



NORTH CENTRAL REGIONAL CENTER  
FOR RURAL DEVELOPMENT

# 2024 Grants Awarded

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***North Central Region Small Grants***

**Enhancing Rural Healthcare by Incorporating Generative AI and Machine Learning: Building Stronger Communication Networks**

*April 18, 2024*

**Principal Investigator:** Richard Johnson-Sheehan, Purdue University

**Co-Principal Investigator:** Thomas Rickert, University of Nebraska-Lincoln Extension

**Proposal Abstract:**

This project addresses the challenges faced by rural healthcare clinics in North Central United States, particularly in Indiana, where geographic isolation, financial constraints, and limited resources lead to healthcare disparities. These clinics struggle with inefficient communication networks, outdated recordkeeping, and a lack of specialized resources. Our aim is to develop strategies in which land-grant universities use generative artificial intelligence and machine learning to enhance rural development by improving healthcare communications. This approach will streamline administrative tasks, improve patient data management, facilitate remote consultations, and enable predictive healthcare management. The project involves three phases: assessing current communication practices, developing AI methods to strengthen these practices, and educating healthcare professionals on using AI tools. Ultimately, this initiative will enhance rural healthcare delivery, reduce the strain on healthcare professionals, and improve the quality of life for rural residents, showcasing the role of land-grant institutions in rural healthcare advancement.

**Award:** \$31,385

***North Central Region Small Grants***

**Partnering to Customize Building an Entrepreneur-Friendly  
Community Curriculum for the Outdoor Recreation Sector**

*April 18, 2024*

**Principal Investigator:** Gwynn Stewart, The Ohio State University Extension

**Co-Principal Investigators:**

Myra Moss, The Ohio State University Extension  
Nancy Bowen, The Ohio State University Extension  
Kyle White, The Ohio State University Extension  
Ami Choi, University of Minnesota Tourism Center

**Proposal Abstract:**

Utilizing strategic planning and education as well as a grant writing curriculum and/or broadband development, in U.S. Forest Service areas, we seek to support rural gateway communities in creating resilient economies through enhancing the outdoor recreation economy.

Utilizing the Ohio State University Extension's *Building an Entrepreneur-Friendly Community* curriculum that provides resources, training, and tools to develop community capacity to better understand and support the local entrepreneurial economy, the team would work to customize the curriculum for Outdoor Recreation gateway communities, as well as customize the Grant writing Curriculum with a list of potential Outdoor Recreation grant resources.

This NCRCRD small grant will also couple well with the already in-process Environmental Justice Thriving Communities Technical Assistance Centers Program (EJ TCTAC) in the two states as well.

**Awarded:** \$40,000

***North Central Region Small Grants***

**Assessing Social Value of Nebraska Livestock Sale Barns to Assist with Community Well-Being and Resiliency**

*April 18, 2024*

**Principal Investigator:** Marilyn Schlake, University of Nebraska-Lincoln

**Co-Principal Investigator:**

Cheryl Burkhart-Kriesel, University of Nebraska-Lincoln

Jean Ann Fischer, University of Nebraska-Lincoln

Michelle Krehbiel, University of Nebraska-Lincoln

Randy Saner, University of Nebraska-Lincoln

**Proposal Abstract:**

Globally, research on social value measurement of economic entities is evolving in relationship to individuals and community. This growing field explores community social capital through the lens of social value, or how social connections translate into actions with tangible outcomes impacting individual livelihoods and community well-being. This project seeks to apply and modify the framework of an Australian research study to Nebraska livestock sale barns, which is a significant rural economic entity. The team will use a mixed-method study to identify the sale barns' social value and explore implications for individual and community well-being and resiliency. These findings can help establish the value of rural business entities or organizations beyond the traditional economic focus. Research findings will also help identify the social connections that enhance belongingness and connectivity and provide potential avenues for enhancing Extension program delivery.

**Award:** \$39,969

**North Central Region Small Grants**

**Partners In Produce – A Food Distribution Project in East Central Illinois**

*April 18, 2024*

**Principal Investigator:** Krystal Hodge, University of Illinois

**Collaborators:**

MaryBeth Massey, University of Illinois

Meredith Probst, University of Illinois

**Proposal Abstract:**

Food insecurity affects over 1 in 7 people in Coles County, IL. The University of Illinois - Extension builds partnerships with local organizations to address food insecurity. One such collaboration, Partners in Produce, distributed over 100,000 pounds of produce to East Central Illinois residents in 2023. Program challenges remain regarding produce delivery and sustainability, and the impact of these efforts on dietary intake and food insecurity among residents is unknown. This project will support Partners in Produce through produce delivery in Summer 2024, outcome evaluation, and development of a sustainability plan for 2025 involving collaboration from partner agencies. Produce purchases and delivery will be tracked to evaluate produce distribution. Participants will be recruited (n=100) to assess the impact on dietary intake and food security. Participants (n=29) will be recruited to participate in a workshop led by Extension staff to develop a plan for pick up and/or delivery of produce and opportunities to share resources to ensure that produce is available for all food pantries that would like to receive it. A diverse audience will be recruited to evaluate the impact of the efforts. The results will inform future years of program implementation.

**Award:** \$25,000

***NCR Extension Collaboration and Implementation Grant***

**Bridging Horizons: Rural Career Pathway Development by UMN Extension, Red Lake Nation College, White Earth Tribal Community College, Leech Lake Tribal College, and Fond Du Lac Tribal and Community College: using APLU's FORWARD Curricula**

*April 18, 2024*

**Principal Investigator:** Rani A. Bhattacharyya, University of Minnesota

**Project Abstract:**

This training and piloting grant is planned for calendar years 2024-2025 to support our UMN collaboration with tribal college peers in Minnesota to implement the FORWARD curricula developed by the APLU and help our respective communities strengthen STEM Career pathways they have for low-income youth. We feel this project would align with NCRCRD's priority #2, workforce development, training & education, because it would build the rural skill sets and knowledge concerning workforce, entrepreneurship, and investment – and help to bridge this knowledge close to home between tribal and non-tribal communities co-inhabiting northern Minnesota. The total amount we are seeking for the duration of the project is \$5,000.00 for a full training of the curricula in 2024.

**Award:** \$5,000