



IU BLOOMINGTON

EMERGING AREAS OF RESEARCH

Abstract Template -- Due June 30, 2017

Title of initiative to be proposed:

Sustainable Food Systems Science

Name of lead PI, with title, department/school:

James Farmer, Assistant Professor, Department of Recreation, Park, and Tourism Studies, SPH-B

Key team member names and departments/schools (up to 10 names):

Dan Knudsen, Professor, Department of Geography, College; Peter Todd, Professor, Cognitive Science Program, College ; Tom Evans, Professor, Department of Geography, College ; Alyce Fly, Associate Professor, Department of Applied Health Science, SPH-B ; Sarah Osterhoudt, Assistant Professor, Department of Anthropology, College; Jennifer Robinson, Professor of Practice, Department of Anthropology, College ; Analena Bruce, Postdoctoral Fellow, Department of Recreation, Park, and Tourism Studies, SPH-B; Angela Babb, Visiting Assistant Professor, +

Description of area to be proposed. What constitutes this area of research or creative activity as emerging? (Word limit=500)

The 20th Century produced a homogenized, petroleum-based industrial food system that is not environmentally sound, culturally just, nor particularly healthy. The American Public Health Association (2007) proclaimed that "the US industrial food system provides plentiful, relatively inexpensive food, but much of it is unhealthy, and the system is not sustainable." Indiana exemplifies this disconnect. Our state is part of the world's bread basket, very agriculturally productive, and yet our health statistics are among the poorest in the nation. Two-thirds of Hoosiers are overweight or obese and one-third have high blood pressure (ISDH 2011). 25% of Indiana residents do not have access to adequate food and nearly 1/6 of the state's population relies on the federal Supplemental Nutrition Assistance Program (FRAC 2015; US Census 2015; Meter 2012). These rates are statewide, higher in less privileged communities. Research increasingly attributes rising obesity, diabetes, cardiovascular disease, and some forms of cancer to the U.S. agricultural and food system (Franck et al. 2013; ISDH 2013; CDC 2012). In the midst of agricultural bounty, want and ill health abounds.

Juxtaposed with the predominant industrial food system is the growing, broad-based demand for food from sustainable, "permanent" agricultural systems centered on resilient ecological, social, and economic models working collectively to enhance a community or region and its people (APHA 2007; USDA 1990). Sustainable food (and its many off-shoots) has transitioned from a niche trend to a mainstream driver. Six of the "Top 10 Concept Trends" of the National Restaurant Association address how and where food is produced and minimizing waste along the supply chain (NRA 2016). Amazon is buying Whole Foods®, urban farms are beginning to supply food insecure places, and Walmart has become the largest organic food retailer in North America.

The emergence of Sustainable Food Systems Science comes at a time that providing healthy, fair, and sustainable food both globally and regionally is at the crux of world conflicts, political battles, public health epidemics and initiatives, alongside un-paralleled popular demand for changes to our agri-food system. Meeting the challenge to provide populations with sustainable and just food requires that scholars move beyond the limits of traditional disciplines and technical solutions to study food systems through the interdisciplinary, community-participatory, and action-oriented contexts in which they exist. This proposal will couple field, lab-based, and big-data research between IU's accomplished food, nutrition, agro-ecological, brain science, and systems scholars to forge a networked effort that will nationally and internationally lead Sustainable Food Systems Science throughout the 21st Century. This combination will create an integrated approach for understanding sustainable food system development, from farm to fork, proposing theoretical and applied solutions and interventions to current and emerging dilemmas and wicked problems. Strategic investments that link existing scholars, units, centers, and infrastructure will catalyze Indiana University's contributions and efforts for better understanding and shepherding food system development, evolution, and achievement across Hoosier communities and beyond.

Please submit to earprogram@indiana.edu