

1969–2019



# Funding for the National Science Foundation



The **National Science Foundation (NSF)** supports fundamental, curiosity-driven science that enables 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 **\$9 billion** for NSF in FY 2020.

## Health and Discovery

NSF provides the 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 that 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. There were **671** university research spin-off companies formed in 2011.<sup>3</sup>

## The Future of the Scientific Enterprise

No one knows what breakthroughs will go undiscovered if NSF funding is not maintained.

- 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 because the results of publicly-funded research are **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 **50,000** Graduate Research Fellowships.<sup>8</sup>
- The scientific enterprise depends on **consistent funding** to support America's scientific workforce. If the scientific pipeline is disrupted, there will be enduring long-term consequences as our talented researchers move on to other fields.

## NSF BY THE NUMBERS

**\$8.1 billion**

NSF FY 2019 budget

**92 percent**

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

**19,074**

FY 2018 grants supported by NSF<sup>5</sup>

**359,000**

personnel at<sup>5</sup>

**2,000**

institutions are supported by NSF<sup>7</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

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- <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 2.0*. The Science Coalition. October 2013.
- <sup>4</sup> Chakma, J., Sun, G., Steinberg, J.D., Sammut, S.M., Jaggi, 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 2019 Budget Request to Congress*. National Science Foundation. NSF-16-034. February 2018.
- <sup>6</sup> *Science and Engineering Indicators 2016*. National Science Board. NSB-20-162. February 2016.
- <sup>7</sup> *FY 2017 Performance and Financial Highlights*. National Science Foundation. NSF-16-003. February 2018.
- <sup>8</sup> *About*. NSF Graduate Research Fellowship Program.

*The Society for Neuroscience (SfN) is a nonprofit membership organization of over 37,000 scientists and physicians who study the brain and nervous system. Visit [SfN.org](http://SfN.org) or email [advocacy@sfn.org](mailto:advocacy@sfn.org) to learn more.*