

# Funding for the National Science Foundation



The **National Science Foundation (NSF)** supports fundamental, curiosity-driven science enabling researchers to advance groundbreaking discoveries. NSF investments are essential to probe scientific frontiers, improve health, and strengthen the nation's economy. We urge Congress to support at least **\$11 billion** for NSF in FY 2023.

### **Health and Discovery**

NSF provides a vital foundation for the nation's science and technology portfolio.

- NSF-funded research in fields such as chemistry, physics, and computer science lays the foundation for advances in neuroscience.
- Basic research also enables the **pursuit of treatments to prevent and delay** debilitating illnesses and improve preventive and public health practices worldwide.

## **Economic Growth and Prosperity**

Federal investments in NSF secure economic benefits for generations to come.

- Economists agree about **50 percent of the country's economic growth** can be traced to investments in research and development.<sup>1</sup>
- One dollar of research money from NSF generates approximately \$2 in economic output.<sup>2</sup>
- Scientific discovery leads to new business. Between 2015 and 2019, 53 university research spin-off companies contributed more than \$700 million to the U.S. GDP and supported 9,300 jobs nationally.<sup>3</sup>

## The Future of the Scientific Enterprise

NSF funding must be maintained to pursue undiscovered breakthroughs. No one knows what innovations will go unexplored without increased or level funds.

- NSF is the funding source for approximately 24 percent of all federally supported basic research conducted by America's colleges and universities.
- NSF drives innovation by investing in **high-risk**, **cutting-edge science and engineering** at the frontiers of knowledge.
- Private industry alone can't support these programs—even as public funding for research and development has increased over the past several years, industry investment has dropped.<sup>4</sup>
- Scientists are able to build on foundations laid by others due to publicly funded research with methodology and results **open to the public**.
- Through graduate fellowships, research funding, and the Math and Science Partnership program, NSF trains the next generation of America's scientists. Since 1952, NSF has awarded more than 64,000 Graduate Research Fellowships.<sup>5</sup>
- The scientific enterprise depends on consistent funding to support America's scientific workforce. If the scientific pathway is disrupted, there will be enduring long-term consequences as our talented researchers move on to other fields.

# **NSF BY THE NUMBERS**

\$8.84 billion NSF FY 2022 budget

**92 percent** of the NSF budget invested through local research institutions <sup>5</sup>

**11,300** FY 2021 awards supported by NSF<sup>5</sup>

**318,000** personnel at NSF<sup>5</sup>

**1,900** institutions are supported by NSF<sup>5</sup>

# 85 percent

of Americans agree that scientific research that advances the frontiers of knowledge should be supported by the federal government<sup>6</sup>



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#### Sources

- <sup>1</sup> Jones, C.I. 2002. Sources of U.S. Economic Growth in a World of Ideas. American Economic Review, 92(1):220-239.
- <sup>2</sup> Gundaya, D. and Inazu, J.K. The Economic Impact of Federal Funds on a Local Community in Hawaii. June 2011.
- <sup>3</sup> Sparking Economic Growth Volume IV. The Science Coalition. April 2021.
- <sup>4</sup> Chakma, J., Sun, G., Steinberg, J.D., Sammut, S.M., Jagsi, R. *Asia's Ascent Global Trends in Biomedical R&D Expenditures*. The New England Journal of Medicine. 370:1. January 2014.
- <sup>5</sup> FY 2021 Agency Financial Report. National Science Foundation. NSF-22-002. November 2021.
- <sup>6</sup> Science and Engineering Indicators 2016. National Science Board. NSB-20-162. February 2016.

The Society for Neuroscience (SfN) is a nonprofit membership organization of around 30,000 scientists and physicians who study the brain and nervous system. Visit SfN.org or email advocacy@sfn.org to learn more.