

# KANSAS NSF EPSCoR

National Science Foundation  
Established Program to Stimulate  
Competitive Research

Impacts since 2006

## BUILDING RESEARCH CAPACITY

**\$73 M**  
NSF EPSCoR  
RII Track-1  
Awards  
since 2006

**\$2 M**  
Scientific &  
computing  
multi-user  
equipment

**66**  
Junior faculty  
careers jump-  
started with  
First Awards

**12**  
Faculty  
hires for  
HINU, KSU,  
KU, & WSU

## ECONOMIC & WORKFORCE DEVELOPMENT

New hub for data science connects  
**86** students with community partners,  
offering data solutions free of charge.

**29** partners span  
economic sectors

6% federal  
government

12% other  
non-profit

23%  
academic

33% state  
or local  
government

26% business



**121**

Native scholars  
gained research  
experience;  
45 went on to  
grad school

**764**

Undergraduate &  
graduate students  
gained research  
experience

**40**

High school  
teachers  
gained  
training

## RETURN ON INVESTMENT

**2.4 to 1**

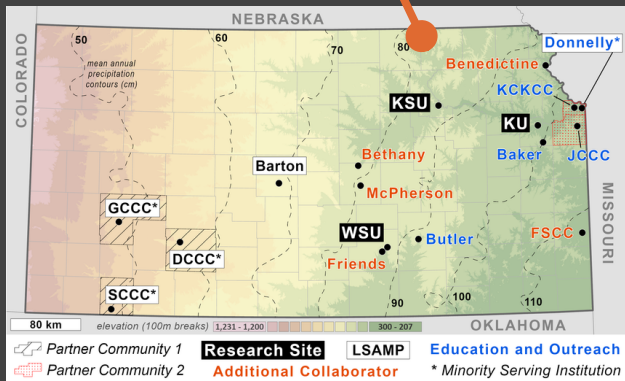
For every dollar NSF EPSCoR  
pumped into research, Kansas  
got back more than double in  
non-EPSCoR funds, leveraging  
\$132M from a \$56M investment.



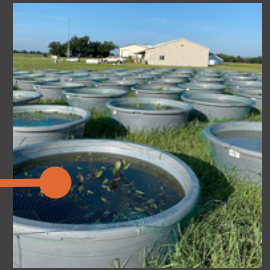
Our mission is to build capacity for science and engineering research in Kansas while fostering a diverse workforce.

# SUCCESS STORIES

We are pioneering a new approach to resilience. Rather than focusing solely on efficiency like conventional tools, our team factors in principals of social equity and local insights to transform how communities manage infrastructure. Project includes partners statewide.



Our research has shown that microbiomes help crops survive droughts and beef up carbon in soil, forging a path for farmers to both feed the world and curb climate change



A mobile museum trekked 700 miles to share bilingual exhibits about microbes statewide.



Current NSF EPSCoR Funding in Kansas	Type / Lead Institution	Years	Cong. District	Amount
<b>Adaptive and Resilient Infrastructures driven by Social Equity (ARISE)</b> (PI: Belinda Sturm, #OIA-2148878)	Track-1 Univ. of Kansas	2022-2027	1,2,3,4	\$20,000,000
<b>RII-BEC: Mitigating COVID-19 Career Challenges with Research and Professional Development Training for Undergraduates &amp; Mentors in Field-based Environmental Sciences</b> (PI: Blair Schneider, #OIA-2225863)	RII-BEC Univ. of Kansas	2022-2027	1	\$999,835
<b>Bioplastics With Regenerative Agricultural Properties (BioWRAP)</b> (PI: Vaishali Sharda, #OIA-2119753)	Track-2 FEC Kansas State Univ.	2022-2026	1	\$5,999,428
<b>Advanced Manufacturing of Renewable and Recyclable Polymers</b> (PI: Bala Subramaniam, #OIA-2119754)	Track-2 FEC Univ. of Kansas	2021-2025	1,2	\$4,000,000
<b>RII Track-2 FEC: Critical Resource Availability for the Future of the Renewable Energy Industry: Critical Minerals and Ground Water Resources in Iowa and Kansas</b> (PI: Franciszek Hasiuk, collaboration with Univ. Of Iowa, #OIA-2119551)	Track-2 FEC Univ. of Kansas	2021-2023	1	\$2,190,146
<b>Aquatic Intermittency Effects on Microbiomes in Streams (AIMS)</b> (PI: Amy Burgin, #OIA-2019603)	Track-2 FEC University of Kansas	2020-2024	1	\$5,998,875
<b>Metrology and spectroscopy of individual nanomagnets dynamics using quantum sensor-based (NV- center) nano-magnetometry</b> (PI: Kapildeb Ambal, #OIA-2033210)	Track-4 Wichita State Univ.	2021-2024	4	\$209,287
<b>RII Track-2 FEC: The IceCube EPSCoR Initiative (IEI) - IceCube and the Data Revolution</b> (PI: David Besson, collaboration with South Dakota School of Mines #OIA-2019597)	Track-2 FEC Univ. of Kansas	2020-2024	1	\$3,482,661
<b>Robust Matrix Completion State Estimation in Low-Observability Distribution Systems under False Data Injection Attacks</b> (PI: Hongyu Wu, #OIA-1929147)	Track-4 Kansas State Univ.	2019-2023	1	\$198,686
<b>Tailored Flow Boiling Mechanisms Using 3D Printed Multifunctional Wick Structures</b> (PI: Gisuk Hwang, #OIA-1929187)	Track-4 Wichita State Univ.	2019-2023	4	\$243,635
<b>Marshalling Diverse Big Data Streams to Understand Risk of Tick-Borne Diseases in the Great Plains</b> (PI: A. Townsend Peterson, #OIA-1920946)	Track-2 FEC Univ. of Kansas	2019-2023	1	\$3,921,229
<b>RII Track-2 FEC: Consortium for Plant Invasion Genomics (CPING): Combining Big Data and Plant Collections to Understand Invasiveness</b> (PI: James Beck, collaboration with Univ. Of Louisiana at Lafayette, #OIA-1920858)	Track-2 Wichita State Univ.	2019-2023	4	\$138,682
<b>Building Field-Based Ecophysiological Genome-to-Phenome Prediction</b> (PI: Stephen Welch, #OIA-1920946)	Track-2 FEC Kansas State Univ.	2018-2023	1	\$4,000,000
<b>Microbiomes of Aquatic, Plant, and Soil Systems across Kansas (MAPS)</b> (PI: Kristin Bowman-James, #OIA-1656006)	Track-1 Univ. of Kansas	2017-2023	1,4	\$20,000,000
<b>Total Funds</b>				<b>\$71,382,464</b>

All districts bolstered by current NSF EPSCoR project