

## **Applying an Innovation Framework to Improve Health in Rural Populations**

PI: Christopher R. Friese

Co-Is: Jeff DeGraff, Sarah T. Hawley, Kenneth Resnicow

School of Nursing, Ross School of Business, School of Medicine, School of Public Health

### **Executive Summary (1 page)**

***Problem Statement.*** Rural Americans face unique threats to health and well-being. Excess morbidity and mortality observed in rural settings correlate with broader indicators of social status, including poverty, educational achievement, and employment. Investigators at the University of Michigan lead impactful, interdisciplinary research programs aimed to improve health and well-being, yet these efforts have failed to translate in substantive ways in rural settings. Increasingly, funders and policymakers seek innovative solutions to the vexing problems faced by rural Americans. Laudable goals of bringing diagnostic and treatment advances to patients across the United States will fail unless solutions are customized to the contexts of vulnerable communities. This proposal seeks to fill the void in Michigan's substantial work to improve the health and well-being of individuals and communities by adopting a well-established innovation framework to propel our work in novel ways to rural settings. Our vision is to bring our unique expertise in a novel way to transform the well-being of individuals and communities who are historically underserved, with an emphasis on rural residents.

***Proposed Strategies.*** We will apply Dr. Jeff DeGraff's *Innovation Genome* framework as a strategy to form and mobilize an interdisciplinary expert team. University of Michigan faculty from the health and social sciences, external experts with research expertise in rural health, leaders from key stakeholder organizations, and funders interested in rural health research will meet in a two-day structured workshop at the Innovatrium in Ann Arbor, MI. After brief individual assessments and summaries of the state of the science, DeGraff's team will lead the invitees in an engaging structured "constructive conflict" session to develop up to four pilot projects for subsequent activation. Data and publications from these pilot projects are critical ingredients for a competitive program project grant (or similar mechanism) focused on improving rural health outcomes.

***Required Resources.*** We request funds for administrative support, honoraria, and travel for up to 10 external experts, hosting funds for the workshop, space and personnel fees for the Innovatrium facility and workshop process, and consulting fees for a professional grant writer. We also request funds to support the direct costs of four pilot projects to generate requisite data for a competitive program project award (or similar mechanism).

***Potential Impact.*** Following the workshop, four interdisciplinary pilot projects will be reviewed for preliminary funding and launch. These projects will form the necessary base to compete successfully for larger programmatic grants from the National Institutes of Health, the Centers for Disease Control and Prevention, and selected foundations. These teams will forge new research directions in improving health and well-being for rural residents through requisite modifications of existing interventions, development and testing of new interventions, and expanding intervention delivery through novel mechanisms (e.g., telehealth, virtual technology, and other platforms).