U.S. National Science Foundation

WASHINGTON

FY 2023 Fast Facts

$191,355,000
Total NSF Awards to Washington

$165,338,000
Invested in Fundamental Research in Washington

$26,017,000
Invested in STEM Education in Washington

$16,638,000
Invested in Washington Businesses

Top NSF-funded Academic Institutions for FY 2023

University of Washington	Washington State University	Western Washington University
$129,714,000	**$20,378,000**	**$7,600,000**

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*

Expanding the Frontiers of Science

Plant researchers and breeders agree that technological advances are needed to meet the future demands for agricultural products, especially considering the accelerating climate crisis. Although traditional plant breeding and fertilizer application have produced large increases in agricultural yields in the past, yields have plateaued in recent years. Through NSF funding, a new project at the **University of Washington** is using novel genome-scale technology and advanced analysis methods to identify and characterize the tens of thousands of genetic elements that drive growth and environmental resilience in maize and tomato, crops that represent two major classes of plants. The large size of the resulting data sets enables systematic computational analyses of these elements and allows for the design of synthetic elements with desirable features. The applicability and safety of these designs for future crop engineering will be examined in maize and tomato plants in the laboratory. The project's results will propel plant gene regulation and crop synthetic biology beyond current knowledge and tools and jump-start crop engineering efforts. (2240888)

STEM Education and Broadening Participation

The complex and pressing issues facing the ocean and the needs of ocean-dependent communities require an ocean-literate society with diverse expertise, racial identities and experiences. Through a NSF Racial Equity in STEM Education program award, Hampton University and the organization **Black in Marine Science**, based in the state of Washington, will boost ocean literacy and research within Black and other marginalized communities and equip people with tools to solve problems in their changing environment. The project: (1) attracts high school students of color into marine science-related fields; (2) engages undergraduate students through a culturally relevant curriculum; (3) supports undergraduate and graduate students as they develop professional skills and build their identity as scientists; (4) prepares undergraduates for marine science-related and STEM careers; and (5) introduces both high school and undergraduate students to research. All activities will be implemented using equitable STEM teaching tools such as cultural pedagogies, multigenerational learning, supporting diverse sense-making, centering racial justice, meaningful phenomena and place-based learning.

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. A Development Award led by **Urbanova** aims to create a green and equitable power grid for the inland Northwest region across Washington and Idaho. The Inland Northwest Center for Energy and Decarbonization collaboration builds off prior clean energy projects to advance research innovations in sustainable energy, accelerate the translation of research to impact through the support of startups and improvements to the region's power grid, and grow a regional workforce to support the innovation ecosystem.

NCSES

According to the NSF National Center for Science and Engineering Statistics (NCSES), which is housed in NSF, Washington ranks 2nd in the nation for total R&D performance. Visit Washington's science and engineering state profile to learn more!

42.93% of **Washington's** higher education degrees are concentrated in S&E fields.

8.87% of **Washington's** workforce is employed in S&E occupations.

10.63% of **Washington'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.

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