



U.S. National
Science Foundation



KENTUCKY

FY 2023 Fast Facts



\$27,492,000

Total NSF Awards
to Kentucky



\$21,104,000

Invested in Fundamental
Research in Kentucky



\$6,387,000

Invested in STEM
Education in Kentucky



\$16,000

Invested in Kentucky
Businesses

Top NSF-funded Academic Institutions for FY 2023

University of Kentucky
\$16,026,000

University of Louisville
\$5,519,000

Kentucky Community and
Technical College System
\$1,448,000

NSF By The Numbers

The U. S. National Science Foundation (NSF) is an [\\$9.06 billion](#) independent federal agency created by Congress in 1950 to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense. NSF's vital role is to support basic research and researchers who create knowledge that transforms the future.

DID YOU KNOW?

NSF has funded the work of **261** Nobel Prize winners over 75 years.



\$9.06B
FY 2024
Total Enacted

93%
Funds research,
education and
related activities



11K
Awards



1.9K
Institutions



353K
People

**Data represents FY 2023 Actuals unless otherwise indicated*



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Expanding the Frontiers of Science

The future of electronics, displays, lighting, large-area power generation and storage and sensors for medical and national security applications requires the continued development of new materials to meet the ever more complex scientific and engineering challenges presented by these technologies. Carbon-based (organic) semiconductors offer opportunities to meet and even exceed the performance metrics required for these applications. However, many questions remain as to which organic semiconductors best fit each of these applications and how best to make them. To accelerate the commercial readiness of organic semiconductors, the Accelerating the Commercial Readiness of Organic Semiconductor Systems team at the **University of Kentucky**, funded by an NSF Designing Materials to Revolutionize and Engineer our Future award, brings together expertise from chemistry, physics, device engineering, materials science and modeling and data science to speed up applications-specific materials design. The team's goals include bolstering an already-comprehensive data infrastructure and associated machine-learning infrastructure to expand machine-informed organic semiconductor design tools and access and facilitating organic semiconductor development over large areas with uniform and stable prescribed properties.



STEM Education and Broadening Participation

The **Appalachian College Association**, which consists of four-year liberal arts institutions in Kentucky, Georgia, North Carolina, Tennessee, Virginia and West Virginia, is leading an NSF ADVANCE Partnership project to address the significant challenge of hiring and retaining science, technology, engineering and mathematics faculty, particularly at small rural institutions in the Appalachian region. The project is implementing a multifaceted approach grounded in the effective, evidence-based practices for fair and welcoming academic workplaces. Academic leadership workshops are conducted for search committees and academic administrators to improve the hiring, promotion, tenure and evaluation processes. The project is also providing professional development programs, peer mentoring and academic leadership training tailored to the unique needs of small rural institutions and helping participating institutions create workplace environments that are fair and welcoming for all STEM faculty. By creating systemic changes in institutional policies and procedures, the project will cultivate a culture that values the full range of perspectives available in the country and ensures fair access to opportunities and resources for all faculty members.



Regional Innovation Engines

NSF Regional Innovation Engines (NSF Engines) Development Awards help organizations create connections and develop their local innovation ecosystem within two years to prepare a strong proposal for becoming a future NSF Engine. An award led by the **University of Kentucky** is convening industrial, research and development, community, workforce, investment and entrepreneurship stakeholders across the Southeastern Commerce Corridor (SCC) of Kentucky and Tennessee to design and develop an innovation ecosystem for next-generation manufacturing and supply chains in the region. The project team envisions the SCC as a global leader in next-generation manufacturing and supply chain innovation for the circular economy, supported by an inclusive and diverse workforce.

EPSCoR

COMPETITIVE RESEARCH | Kentucky is one of 28 U.S. states or territories under the [NSF Established Program to Stimulate Competitive Research \(EPSCoR\)](#). **\$4,417,717** in awards have been made to Kentucky academic institutions through EPSCoR in FY 2023. For more information, visit Kentucky's EPSCoR state web page.

NCSES

According to the [NSF National Center for Science and Engineering Statistics \(NCSES\)](#), which is housed in NSF, 43% of science, engineering and health doctorates conferred in Kentucky are made in life sciences. [Visit Kentucky's science and engineering state profile to learn more!](#)

29.79% of **Kentucky's higher education degrees are concentrated in S&E fields.**

3.40% of **Kentucky's workforce is employed in S&E occupations.**

8.29% of **Kentucky's total employment is attributable to knowledge - and technology - intensive industries.**

Learn More

CHIPS & SCIENCE – The CHIPS and Science Act's investments in the U.S. National Science Foundation will help the United States remain a global leader in innovation. Implementation of this legislation will be key to ensuring that ideas, talent and prosperity are unleashed across all corners of the nation. [For more information, please visit the NSF CHIPS and Science website.](#)

RESEARCH SECURITY – NSF is committed to safeguarding the integrity and security of science and engineering while also keeping fundamental research open and collaborative. NSF seeks to address an age of new threats and challenges through close work with our partners in academia, law enforcement, intelligence and other federal agencies. By fostering transparency, disclosure and other practices that reflect the values of research integrity, NSF is helping to lead the way in ensuring taxpayer-funded research remains secure. [To learn more, please visit the NSF Research Security website.](#)

CONNECT WITH NSF – For more information on NSF's impact in your state, please contact the NSF Office of Legislative and Public Affairs at congressionalteam@nsf.gov.