

**Foundation for Food and Agriculture Research
Preliminary Challenge Areas for 2019 and Beyond
Comments from the APLU Boards on Agriculture Assembly and Human Sciences
Submitted on October 15, 2018**

The Association of Public and Land-grant Universities' Board on Agriculture Assembly and Board on Human Sciences strongly supports FFAR's focus on the nexus of agricultural production, food, nutrition, and health care systems in its preliminary Challenge Areas. FFAR's identification of this as an important area of research is consistent with and builds upon recommendations in the federal Interagency Committee on Human Nutrition Research's National Nutrition Research Roadmap and the APLU's own *Healthy Food Systems, Healthy People* report, and is consistent with direction from the House Agriculture Committee in its report accompanying the 2018 Farm Bill for a multi-disciplinary, multi-federal agency research investment in this area. The *Healthy Food Systems, Healthy People* report calls for increased collaborations and integration among agriculture, food, nutrition, and health care systems to develop solutions that combine multidisciplinary research and education efforts to address issues facing human health and chronic disease prevention.

In particular, we believe the preliminary FFAR challenge area focused specifically on 'Healthy Food Systems' will provide an important incentive for multi-disciplinary research to understand the characteristics, interactions, and challenges across these systems. We believe such a focus has the potential to forge new partnerships of medical, public health, education, and Extension professionals to develop and rigorously evaluate new ways to improve health and lower the risk of chronic disease. Similarly, we support elements of other FFAR preliminary Challenge Areas that focus on this important nexus, including Next Generation Crops (e.g., Breeding better nutrition), Soil Health (e.g., Soil-human health connections), and Urban Agriculture (e.g., Systems solutions to food and nutritional insecurity).

As FFAR refines its preliminary Challenge Areas, we urge you to consider incorporating additional elements into the Challenge Areas for research topics we believe are critical to the Healthy Food Systems subject. These include:

- **Integration Across Systems:** Implement systems research partnerships (academia, industry, federal and state governments and health care) for a greater understanding of the barriers, differences, and challenges that inhibit the agriculture, food, nutrition, and healthcare systems from effectively changing health outcomes.
- **Drivers of Food Choices and Consumer Behavior:** Research to identify what cultural, policy, systems, and environmental changes can positively affect consumers to make healthy choices and translate this science on consumer behavior into viable marketing interventions that influence consumer behavior.

- **Impact of Food on Consumer Health:** Research to better understand the complex interrelationships of the food-human-gut microbiome ecosystem and its roles in promoting human health, including developing new biomarkers to better predict chronic disease predisposition that can help to tailor individual nutrition programs to better address these diseases.
- **Definition and Accessibility of Quality Food:** Research to better consider the true functionality of food and to translate human health promoting attributes to consumer food products and dietary supplements, including establishing translational and commercial paths for improved crop and animal products and other raw materials that generate products of enhanced health quality.
- **Education, Outreach and Engagement:** Partnerships to improve the lab-to-community pipeline so that medical, public health, education, and Cooperative Extension professionals are well-prepared to use state-of-the-science food and nutrition recommendations to help their patients, clients, and the public better understand the role of nutrition and lifestyle strategies in improving health and lowering the risk of chronic disease.

The APLU Boards on Agriculture Assembly and Human Sciences appreciate the opportunity to comment on FFAR's preliminary Challenge Areas and would welcome the opportunity to discuss with you our comments or other issues you might have related to FFAR Challenge Areas.