

## Basic Information

- **Project No. and Title:** WERA72 : Agribusiness Scholarship Emphasizing Competitiveness
- **Period Covered:** 06/04/2021 to 06/02/2022
- **Date of Report:** 09/09/2022
- **Annual Meeting Dates:** 06/01/2022 to 06/02/2022

## Participants

Downey, Scott (downeyws@purdue.edu) - Purdue University; Brooks, Kate (kbrooks4@unl.edu) - University of Nebraska-Lincoln; Clark, Jennifer (tspartin@ufl.edu) - University of Florida; Ward, Ruby (ruby.ward@usu.edu) - Utah State University; Johnson, Aaron (ajjohnson@ksu.edu) - Kansas State University; Larsen, Ryan (ryan.larsen@usu.edu) - Utah State University; Lyles, Ivory (ivory.lyles@oregonstate.edu) - Oregon State University; Ripplinger, David (david.ripplinger@ndsu.edu) - North Dakota State University; Sterns, James (jasterns@oregonstate.edu) - Oregon State University; Zuo, Na (nazuo@email.arizona.edu) - University of Arizona; Asci, Serhat (sasci@csufresno.edu) - Fresno State; Boerngen, Maria (maboern@IllinoisState.edu) - Illinois State University; Harper, Dave (david.harper@kirkwood.edu) - Kirkwood Community College; Ross, Brent (ross@msu.edu) - Michigan State University; Tewari, Rachna (rtewari@utm.edu) - University of Tennessee at Martin; Blare, Trent (tblare@ufl.edu) - University of Florida; Simandjuntak, Daniel (dps5776@psu.edu) - Penn State University; Bergtold, Jason (bergtold@ksu.edu) - Kansas State University; Ng, Desmond (dng@tamu.edu) - Texas A&M University; Uddin, Md Azhar (mdazharuddin@ufl.edu) - University of Florida; Delbridge, Tim (delbridt@oregonstate.edu) - Oregon State University.

:

Attached file:

[WERA72\\_ListServ\\_09\\_09\\_2022.pdf](#)

## Brief Summary of Minutes of Annual Meeting

WERA72 Business meeting minutes and 2022 Agenda attached.

Summary: The 2022 annual meeting was held as a hybrid (in-person & online) format this year. In-person attendance met in Portland, OR at the OSU Portland Center; virtual members attended via Zoom. Members met and discussed potential collaboration projects within education, Extension, and research. A discussion of upcoming grant opportunities as well as continued discussion of identifying new skills needed by agribusiness graduates and innovations in agribusiness teaching programs needed was discussed during breakout groups.

The 2021 business meeting minutes were moved for approval and unanimously passed. It was recognized that the 2021 meeting approval and subsequent reporting procedures were not followed correctly with documentation in NIMMS due to lack of understanding and will to increase efforts to communicate reporting procedures extended to future WERA-72 leadership.

A motion was made and approved to move the balance of meeting support funds from Purdue University to Oregon State University.

The Chair's report encouraged members to submit annual agribusiness publications for NIMMS reporting. Plans to coordinate increased communication outreach were introduced for the purpose of narrowing the gap between one hundred and forty members on the email list-serv and twenty-one members registered through the NIMMS system. It was agreed upon to more broadly disseminate meeting and

collaboration information through collegial networks and academic professional agricultural, agribusiness, and agricultural economics associations. Members were identified to present WERA-72 presence through the Applied Agricultural Economics Association (AAEA) committees and North American College Teachers of Agriculture (NACTA) meetings, and other associations (e.g., NGA, FDRS), prior to the next annual meeting. A discussion of updates to an informational WERA-72 website, currently hosted by Kansas State, invited participation and opportunity to volunteer as communications officers in this capacity.

The need for mentorship of younger faculty regarding operations of WERA-72 to meet USDA NIMMS requirements and to increase multi-institutional collaborative output was discussed favorably. A recommendation was made by WERA-72 Administrative Advisor, Dr. Ivory Lyles for the group to consider adding a second advisor with an administrative background in university agribusiness programs; a potential candidate with WERA-72 experience and administrative knowledge at the university level was identified.

Continuation of previous meeting discussions reintroduced the desire to organize an informal group of 'Friends of WERA-72', consisting of former WERA-72 Executive Council leadership, as a proactive strategy for learning about the historical context of the WERA-72 organization in TRE efforts, deepen understanding of new challenges in the discipline, and expand promotional efforts supporting increased participation within the WERA-72 coordinating committee activities.

David Ripplinger (NDSU) was elected as WERA-72 Treasurer for the next year. Serhat Asci (Fresno State) was elected as Secretary. Ryan Larsen (USU) moved to Chair's position. Na Zuo (University of Arizona) moved to Chair-Elect. Jennifer Clark moved to Past-Chair.

The 2023 meeting location will be held in Logan, Utah and meeting request filed in NIMMS.

Attached file:

[2021 WERA72 Meeting Report.pdf](#)

## Accomplishments

As stated in the project objectives: The WERA-72 Coordinating Committee plays a key role in facilitating, promoting and advancing agribusiness scholarship by providing an educational, research and extension forum for focusing on fundamental and key issues in agribusiness. Agribusiness scholarship is defined as the creation of knowledge that explains, solves and provides options for agribusiness, and it is fundamental to the future of agribusiness.

### Short-term Outcomes:

We recognize that relevant and key issues facing agribusiness are changing including market structure and access, use and analysis of Big Data, food and energy security, efficiency and productivity of agribusiness firms, among others. In response, WERA-72 participants have focused for several years on identifying how these changes apply to educating and training the next generation of agribusiness professionals as we recognize a changing industry frontier.

Efforts to build faculty consensus and data collection related to employability skills and changing industry needs have been the focus of the last four years (2019-2022) of WERA-72 meetings. We have focused on the role of Extension to identify industry needs that inform research innovations and teaching curriculum. These efforts have led to increased efforts nationally to address the Association of Public Land-Grant Universities' (APLU) identified gaps in employability skills and workforce preparedness among college graduates. WERA-72 efforts to address critical growth areas for students has led to increased understanding in the discipline of the need for innovation in curriculum and outreach through other academic professional associations in this

area. Discussions and collaborative efforts continue to develop among WERA-72 participants in this area and several research groups have been established from these meetings

### **Outputs:**

In 2019, a group of WERA-72 participants attended a post-meeting workshop focus group to discuss relevant information associated with a broad-base of academic units nationally.

In 2020, a discussion was held about gaps within agribusiness TRE and potential deliverables, gaps within agribusiness competencies, interest of formal collaborations and perceived challenges associated with creating deliverables. A summer series of webinars included:

- Developing a research and Extension agenda to address emerging ecosystem service markets
- Continuing WERA's discussion of undergraduate agribusiness competencies (i.e., second round of participant data collection of perceived gaps between student needs and industry demands)
- Lessons from agribusiness curriculum review
- Developing and publishing effective and engaging teaching case studies for agribusiness and applied economics
- Lessons learned from sudden change to remote learning environment
- WERA-72 continues to offer support to graduate students as a forum for their presentations and full contribution as an academic professional.

In 2021, WERA-72 participants from eighteen universities met to discuss TRE efforts in a series of summer webinars including presentations addressing the [USDA/Purdue Jobs Outlook Project](#) and supply chain management and marketing industry professionals' responses.

2022 WERA-72 efforts extended TRE efforts to invite industry feedback and synthesize output generated from previous three years related to APLU research findings and subsequent call to address employability gaps identified in [From Academia to Workforce: Navigating Persistence, Ambiguity, Change and Conflict in the Workplace](#) (2020), and [From Academia to Workforce: Critical Growth Areas for Students Today](#) (2020). This year's annual meeting focus was to focus on listening to industry perspective and empirical evidence related to employability skills and perspective shared about innovations and new skill emphasis recognized as important for agribusiness success on the frontier of a changing industry and dynamic economy.

### **Activities:**

Goal is to continue working with academic and industry collaborators conducting primary survey work in agribusiness programs including partnerships to identify employability skills needed by industry and stakeholders and to translate information into innovative curriculum programs and Extension efforts.

Qualitative primary data was collected from Pacific NW industry representatives to determine factors associated with supply chain resiliency in a changing economy. The panel discussion, held at the WERA-72 annual meeting was titled: *"Resiliency in Agri-Food Systems – For Supply Chain Management, As an Operational Core Competency, As a Strategic Competitive Advantage."* Panelists ranged from value-added processed foods for retail and food-service to ingredient sourcing and bulk ingredient supply. The data informed researchers about changing dynamics occurring in operations and supply chain network relationships resulting from distribution bottlenecks and shifts in consumer demand for products and services.

A group of more than twenty faculty met as a Council on Agribusiness Soft/Essential Skills (CASES) with an objective to incorporate soft/essential skills into existing curriculum across the country. Efforts in this area relate to a new survey instrument being conducted nationally to update the 1987 Litzenberg and Schnieder paper on the AgriMASS survey noting soft skills being highly emphasized in the agribusiness hiring process and

echoed by Boland and Akridge in 2001. Industry evidence also supports the theory that soft/essential skills are further emphasized in an emerging Big-Data driven economy. Preliminary data collected from agribusiness professionals, agricultural economics faculty, and department heads is applying an evidence-based approach to build academy support for developing new curricula that delivers in-demand skills and knowledge. Learning objectives associated with this research includes thinking strategically about business decisions and the interaction between marketing, finance, operations, and human resource dimensions of firms. The goal is to enhance students' problem-solving and decision-making skills and provide opportunities for improving their ability to communicate effectively in both oral and written forms of information exchange.

The International Fresh Produce Association's Vice President of Supply Chain and Sustainability, Mr. Ed Treacy, presented industry technology and innovation insights to WERA-72 participants representing more than thirty years of first-hand experience in his talk, "Adapting to changes in a data-driven industry and perspective on market-ready skills agribusiness graduates need." Mr. Treacy emphasized the need for new graduates to be able to work comfortably and experienced in managing big data sets which are pervasive in industrialized global food supply chains. He synthesized students' skills to essentially be able to organize and analyze data by understanding the relevant variables needed to answer a question, recognize patterns in the data, use software to develop illustrative graphics representing their analysis, and be able to "tell the story that the data presents" to a diverse audience of team members and executive decision-makers. Furthermore, demonstrating the capacity to work in teams that may have competing sub-goals (i.e., for sales, costs, or profit margins) is increasingly a focus of hiring consideration for internships and employment.

An AAEA- Teaching and Learning Committee (AAEA-TLC) continues working on a 2-year project to develop an Innovations in Agricultural Economics Teaching Curriculum Award. The award focuses on program-level (not individual course-level) innovations that clearly address an employability need (e.g., graduate school, industry) with the potential to scale and transfer widely for adoption across academic units. Two sub-groups of multi-institutional collaborators are working in the areas of 1) informing the application and scoring rubric based on extensive literature review and examination of similar academic innovation program awards, and 2) developing a survey instrument to be disseminated nationally to faculty and administrators of land-grant universities with the purpose of establishing a baseline of current curriculum, technology, and learning objectives representing the agribusiness and agricultural economics discipline at the national level.

#### **Milestones:**

- To reach our identification of new and emerging employability skills needed in agribusiness by 2024.
- To recognize innovations in agricultural economics and agribusiness higher-education programs beginning in 2024.
- To successfully apply for and receive a multi-institution led USDA Higher Education Challenge Grant in the areas of employability skills needed in agribusiness to support an increasingly data-driven food and fiber economy and interconnected global supply chain.

## **Impacts**

1. WERA-72 will facilitate the development of quality research, teaching and extension programs in agribusiness and economic development through collaboration in integrated and multi-state work.
2. WERA-72 will work to coordinate special issues of peer-reviewed journals related to a specific theme from the WERA-72 objectives.
3. WERA-72 will develop new ways to disseminate information regarding ongoing research and extension projects to interested parties. This will include greater use of the project website that catalogues past and ongoing research, as well as the potential utilization of new tools that may provide for greater discussion of current issues and the dissemination of research results.

## Publications

### Publications:

Bayabil, H. K., Li, Y., Crane, J., H., Schafer, B., Smyth, A. R., Zhang, S., Evans, E.A., and Blare, T. 2022. Saltwater intrusion and flooding: risks to South Florida's agriculture and potential management practices: threats of saltwater intrusion and flooding to South Florida's agriculture and environment. *AE572*. 5/2022. *EDIS* 2022(3).

Blare, T. and Donovan, J. (2022). Challenges for 'going local' by the tourism sector: Lessons from direct food sourcing initiatives in Cusco, Peru. *Tourism and Hospitality Research*.  
<https://doi.org/10.1177%2F14673584221074923>

Blare, T., Rivera, M., Ballen, F. H., and Brym, Z. 2022. Is a viable hemp industry in Florida's future? FE1116 (English) FE117 (Spanish). *EDIS*. 2022(2).

Blare, T., Ballen, F., Singh, A., Haley, N., and Crane, J. 2022. Profitability and cost estimates for producing Mango (*Mangifera Indica* L.) in South Florida: FE1115 (English) FE118 (Spanish). *EDIS*. 2022(2).

Boerngen, M.A. and J.W. Rickard. (2021). You're all farmers, right? Students' perceptions of classmates' and instructors' experience. *NACTA Journal* 65, Suppl. 1:5.

Boerngen, M.A. and J.W. Rickard. 2021. To Zoom or not to Zoom: The impact of rural broadband on online learning. *Natural Sciences Education* 50:e20044.

Brown, R., Hamilton, L., Kiesel, K., Treme, J., and Zuo, N. (2021). Pedagogical Pivot - Faculty Reflections on the Rapid Transition to Virtual Teaching During COVID-19. *Western Economics Forum*, 19(1): 120-129. (Authors are listed in alphabetical order rather than in order of contribution.)

Brown, R., Buck, S., Kibler, M., Penn, J., and Zuo, N. (2021). Course-Related Student Anxiety During COVID-19: A Problem and Some Solutions. *Applied Economics and Teaching Resources*, 3(1): 1-21. (Authors are listed in alphabetical order rather than in order of contribution.)

Dallin, J., Hadfield, J., Pace, M., Hadfield, J., Smith, J., Greenhalgh, L., Taylor, K., Larsen, R., & Sulser, A. R. (2021, March 01). 4-H/FFA Turkey Dressing Percentage Calculation Tool. *Journal of NACAA*, 14(1).

Garcia, M., Chapman, K., Heaton, K., Dallin, J., Rood, K., Thacker, E., Hadfield, J., & Larsen, R. (2021). Using GPS and Genomic Technology to Provide a More Accurate Estimate of Bull Power in Western Intermountain Beef Systems. *Journal of Animal Science*, 99(Supplement\3), 28--29.

Gardner, J.G., J.R.V. Franken, and M.A. Boerngen. (2022). A research agenda for cooperatives. *Journal of Cooperatives* 37:38-66.

Hadfield, J., Waldron, B. L., Isom, S., Feuz, R., Larsen, R., Creech, J. E., Rose, M. F., Long, J. N., Peel, M. D., Miller, R. L., Rood, K., Young, A., Stott, R. D., Sweat, A., & Thornton, K. J. (2021, August 10). The effects of organic grass and grass-birdsfoot trefoil pastures on Jersey heifer development: Heifer growth, performance, and economic impact. *Journal of dairy science*, 104(10), 10863-10878.

Hoselton, G.S.W.\* and M.A. Boerngen. (2021). Farmers' awareness of and concerns about nutrient loss. *Journal of Soil and Water Conservation* 76(5):387-491.

Mehlhorn, S., I. Lepcha, and R. Tewari (2022). Student Perceptions of Their Online Learning Experience. *NACTA Journal*, 66, 147-153.

Morgan, K. L., Wade, T., Athearn, K., Prevatt, C., Singerman, A., Evans, E. Blare, T., Khachatryan, H., and Guan, Z. (2021). An introduction to Florida commodity enterprise budgets: An extension tool to improve farm financial planning: FE1109. 12/2021. *EDIS*. 2021, (6).

Motsinger, L. A., Young, A., Feuz, R., Larsen, R., Brady, T. J., Briggs, R. K., Bowman, B. R., Pratt, C., & Thornton, K. J. (2021, July). Effects of feeding a novel alfalfa leaf pellet product (ProLEAF MAX™) and alfalfa stems (ProFiber Plus™) on feedlot performance and carcass quality of beef steers. *Translational Animal Science*, 5(3), txab098.

Reichhardt, C. C., Feuz, R., Brady, T. J., Motsinger, L. A., Briggs, R. K., Bowman, B. R., Garcia, M. D., Larsen, R., & Thornton, K. J. (2021, May). Interactions between cattle breed type and anabolic implant strategy impact circulating serum metabolites, feedlot performance, feeding behavior, carcass characteristics, and economic return in beef steers. *Domestic Animal Endocrinology*, 77, 106633.

Rickard, J.W. and M.A. Boerngen. (2022). Perceived agriculture experience impacts the learning environment. *NACTA Journal* 66, Suppl. 1:8.

Sant'Anna, A.C., T. Xia and J.S. Bergtold. (2022). Public Policies versus Market Factors: What Drives Ethanol Expansion in Brazil? *Q Open* 2(1), qoac009, <https://doi.org/10.1093/qopen/qoac009>.

Sant'Anna, A.C., J.S. Bergtold, A. Shanoyan, M. Caldas and G. Granco. (2022). Biofuel Feedstock Contract Attributes, Substitutability and Tradeoffs in Sugarcane Production in the Brazilian Cerrado: A Stated Choice Approach. *Renewable Energy*, 185: 665 - 679.

Styan, J.\*, M.A. Boerngen, and M. Barrowclough. 2021. Factors influencing increased usage of cash rent leases in Illinois. *Journal of the American Society of Farm Managers and Rural Appraisers* 2021:6-16.

Tewari, R., K. Lange, and J. Mehlhorn (2022). Curious or not? Agribusiness students' perceptions of curiosity dimensions. *Journal of Agribusiness*. Accepted April 2022.

### **Presentations:**

Barnes, E., R. Tewari, J. Mehlhorn and A. Delmond. (2022, February 12-15). *Preserving water quality in the U.S mid-south: producer perceptions and willingness to adopt alternative agricultural practices*. [Conference presentation]. Southern Agricultural Economics Association Meetings. New Orleans, LA.

Bergtold, J.S. and B. Briggeman. (2022, May 9). *Active Learning in the Classroom: An Engaging Game About Agricultural Supply Cooperatives*. [Keynote]. Scholarship of Teaching and Learning Showcase, Teaching and Learning Center, Kansas State University.

Blare, T. (2022, September 8). *Are environmental and social justice goals mutually exclusive? Exploring inclusive businesses in Peru's cacao and coffee sectors*. [Conference presentation]. International Workshop on Environmental Justice. Bern, Switzerland.

Blare, T. (2022, September 6). *Application of transformative research to build inclusive and sustainable food systems: Experiences from Latin America and South Florida*. [Invited Speaker]. University of Bern Center for Development & Environment Brown Bag Series. Bern, Switzerland.

Blare, T. (2022, July 20). *Are agroforestry and social goals mutually exclusive? Exploring inclusive businesses in Peru's cacao, coffee, and oil palm sectors*. [Conference presentation]. 5th World Congress on Agroforestry. Quebec City, Canada.

Blare, T. (2022, July 13). *Are environmental and social justice goals mutually exclusive? Exploring inclusive businesses in Peru's cacao and coffee sectors*. [Conference presentation]. 58th Annual Meeting of the Association for Tropical Biology and Conservation. Cartagena, Colombia.

Blare, T. (2022, May 7). *What's the Future of Hemp? Analysis of the Opportunities and Challenges to Strengthen US Hemp Markets*. [Conference presentation]. Florida State Horticulture Society. Sarasota, Florida.

Blare, T. (2022, March 30). *How to Market in a Digital Era: 2022 Florida Agricultural Marketing Manual*. [Poster presentation]. 2022 Extension Risk Management Education National Conference. Omaha, Nebraska.

Blare, T. (2022, August 2). *Effects of the COVID pandemic on agricultural markets & rural communities in the Andes*. [Conference presentation]. Agricultural and Applied Economics Association Annual Meetings (AAEA). Austin, Texas.

Blare, T. (2021, August 31). *Challenges for "going local" by the tourism sector: Lessons from direct food sourcing initiatives in Cusco*. [Conference presentation]. International Conference of Agricultural Economists (virtual).

Blare, T. (2022, April 4). *Market Potential for Floridan Growers in Industrial Hemp*. UF/IFAS Cooperative Extension [In-service Training]. Virtual.

Blare, T. (2022, April 8). *Nine steps to create your own marketing plan*. UF/IFAS Cooperative Extension [In-service Training]. Apopka, FL.

Blare, T. (2022, April 19). *Can I make money growing passion fruit and dragon fruit? Tools to analyze your enterprise's profitability*. [In-service Training]. Homestead, FL.

Blare, T. (2022, June 15). *How to Market in Digital Era. Multi-State Passion Fruit Conference*. [In-service Training]. Homestead, FL.

Brown, R., R. Tewari, and J. Clark. (2022, July 31). *Report and updated proposal from TLC curriculum innovation/accreditation award working group*. [Teaching, Learning and Communication Business Meeting]. Agricultural & Applied Economics Association Annual Meeting, Anaheim, CA.

Clark, J., N. Zuo, and R. Tewari. (2022, June 1). *AAEA TLC Innovation Curriculum Award Developments and Survey Feedback*. [Conference presentation]. WERA-72 Annual Meeting Portland, OR.

Clark, J. and Sharp, M. (2022). *Using mapping tools in Excel for visual data analytics*. [Conference presentation]. Applied Agricultural Economics Association Annual Meeting, Anaheim, CA (virtual), August 2, 2022.

Hopmann, L., A. Bittel, and R. Tewari. *Integrating environmental and sustainability issues in the German-English Speaking Classroom*. [Conference presentation]. Tennessee Academy of Sciences Annual Meeting, Cookeville, TN, November 2021.

Johnson, A. (2022, June 1). *Translating new frontiers in agribusiness to critical skills for industry ready graduates*. [Conference presentation]. WERA-72 Annual Meeting Portland, OR.

Johnston, E., Keeley, M., Meeks, N., panelists, Stone, D. moderator, (2022, June 1). *Agri-food industry panel on resiliency within supply chains as a core competency & strategic competitive advantage*. [Conference presentation]. WERA-72 Annual Meeting Portland, OR.

Ripplinger, D. (2022, June 2). *Considering global issues and the impact on food marketing, energy, trade flows, and logistics systems*. [Conference presentation]. WERA-72 Annual Meeting Portland, OR.

Sterrett, T., R. Tewari, J. Mehlhorn and I. Lepcha. (2022, February). *Soil carbon markets as a means to mitigate greenhouse gas emissions: perceptions of agricultural producers in the U.S mid-south*. [Conference presentation]. Southern Agricultural Economics Association Meetings. New Orleans, LA.

Sterrett, T., R. Tewari, J. Mehlhorn and I. Lepcha. (2021, November, 18). *Mid-south agricultural producers' perception and knowledge of the soil carbon market to potentially mitigate greenhouse gas emissions*. [Conference presentation]. Tennessee Academy of Sciences Annual Meeting, Cookeville, TN.

Treacy, E. (2022, June 1). *Adapting to changes in a data-driven industry and perspective on market-ready skills agribusiness graduates need*. [Conference presentation]. WERA-72 Annual Meeting Portland, OR.

Wright, M., R. Tewari, and J. Mehlhorn. (2022, February). *Researching Cattle Auction Bids with Climate Data: A Study from Cattle Production Areas in the U.S mid-south region*. [Conference presentation]. Southern Agricultural Economics Association Meetings. New Orleans, LA.

Zuo, Na., R. Tewari., M. Bampasidou, and J. Mehlhorn. (2022, June). *Innovative teaching strategies: targeting industry skills through single credit courses?* [Conference presentation]. Annual North American Colleges and Teachers of Agriculture Conference.