**A Call to Action for Increasing Human and Institutional Capacity in Food and Agriculture**

***Critical issues facing the long term viability of agriculture***

With a growing and aging world population, demand on food systems is changing and will require collaboration to work with the complexity of the systems. Arable land is growing more limited. Water resources are scarce. The middle class around the world is growing and increasing the demand for high quality protein. Both obesity and hunger are major challenges, as well as food lost post-harvest (40% in parts of the world).

In the developing world, problems associated with overstretched natural resources are exacerbated by political instability, developmental problems associated with poor nutrition, inadequate infrastructure, limited availability of foundational and continuing education, lack of access to micro-finance opportunities and legal challenges regarding private property rights among numerous other social challenges. In addition, women in these countries are responsible for 80 percent of the farming and receive 10 percent of the wealth.

In the developed world, increasing regulatory challenges and competing demands on resources fuel debates that frequently challenge the benefit and role of food production in society. Issues central to the global climate and food production debate such as GMO crops, sources and reduction of greenhouse gas, food vs. fuel, water usage and distribution, domestic vs. imported food, sustainability and externalities of food production, and others, are challenges with which tomorrow’s leaders will continue to wrestle.

***Interdisciplinary approaches needed***

Addressing the challenges facing food production and society cannot happen within the tidy confines of traditional disciplines that are conventionally defined. Rather, progress on such challenges will require an interdisciplinary approach that considers a wide spectrum of stakeholder perspectives and expertise. Many stakeholders have competing values and priorities and disparate exigencies and values. Skillful intervention in the human systems that are present throughout the food value chain are needed to make progress with these challenging situations.

There is a need for the ability to bring groups together who often have these disparate exigencies and values through community engagement. Community-engaged leadership includes processes of influence, deliberation, and dialogue to make progress on the world’s most difficult issues. Community-engaged scholarship integrates experiential, theoretical, and applied approaches to understand leadership, education, and communication needs and resources. With leadership involving community-engaged scholarship, groups can transform the academic, nonprofit, government, private, and civic spaces in which they live and work.

***Scholarship of engagement***

Engaged scholarship is increasingly required by the National Science Foundation and other funders.

The term "scholarship of engagement" is an emergent concept first used by Ernest Boyer in a 1996 article by that title. The term redefines faculty scholarly work from application of academic expertise to community engaged scholarship that involves the faculty member in a reciprocal partnership with the community, is interdisciplinary, and integrates faculty roles of teaching, research, and service. Engaged scholarship is defined by the collaboration between academics and individuals outside the academy – knowledge professionals and the lay public (local, regional/state, national, global) – for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity.

The scholarship of engagement includes explicitly democratic dimensions of encouraging the participation of non-academics in ways that enhance and broaden engagement and deliberation about major social issues inside and outside the university. It seeks to facilitate a more active and engaged democracy by bringing affected publics into problem-solving work in ways that advance the public good with, and not merely for, the public (New England Resource Center for Higher Education, 2016).

It is a departure from the knowledge-deficit model that fails to acknowledge native knowledge and values and represents a different kind of knowledge production and use. This form of scholarship is also post-positivistic, acknowledging that the researcher is part of the phenomenon. It requires respect for community knowledge and a commitment to reciprocity. Food systems is an area that requires research and public engagement to lead change.

### *Community-engaged scholarship*

### Community-engaged scholarship requires a different type of faculty work that is locked into one single discipline. As such, a community of practice should be formed by using the Agricultural Experiment Station system for a multistate research coordinating committee and information exchange group. Once the proposal is approved, participants are provided multistate funds for travel and collaborative work. The first step is to form a development committee comprising interested faculty to develop a proposal for consideration by AES directors. A recent successful NCERA referenced by the advisor to our administrative committee was NCERA223: Building Capacity in Issues Management in the Land Grant System, which was formed by agricultural communicators. Other multistate programs address agriscience education, leadership development, economics, and sociology. However, we are unaware of any project that creates a space for social and behavioral scientists in food and agriculture to work together.

***Call to action***

Given this situation and need, the profession is at an inflection point. To fully engage in the process to address the key issues of our time in food and agriculture, the profession as a whole is called to act in these specific ways.

1. Utilizing the principles of team science, multi-state teams of researchers from our profession should be assembled to develop projects that address one or more of the USDA-NIFA Grand Challenges. These teams should be formed as development committees under the agricultural experiment station multi-state project system. These development committees should be established with faculty with knowledge and experience across the specialization areas of the profession. A tenured faculty member should be asked to lead each committee through its work to develop a proposal for an Extension and Research Activities (ERA) project. This project proposal should be designed to guide the work of this committee and the profession to address one or more of the NIFA Grand Challenges. The NCAC24 committee should draft the list of initial development committees as well as invite faculty based on expertise and experience to serve on these development committees. Further, NCAC24 should appoint up to two members of NCAC24 to serve in an advisory capacity for each development committee.
2. Through the ERA committees, investigate the potential to develop Coordinated Agricultural Projects ([CAP](http://nifa.usda.gov/resource/2008-farm-bill-report-making-impact-through-nifa)) grant proposals, public-private partnerships, as well as other large-scale, multi-state grant proposals. Intentional efforts should be made by the leadership of these multi-state projects and by NCAC24 to invite faculty to join these teams as well as provide an opportunity for any faculty member in the profession to engage in these efforts.
3. In addition to the structure and support of the multi-state project system, AAAE will support these efforts by allowing time for these committees to meet as well as report progress at national and regional professional meetings, as appropriate.