



Impact Statement

Project Title: Center for Educational Innovation and Broadening Research Impacts

Issue: Research and the dissemination of research has been a focus of land-grant universities for more than 150 years. Conducting and disseminating objective interdisciplinary research and educational programs to increase public understanding of and engagement in agricultural, food and life sciences is at the core mission of the Dale Bumpers College of Agricultural, Food and Life Sciences (Bumpers College) and was one of the primary purposes behind the belated Senator Dale Bumpers leaving his legacy and name on our College. The mission of the land-grant university, as set forth in the first Morrill Act (1862), was to teach agriculture, military tactics, and the mechanic arts as well as classical studies so members of the working classes could obtain a liberal, practical education. Collaboration and dissemination of discovery has been at the core of the land-grant mission since its inception. Today, this collaboration must focus on bringing bench and social scientists together to tackle the grand challenges facing our institution, state, nation, and world. In the past, bench sciences have been the key in research generation for most experiment station and land-grant universities. However, the social science perspective in today's grand challenges discussions is an important one, and has recently been a focus in federal grants, contracts, initiatives, and legislative discussions. This project proposes to develop an initiative that would create a Center for Educational Innovation and Broadening Research Impacts (CEIBRI, pronounced see-bree) at the University of Arkansas (UA).

CEIBRI will be a combination of the University of Missouri's Center for the Collaboration and Development of Educational Innovations, which serves the university by providing researchers with custom educational programs; the University of Florida's Public Issues Education (PIE) Center, which is the preeminent research and education organization on social science perspectives of agricultural and natural resources issues to promote a more informed and engaged public; and the University of Kentucky's Community Innovation Lab, which serves as a social science research station for the state. The UA Center for Educational Innovation and Broadening Research Impacts (CEIBRI) would serve the university by providing the infrastructure to enable bench scientists within and outside the university to easily identify, access, and collaborate with social scientists with the necessary expertise to address interdisciplinary grand challenges through funding opportunities. CEIBRI would also create custom educational programs and program evaluations designed to expand the impacts of faculty research projects and grant proposals. We believe the Center for Educational Innovation and Broadening Research Impacts is critical to the success of our researchers, educational programs, and the future of the university. Although the UA has numerous excellent researchers whose individual expertise can contribute to competitive grant proposals, federal funding opportunities value interdisciplinary collaboration, as is commonly found within requirements for educational innovation or broadening research impacts. The UA Center for Educational Innovation and Broadening Research Impacts will allow for more effective matching of research and funding needs to specific personnel, as well as aid in improving the competitiveness of UA grant proposals. Through this Center, benchmark and social scientists will have a systematic method of collaborating to better meet funding priorities based on specific federal and industry research opportunities. The core of CEIBRI will be conducting collaborative research between bench and social sciences in order to address grand challenges; however, it will also serve faculty and Arkansas industries and citizens by focusing on outreach and extension, improving educational

strategies, and meet funding priorities. The core of CEIBRI will be research; however, it will also focus on outreach and extension, improving educational strategies, and increasing public awareness.

What has been done: The idea phase has been strengthened and other faculty have been added to the project. In June 2017, a funding proposal was submitted to the UA Chancellor's Discovery, Creativity, Innovation and Collaboration Fund. This is a new funding initiative at the University of Arkansas that utilizes college and department pull back funding in an effort to encourage increased collaboration and research on our campus. We are hopeful the CEIBRI initiative will be funded. If not, we will continue to seek funding opportunities for this project.

Impacts/New Partnerships: Our global grand challenges, including climate change and feeding a growing population, are interdisciplinary in nature; however, scientists tasked with addressing these are specialized experts who are not equipped to tackle these grand challenges from within one discipline. Interdisciplinary teams are required to solve these multi-faceted issues, and are supported by federal and private funding opportunities. Within the University of Arkansas, researchers have the individual expertise to contribute to solutions to these grand challenges, but current interdisciplinary research efforts depend on faculty members' awareness of one another's research expertise—a difficult feat, with hundreds of faculty members maintaining expertise in thousands of areas. Further contributing to the challenge of interdisciplinary teams is the divide between bench and social sciences, which has been highlighted by the Consortium of Social Science Associations and recent legislative discussions. This divide must be overcome in order to solve grand challenges, because so many of them require both technical innovation and social acceptance. CEIBRI has the potential to serve the university by providing the infrastructure to enable bench scientists within and outside the university to easily identify, access, and collaborate with social scientists with the necessary expertise to address interdisciplinary grand challenges through funding opportunities. Other institutions, including the University of Missouri, the University of Florida, and the University of Kentucky, have created similar centers that have pushed them to the forefront of solving these highly complex grand challenges. This project will continue to seek seed funding to develop a solid infrastructure to foster and guide collaborative projects between bench and social scientists. Once CEIBRI is established, it will be sustained through grant funds acquired through the budgets of interdisciplinary projects created through its infrastructure.

Outcome of the Project (societal impact/ measure of increased quality of life): To be determined.

How has your project been aided by your FSLI experience? The FSLI experience has forced me to think about how I can be a part of improving the land-grant university. My project was developed out of the idea of rethinking, refocusing, and redefining our university system norms. Through the training I received in FSLI, I know I can be a part of helping my institution think and move beyond the current structure. This project idea is definitely needed on our campus. Do I think I will be successful in securing funding? Yes, but I am prepared that it may take a few years. I will continue to refine and redevelop this idea as our university and funding structures change, because I believe we must do a better job of linking faculty experts together to solve the grand challenges facing agriculture today. The FSLI program has taught me to focus on what I need to do personally to improve as a leader, second to reflect on my organization, and third on

the land-grant system. I believe this project combines all three of these areas. I have learned the value of building trust, relationships, and partnerships; in pausing to self-reflect; in building a culture of communications; in the importance of looking at a situation from another person's perspective; and learned effective strategies to get others on or off "my bus". I have used many of the skills developed through this program to assist me in my job daily and in developing this project idea. I know I have the ability to move this project forward, because I can utilize the leadership skills I developed through FSLI to cultivate partnerships and develop collaborations with leaders in the food industry. My FSLI training has given me the confidence and determination to see this project through. Although this project is just beginning, I know I have the ability to make it happen!

Contact information:

Dr. Leslie D. Edgar

University of Arkansas

Dale Bumpers College of Agricultural, Food and Life Sciences

AFLS E113

Fayetteville, AR 72701

(479)575-6770

ledgar@uark.edu