

BIOLOGICAL SCIENCES: AN INVESTMENT IN AMERICA'S FUTURE

Government investment in scientific research & development fuels innovation, creates jobs, and grows the economy.



BIOLOGICAL RESEARCH IS ESSENTIAL

Biological research funded by the National Science Foundation (NSF) and other federal agencies promotes national security and public well-being by solving pressing challenges, such as improving food security, combating new diseases, and wisely managing natural resources. This federal support helps the U.S. attract and educate the next generation of scientists. Students learn research skills that prepare them for the jobs of today and tomorrow.

NSF's Biological Sciences Directorate provides about **65%** of federal grant support for non-medical, fundamental biological research conducted at our universities and nonprofit research centers.

MEETING SOCIETY'S NEEDS

- Improving **human health** and combating **emerging diseases**.
- Increasing **food security** by developing crops that grow in changing environments.
- Predicting, mitigating, and preparing for the impacts of **environmental changes**.
- Sustaining **biodiversity and healthy ecosystems** that underpin the livelihoods of communities.
- Fueling the **economy** by improving the sustainability of domestic energy sources.
- Developing **new tools** and mobilizing **big data** to spur the development of new research fields.

40%

Percentage of fundamental research funding provided by the federal government

24%

Percentage of the total U.S. workforce employed in science, technology, engineering, & mathematics (STEM) jobs.

11%

Rate of increase for employment in science & engineering occupations between 2014 and 2024; compared to 7% rate of increase for all occupations.

91K

Median annual salary in science & engineering occupations in 2021, roughly double the median for all U.S. workers.

PUBLIC INVESTMENTS IN NSF YIELD A POSITIVE RATE OF RETURN

1,850

Number of NSF-funded institutions across the country in fiscal year 2024

70K

Students supported by NSF Graduate Research Fellowships since 1952

268

Total number of Nobel Prize winners who have received NSF funding

400

Number of companies that receive NSF small business funding each year

25%

Percentage of basic scientific research conducted by America's colleges and universities that is supported by NSF

358K

Researchers, postdoctoral fellows, trainees, teachers & students were supported directly by NSF in fiscal year 2024



Funding for NSF's Biological Sciences Directorate (BIO) has not kept pace with the demand for research grants. Despite the large number of highly competitive and potentially transformative grant proposals submitted to BIO, **81%** of applications were rejected in 2024.

Research programs that support fundamental biological research have very low funding rates. Roughly **one in five** research proposals are funded by NSF, the National Institutes of Health, and USDA's Agriculture and Food Research Initiative.

Sustained investments are required to ensure that our nation is positioned to be a global leader in science and innovation. Please provide NSF with at least \$9.9 billion in FY 2026 and ensure robust federal investments in the biological sciences.