO and Board Roundtable, Conrad, Iowa. March 9, 2017.
- “Boards and Management: Responsibilities, Limitations, and Challenges in Navigating Both.” Iowa Communications Alliance Annual Meeting, Des Moines, Iowa. March 7-8, 2017.
- “Iowa’s Ag Cooperatives: What’s Now.” Nevada Rotary Club’s Urban Rural Day, Nevada, Iowa. March 1, 2017.

- “Insights for Improved Participation in the Delivery of Corn Stover to Cellulosic Ethanol Plants.” American-Made BioEnergy from Field to Refinery: Feedstock Logistics, a Council on Food, Agricultural and Resource Economics (C-FARE) and Office of Chief Economist, USDA event. National Press Club, Washington, D.C. February 17, 2017.
- “The Future of Cooperatives.” Moderator, National Council of Farmer Cooperatives’ Annual Meeting, Fort Lauderdale, Florida. February 16, 2017.
- “Cooperative Leadership and Governance: Who Is Responsible?” Iowa Association of Electric Cooperatives’ Iowa Directors’ Update, West Des Moines, Iowa. February 2, 2017.
- “Consolidation and Competition in Ag: Are These Game Changers?” Iowa Chapter of American Society of Farm Managers and Rural Appraisers’ Annual Meeting, Ames, Iowa. February 1, 2017.
- “Board Leadership and Strategic Planning.” Phase 2, Director Certification Program, Iowa Institute for Cooperatives, Cedar Falls, Iowa. January 27, 2017.
- “Co-op 101 and Director Basics.” Phase 1, Director Certification Program, Iowa Institute for Cooperatives, Cedar Falls, Iowa. January 26, 2017.
- “Cooperative Financial Statements and Analysis.” Phase 3, Director Certification Program, Iowa Institute for Cooperatives, Storm Lake, Iowa. January 25, 2017.
- “Cooperative Performance Study and Equity Options.” StateLine Cooperative Board Strategic Planning Session, Des Moines, Iowa. January 18, 2017.
- “Board Leadership and Strategic Planning.” Phase 2, Director Certification Program, Nebraska Cooperative Council, Kearney, Nebraska, January 6, 2017.
- “Cooperative Financial Statements and Analysis.” Phase 3, Director Certification Program, Nebraska Cooperative Council, Kearney, Nebraska, January 5, 2017.
- “Understanding Ag Cooperatives’ Equity and Patronage.” Webinar, Center for Agricultural Law and Taxation, Iowa State University. December 20, 2016.
- “Cooperative Financial Statements.” Mid Management Development – Phase I, Iowa Institute for Cooperatives, Ames, Iowa. December 13, 2016.
- “How a Co-op is Different and Why It Matters.” Ag Partners, L.L.C. Employee Workshop, Storm Lake, Iowa. December 8, 2016.
- “Cooperative Leadership for Tomorrow: Success Starts in the Boardroom.” NTCA 2016 Board Officers Seminar, Des Moines, Iowa. October 23, 2016.

- “Cooperative Status and Trends: Iowa.” Bill Fitzwater Cooperative Symposium, Stillwater, Oklahoma. October 20, 2016.
- “The Cooperative Way: A Business Model.” Des Moines Area Community College, Carroll, Iowa. October 3, 2016. (with Jim Gossett, Raccoon Valley Electric Cooperative)
- “Current Ag Co-op Conditions and Outlook.” Taygold Cooperative’s Board Planning Session, Des Moines, Iowa. September 8, 2016.
- Raccoon Valley Electric Cooperative Annual Meeting, Glidden, Iowa. September 7, 2016.
- “Board Presidents and Vice Presidents: Responsibilities and Leadership.” Board Officers Workshop, Iowa Institute for Cooperatives, Ames, Iowa, July 12, 2016.
- “Co-op 101: How a Co-op is Different and Why It Matters.” Iowa Cooperative Intern Day, Huxley, Iowa. June 23, 2016.
- “Cooperative Financial Statements and Analysis.” Phase 3, Director Certification Program, Iowa Institute for Cooperatives, Waterloo, Iowa. February 19, 2016.
- “Board Leadership and Strategic Planning.” Phase 2, Director Certification Program, Iowa Institute for Cooperatives, Storm Lake, Iowa. February 17, 2016.
- “Co-op 101 and Director Basics.” Phase 1, Director Certification Program, Iowa Institute for Cooperatives, Storm Lake, Iowa. February 16, 2016.
- “Update on Local Ag Cooperatives’ Benchmarks.” Harlan Farm Service Cooperative Strategic Planning Session, Des Moines, Iowa. February 11, 2016.
- “Consolidation of Iowa Cooperatives.” Winter Workshop, Iowa Institute for Cooperatives, Waterloo, Iowa. January 14, 2016.
- “Consolidation of Iowa Cooperatives.” Winter Workshop, Iowa Institute for Cooperatives, Storm Lake, Iowa. January 13, 2016.
- “Cooperative Financial Statements and Analysis.” Phase 3, Director Certification Program, Nebraska Cooperative Council, Kearney, Nebraska, January 5, 2016.
- “The Cooperative Model: Opportunities and Flexibility.” Iowa Farmers Union Annual Meeting, Des Moines, Iowa. November 21, 2015.
- “Update on Local Ag Cooperatives’ Benchmarks.” Iowa Institute for Cooperatives’ Summer Workshop, Ankeny, Iowa. June 30, 2015.
- “Financial Perspectives on Agricultural Cooperatives.” National Agricultural Credit Committee Meeting, Federal Reserve Bank of Kansas City, Kansas City, Missouri. October 16, 2014.

Updated: May 2021

“Competition for Land Use: Why would the rational producer grow switchgrass for biofuel?”  
Webinar, CenUSA Bioenergy, Iowa State University. May 30, 2014.  
<http://farmenergymedia.extension.org/video/competition-land-use-why-would-rational-producer-grow-switchgrass-biofuel>

“Equity Systems.” Workshop, Famers Cooperative Company, Ames, Iowa, August 18, 2014.

“Co-ops 101.” Workshop, Farmers Cooperative in Ames, Iowa. March 11, 2014.

“Understanding Changes in Equity and Implications for Strategic Planning.” Iowa Institute for Cooperatives’ Summer Workshop, Ankeny, Iowa. June 29, 2013.

“Foundations, Principles, and the Economics of Cooperative Business.” Midwest Aronia Association’s Annual Conference, West Des Moines, Iowa. April 5, 2013.

“Understanding the economics of a system of perennial grasses for bioenergy in the Central United States.” Integrated Crop Management Conference, Ames, Iowa. November 28 – 29, 2012.

“Public Policy and Economics of Conservation Programs.” Conference on Grazing on Public and Privately Managed Non-Pasture Grasslands, sponsored by the Whiterock Conservancy, Iowa State University, and Iowa Cattleman’s Association, Ames, Iowa. January 2011.

“The Conservation Reserve Program: Options for North Carolina Landowners.” NCSU Extension Workshop on *Current Agricultural Economy for Row Crops: Outlook and Marketing, Risk Management and Farm Policy*, Plymouth, North Carolina. January, 2008.

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## TEACHING and FORMAL INSTRUCTION

### Courses Taught

Econ 207 Applied Economic Optimization: S12

Econ 230 Farm Business Management: S10, S11, F11

Econ 332 Cooperatives: S13, F13, F14, F15, F16, F17, F18, F19, F20

Econ 466 Agricultural Finance: F10, F11, F13

Econ 495 Cooperative Domestic Travel Course: F18

### Guest Lectures

“Cooperatives: Managing Alignment of Firm Control, Capitalization, and Benefits,” ABM3286 Managerial Decision Making, University of Missouri, Spring 2021

“Cooperatives and Their Roles in Ag Markets,” ABM2183 Economics of the Food, Fiber and Fuel Supply Chains, University of Missouri, Spring 2021

“Leadership Challenges Unique to Ag Co-ops,” EMBA Leadership Speaker Series, Iowa State University, March 27, 2020.

Updated: May 2021

“Uniqueness of Ag Co-ops,” presented to the ISU Ivy Executive MBA Faculty, April 16, 2019.

“Capital Structure of Co-ops, Patronage, and Equity Considerations for Producers.” Econ 466 Agricultural Finance, Iowa State University, Fall 2018.

“Cooperatives in Ag Marketing.” Econ 235 Intro to Agricultural Markets, Iowa State University, Spring 2018.

“Cooperatives in Ag Marketing.” Econ 235 Intro to Agricultural Markets, Iowa State University, Fall 2017.

“Financial Intermediaries in Agriculture.” Econ 466 Agricultural Finance, Iowa State University, Spring 2017.

“Co-op 101: How Does Doing Business with a Cooperative Effect My Operation?” Econ 230 Farm Management, Iowa State University, Spring 2016.

“Intro to Cooperatives and Finance: Issues and Nuances,” Econ 466 Agricultural Finance, Iowa State University, Fall 2014.

“Current Issues in Agriculture” with Lee Schulz. AnSci 211/411 Issues in Animal Science, Iowa State University, Spring 2013.

“Economics of Integrated Crop and Livestock Systems: Perspectives in Economic Evaluation of Enterprises,” SusAg 515 Integrated Livestock and Production Systems, Iowa State University, Fall 2011.

### **Graduate Student Committees**

\* Chair/Co-Chair of PhD Committee

#### *Current*

Bennett Barr, PhD, Ag Biosystems Engineering, ISU

Ryan Goodrich, PhD, Economics, ISU

Lucy McGowan, PhD, Managerial, Behavioral and Organizational Economics, U of Missouri

Oranuch Wongpiyabovorn, PhD, Economics, ISU

#### *Completed*

Chenzi Lv, Economics, PhD, Economics, ISU, 2020

Ahmed Tariq Aziz, PhD, Economics, ISU, 2020

\* Ziran Li, PhD, Economics, ISU, 2017

Sai Ramaswamy, PhD, Industrial and Agricultural Technology, ISU, 2017

Sandip Agarwal, PhD, Economics, ISU, 2017

Chao Li, PhD, Economics, ISU, 2016

Savanna Lyons, MS, Economics, ISU, 2016

Updated: May 2021

Daniel Alexander, MS, Economics, ISU, 2016  
Wei Zhou, PhD, Economics, ISU, 2015  
Rafael Martinez-Feria, MS, Agronomy, ISU, 2015  
Julia Winter, MS, Graduate Program in Sustainable Agriculture, ISU, 2014  
Kodjo Drogenou, MS, Economics, ISU, 2013  
Nathan Kauffman, PhD, Economics, ISU, 2012  
Juan Francisco Rosas, PhD, Economics, ISU, 2012  
Alicia Rosburg, PhD, Economics, ISU, 2012  
Matthew Stinn, MS, Economics, ISU, 2012

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## **FINANCIAL SUPPORT**

### **Funded Grants and Contracts**

#### *External Funding - Awards*

Project Director, “Agricultural Supply Chain Disruptions, Costs, and Mitigation Strategies to Enhance Resiliency of the U.S. Food Supply.” \$457,011. Rapid Response to Novel Coronavirus (SARS-CoV-2) Impacts Across Food and Agricultural Systems, 2020 USDA AFRI Competitive Grants Program, Aug 2020 – Jul 2022.

Co-Principal Investigator with M. Boland, “Advanced Cooperative Director Certification: A National Program to Address Agricultural Cooperative Director Education.” \$20,000. 2020 Cooperative Education Grant, CHS Foundation, Mar 2020 – Mar 2021.

Co-Principal Investigator with Q. Weninger, “Subjective Beliefs, Decision Making Under Uncertainty and the Design of Nutrient Management Policy in U.S. Agriculture. \$196,257. Competitive grant awarded by the U.S. Department of Agriculture, National Institute of Food and Agriculture, Apr 2017 – Mar 2021.

Principal Investigator, “Iowa State University’s Experiential Cooperatives Course.” \$7,000. 2019 Cooperative Education Grants Program, CHS Foundation, May 2019.

Co-Project Director with scientists and researchers from nine institutions, led by R. Brown, Iowa State University. “Agro-Ecosystem Approach to Sustainable Biofuels Production via the Pyrolysis-Biochar Platform.” \$25,000,000. Competitive grant awarded by the U.S. Department of Agriculture, National Institute of Food and Agriculture, Jul 2011 – Jul 2017.

Co-Principal Investigator with D. Jarboe, G. Artz, and K. Kimle. “Iowa Alliance for Cooperative Business Development.” \$175,000. Competitive grant awarded by the Rural Business Cooperative Service, USDA, Jan 2013 – Aug 2014.

Principal Investigator. “Understanding the Local Level Supply Elasticity of Land Cover in the CRP.” \$23,148. Contract awarded by the National Pork Producers Council, Jan 2012 – Dec 2012.



Co-Principal Investigator with C. Hart. "Balancing Environmental and Feed Availability Concerns." \$55,781. Contract awarded by the National Pork Producers Council, Sep 2011 – Jun 2012.

Co-Principal Investigator with D. Hennessy and H. Feng. "Federal Insurance Payments and Land Conversion: Impacts, Estimation and Alternative Policy Design," \$124,288. Contract awarded by Ducks Unlimited, 2010 – 2012.

*External Funding – Not Awarded*

Co-Principal Investigator with M. Boland and W. Secor, "Economic Analysis of Agribusiness Asset Reinvestment under Alternative Tax Policies: 2004 – 2024." Agriculture Economics and Rural Communities Program Area, 2020 USDA NIFA AFRI Competitive Grant Program. Submitted Agricultural Supply Chain Disruptions, Costs, and Mitigation Strategies to Enhance Resiliency of the U.S. Food Supply." \$500,000. Submitted May 2020.

*Internal Funding - Awards*

"Exploring Diversity of Cooperative Businesses in the United State." \$3,000. Learning Across America Program, College of Agriculture and Life Sciences, Iowa State University, 2019.

Co-Principal Investigator with M. Lamm, A. Smiley-Oyen, M. Dorneich, H. Bender, S. Gahn, S. Bickelhaupt, G. Artz, and C. Dorius. "Team-Based Learning Outcomes: Developing a Survey Instrument to Evaluate Student Motivation and Beliefs and Learning." \$14,760. Miller Faculty Fellowship Program, 2014 – 2016.

Principal Investigator. "Exploring the Potential for Iowa Cooperatives' to Advance Feedstock Market Development." \$15,000. EPSCoR Seed Grant, Mar 2014 – Aug 2014.

Co-Principal Investigator with L. Schulz. "Livestock Producer costs Under Haying and Grazing Provisions in the Conservation Reserve Program." \$2,992. Competitive contract awarded by the Iowa Beef Center, Oct 2012 – Aug 2013.

Principal Investigator. "Optimal Nitrogen Usage under Uncertainty: Potential Implications of Nitrogen Use Reduction on Acres Available for Biomass Production." \$37,500. Competitive contract awarded by the Biobased Industry Center, 2011 – 2012.

Co-Principal Investigator with J. Miranowski. "Cellulosic Biofuel Potential under Limited Land Use Change: Feedstock Supplies, Costs, and Locations." \$37,500. Competitive contract awarded by the Biobased Industry Center, 2011 – 2012.

**Other Financial Support**

*Iowa Institute for Cooperatives Economics Professorship, \$500,000, 2013 - 2020*

An endowment from the cooperatives in Iowa to the College of Agriculture and Life Sciences, the proceeds from which support my extension, research, and teaching related to cooperatives. I leverage this gift to develop and delivery programming for cooperatives and provide experiential and research opportunities for graduate and undergraduate students. Funded 2013.

*CoBank Fund for Excellence in Cooperatives Economics, \$250,000, 2013 - 2017*

A five-year gift to support extension, research and teaching initiatives related to cooperatives.  
Funded September 2013.

*Barbara and Thomas Lyon Scholarship for Study of Agricultural Cooperatives, \$70,000, 2012*

A gift to the Department of Economics provides an annual scholarship to a graduate student with an expressed interest in studying or pursuing a career in cooperative business enterprises.  
Funded May 2012.

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## **SERVICE**

### **Division of Applied Social Sciences, University of Missouri-Columbia**

*Department Ad Hoc Committee Service*

Recruiting Committee: 2021

### **Iowa State University**

*Department of Economics Standing Service Roles*

Program Director, MS Ag Econ: 2019 – 2020

Promotion and Tenure Committee: 2018 – 2019

Economics Council: 2014 (*Secretary*), 2015 – 2016, 2019 (*Secretary*), 2020

Budget Advisory Committee: 2018 – current

Undergraduate Curriculum Committee: 2011 – 2016, 2018 – 2019 (*Chair*)

Undergraduate Coordinator: 2018 – 2019

Faculty Awards Committee: 2016 - 2018

*Department of Economics Ad Hoc Committee Service*

Graduate Program Review Committee: 2015 - 2016

Recruiting Committee for Agricultural Business position: 2012

*College of Agriculture and Life Sciences and University Service*

Iowa Grain Quality Initiative, Management team: 2016 – 2020

Farm Financial Stress Taskforce: 2014 – 2020

CALS Curriculum Committee: 2018 – 2019

Rural Workforce Development: 2017 – 2019

### **Professional Service**

*Industry Committees*

NCBA Cooperative Business Journal Editorial Committee: 2020 - present

Land O'Lakes Research Advisory Committee, CD4: 2019 – current

Iowa Communications Alliance (ICA) Directors Training Committee: 2014 – 2019

*Academic Committees*

Farmer Cooperative Conference Planning Committee: 2013 – present

Choices Editorial Council: 2018 – current

NCERA 210: 2013/14 (*Secretary*), 2014/15 (*Vice Chairperson*), 2015/16 (*Chairperson*)

Updated: May 2021

AAEA Extension Section Executive Committee (*Secretary*): 2014 – 2017

*Reviewer / Referee Service*

Agribusiness

Agricultural and Applied Economics Association Annual Meeting (abstract reviewer)

Agricultural Economics

Agricultural Finance Review

American Journal of Agricultural Economics

Applied Economics Perspectives and Policies

Environmental Research Letters

European Association of Agricultural Economists (abstract reviewer)

International Food and Agribusiness Management Review

Journal of Agriculture and Food Economics

Journal of Cooperatives

Renewable Agriculture and Food Systems

Western Agricultural Economics Association (abstract reviewer)

## Truth in Testimony Disclosure Form

In accordance with Rule XI, clause 2(g)(5)\* of the *Rules of the House of Representatives*, witnesses are asked to disclose the following information. Please complete this form electronically by filling in the provided blanks.

Committee: Agriculture

Subcommittee: Livestock and Foreign Agriculture

Hearing Date: 07/28/2021

Hearing Title :

**State of the Beef Supply Chain: Shocks, Recovery, and Rebuilding**

Witness Name: Keri L. Jacobs

Position/Title: Associate Professor, Ag and Applied Economics

Witness Type: ☐ Governmental ☒ Non-governmental

Are you representing yourself or an organization? ☐ Self ☒ Organization

If you are representing an organization, please list what entity or entities you are representing:

University of Missouri

### **FOR WITNESSES APPEARING IN A NON-GOVERNMENTAL CAPACITY**

Please complete the following fields. If necessary, attach additional sheet(s) to provide more information.

Are you a fiduciary—including, but not limited to, a director, officer, advisor, or resident agent—of any organization or entity that has an interest in the subject matter of the hearing? If so, please list the name of the organization(s) or entities.

**Please list any federal grants or contracts (including subgrants or subcontracts) related to the hearing's subject matter that you, the organization(s) you represent, or entities for which you serve as a fiduciary have received in the past thirty-six months from the date of the hearing. Include the source and amount of each grant or contract.**

"Agricultural Supply Chain Disruptions, Costs, and Mitigation Strategies to Enhance Resiliency of the U.S. Food Supply." \$457,011. Rapid Response to Novel Coronavirus (SARS-CoV-2) Impacts Across Food and Agricultural Systems, 2020 USDA AFRI Competitive Grants Program, Aug 2020 – Jul 2022.

**Please list any contracts, grants, or payments originating with a foreign government and related to the hearing's subject that you, the organization(s) you represent, or entities for which you serve as a fiduciary have received in the past thirty-six months from the date of the hearing. Include the amount and country of origin of each contract or payment.**

**Please complete the following fields. If necessary, attach additional sheet(s) to provide more information.**

- ☒ I have attached a written statement of proposed testimony.
- ☒ I have attached my curriculum vitae or biography.

\* Rule XI, clause 2(g)(5), of the U.S. House of Representatives provides:

(5)(A) Each committee shall, to the greatest extent practicable, require witnesses who appear before it to submit in advance written statements of proposed testimony and to limit their initial presentations to the committee to brief summaries thereof.

(B) In the case of a witness appearing in a non-governmental capacity, a written statement of proposed testimony shall include— (i) a curriculum vitae; (ii) a disclosure of any Federal grants or contracts, or contracts, grants, or payments originating with a foreign government, received during the past 36 months by the witness or by an entity represented by the witness and related to the subject matter of the hearing; and (iii) a disclosure of whether the witness is a fiduciary (including, but not limited to, a director, officer, advisor, or resident agent) of any organization or entity that has an interest in the subject matter of the hearing.

(C) The disclosure referred to in subdivision (B)(iii) shall include— (i) the amount and source of each Federal grant (or subgrant thereof) or contract (or subcontract thereof) related to the subject matter of the hearing; and (ii) the amount and country of origin of any payment or contract related to the subject matter of the hearing originating with a foreign government.

(D) Such statements, with appropriate redactions to protect the privacy or security of the witness, shall be made publicly available in electronic form 24 hours before the witness appears to the extent practicable, but not later than one day after the witness appears.