



WICHITA STATE  
UNIVERSITY

# RESEARCH & INNOVATION NEWS

Wichita State University

February 2024



**February 2024**

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**Latest News**



## Wichita State rises to No. 2 in national list for industry-funded engineering R&D

Wichita State University moved to No. 2 on the national list of industry-funded engineering and research and development, according to the latest data compiled by the National Science Foundation's Higher Education Research and Development Survey.

NSF's latest data ranks U.S. universities in various categories, including R&D spending broken down by subfield and funding source.

For fiscal year 2022, Wichita State reported R&D expenditures totaling \$261 million, up from \$192 million in 2021. Industry-funded R&D expenditures totaled \$116.3 million, up from \$86 million in 2021.

[Read more about the ranking](#)

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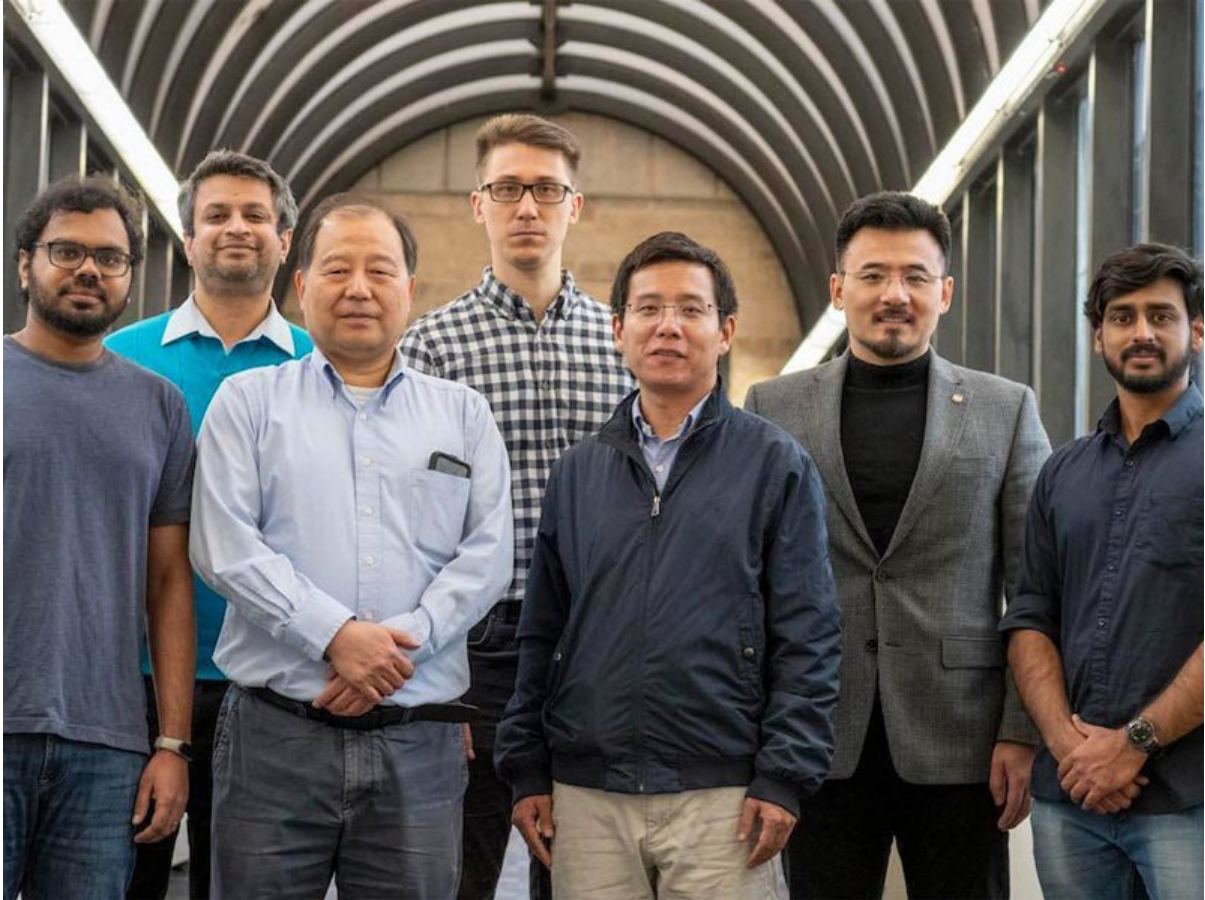


## **FirePoint selected to operate new Defense Innovation OnRamp Hub, connecting small business with defense innovation opportunities**

The FirePoint Innovations Center at Wichita State University announced it has been selected to deliver Defense Innovation OnRamp Hub programming for the National Security Innovation Network (NSIN) through the newly established Great Plains Mission Acceleration Center (MAC), an innovation and collaboration hub designed to connect small businesses, academia and the Department of Defense (DoD) to support defense-focused technology development.

One of five facilities in the national network operating a Defense Innovation OnRamp Hub program, the new Wichita State location will bring together small and medium-sized businesses (SMBs) across Kansas and the Great Plains region to partner with the DoD, academia and even venture capital investors to accelerate tech innovation and manufacturing to meet national defense and security needs. The network of OnRamp Hubs serves a mutual benefit of helping SMBs tap into DoD contracting opportunities, which can be tough for small organizations to access, and enabling DoD to source groundbreaking new technologies and find supply chain and manufacturing partners in the region.

[Learn more about the hub](#)



## **Wichita State, NASA lead research for improved in-space manufacturing plans**

Wichita State University and Knowmadics are entering into a new collaboration aimed at enhancing the security and resiliency of satellite constellations and satellite-based communications. The endeavor is intended to strengthen the security of data collection and transfer among space-based Internet of Things devices.

The work will be performed through Wichita State's National Institute for Research and Digital Transformation, and led by Pierre Harter, the associate vice president of research operations for WSU Industry and Defense Programs. Dr. Ross Gruetzemacher, WSU assistant professor of business analytics, will serve as the technical lead. His areas of expertise include data science and artificial intelligence.

[Learn more about the research](#)

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# Wichita State interdisciplinary student team advances to top 10 in NASA SUITS Challenge for third time

Wichita State University proudly announced that its interdisciplinary student team, CosmoShox, has secured a spot in the top 10 teams in the NASA Spacesuit User Interface Technologies for Students (SUITS) Challenge. Organized by the College of Innovation and Design and guided by faculty members Kristyn Waits and Maggie Schoonover, the CosmoShox team is gearing up for the second phase of this competitive challenge.

CosmoShox is composed of exceptionally talented students composed of both undergraduate and graduate-level students representing a range of academic disciplines in four different WSU colleges:

- **Denae Sawyer**, innovation design
- **Desmond Cockrell**, graphic design
- **Elaine Duff**, geology and planetary sciences
- **Elliott Chambon**, aerospace engineering
- **Marianna Fronciani Farina**, mechanical engineering
- **Nathan Lewis**, innovation design
- **Savannah Denny**, graphic design
- **Yumi Kikuchi Coronel**, innovation design

[Read more about CosmoShox](#)

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## **B-1 increases contract ceiling with NIAR to \$200M; expands partnership to include repair prototyping**

The B-1 System Program Office (SPO) has increased the ceiling on their award with Wichita State University's National Institute for Aviation Research (NIAR) to continue the B-1's Digital Engineering transformation to \$200 million. The National Center for Manufacturing Sciences helped form the strategic partnership and created a flexible contract structure, which allows NIAR and the B-1 SPO to adapt to real-time requirements and warfighter needs.

A major consideration on increasing the contract ceiling was the return on investment from the digital engineering strategy realized by the SPO since the program began in 2020. To date, NIAR has delivered over 24,000 digital models and developed engineering tools being used to aid in the management of the fleet; increasing the number of B-1 aircraft available to fly at any time. Recently, digital tools were used to assess unexpected damage on an aircraft and generate a repair strategy, restoring full operational capability while reducing the return to service time by over 50 percent.

[\*\*Learn more about the expanded partnership\*\*](#)



## **WSU reveals renderings for downtown's Wichita Biomedical Campus**

Phase One of the Wichita Biomedical Campus, being built in the heart of downtown Wichita, now has its official look.

Renderings created by Helix Architecture + Design and CO Architects show the 8-story, 350,000-square-foot building that features a 3-story pavilion, classrooms, labs, student success center, lounges and study spaces, offices and meeting spaces.

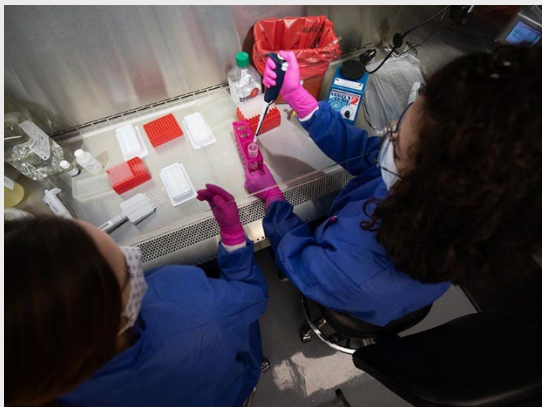
This marks the first phase of the joint health sciences project between Wichita State University and the University of Kansas. Once built, the Wichita Biomedical Campus will combine WSU's College of Health Professions and Speech-Language-Hearing Clinic, WSU Tech's health care program and Wichita campuses of KU School of Medicine and KU School of Pharmacy into one location.

[\*\*Read more about the Wichita Biomedical Campus\*\*](#)

## WSU in the News

- [The Top Universities In The Nation For R & D Funding In Engineering](#) - *Forbes*
- [Kansas to Build State's First Internet Exchange Point at Wichita State University](#) - *Campus Technology*
- [FirePoint Selected to Operate New Defense Innovation OnRamp Hub Connecting Small Business with Defense Innovation Opportunities](#) - *Yahoo Finance*
- [Wichita State to Operate DOD OnRamp Hub in Great Plains Region](#) - *ExecutiveGov*
- [Ancient Mesopotamian Bricks Captured a Mysterious Blip in Earth's Magnetic Field](#) - *Science Alert*
- [Defense innovation hub at Wichita State is first on university campus](#) - *Military Embedded Systems*
- [Wichita State to lead NASA research for improved in-space manufacturing plans](#) - *Voxel Matters*
- [Phase One Begins for WSU's Wichita Biomedical Campus](#) - *Ingram's*
- [America Makes unveils winners of \\$5.75M in pioneering AM Material Datasets Project](#) - *3D Printing Industry*
- [WSU's NIAR receives more funding for Air Force B-1 program](#) - *Yahoo*

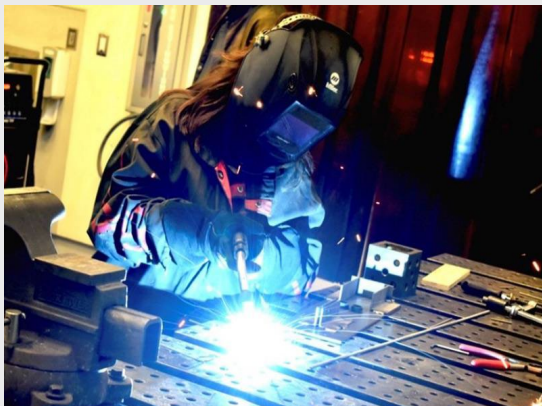
## Research at Wichita State



With yearly funding topping \$400 million, research at Wichita State ranges from bioscience, chemistry and engineering to mathematics, physics and ancient civilization.

Learn more at [wichita.edu/research](http://wichita.edu/research).

## Innovation at Wichita State



Innovation is more than just talk at WSU. It permeates everything we do, all we aspire to become and reaches far beyond our campus boundaries.

Learn more at [wichita.edu/innovation](http://wichita.edu/innovation).

***Student-centered. Innovation-driven.***

## **About Wichita State University**

Wichita State University is Kansas' only urban public research university, enrolling more than 23,000 students between its main campus and WSU Tech, including students from every state in the United States and more than 100 countries. Wichita State and WSU Tech are recognized for being student centered and innovation driven.

Located in the largest city in the state with one of the highest concentrations in the United States of jobs involving science, technology, engineering and math (STEM), Wichita State University provides uniquely distinctive and innovative pathways of applied learning, applied research and career opportunities for all of our students.

The Innovation Campus, which is a physical extension of the Wichita State University main campus, is one of the nation's largest and fastest-growing research/innovation parks, encompassing more than 120 acres, and is home to a number of global companies and organizations.

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