

Dr. Gilda Barabino
President, Olin College of Engineering
AAAS Chair of the Board

20 March 2023







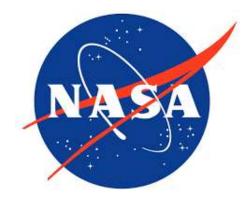
AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE





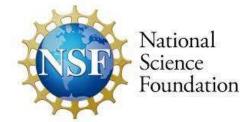
Getty Images

















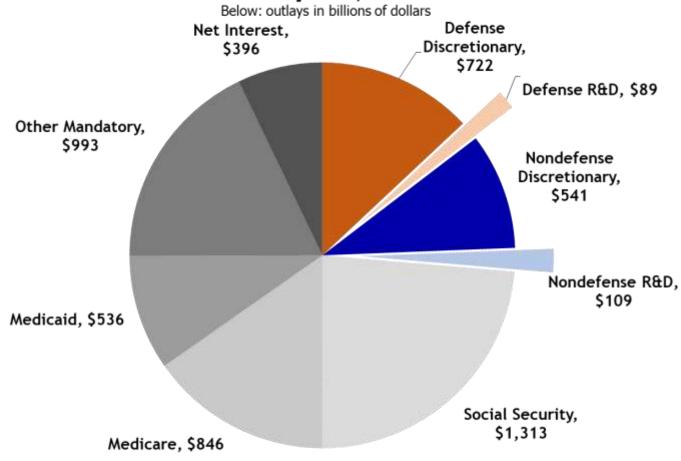






Federal R&D Configuration

Composition of the Proposed FY 2023 Budget Total Outlays = \$5.8 trillion

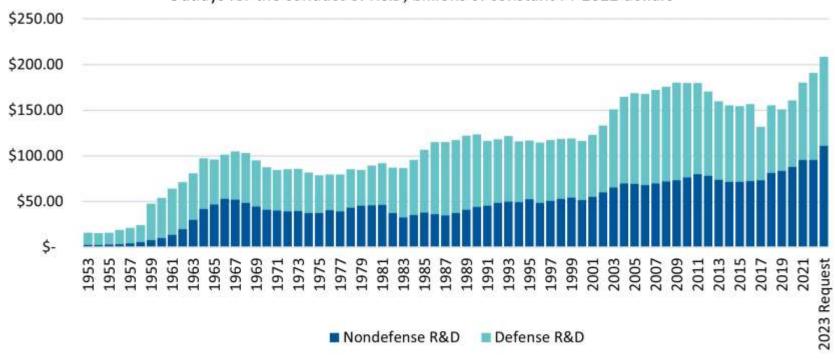


Source: Budget of the United States Government FY 2022. © 2021 AAAS

Balance between NonDefense and Defense Priorities

Federal Spending on Defense and NonDefense R&D

Outlays for the conduct of R&D, billions of constant FY 2022 dollars

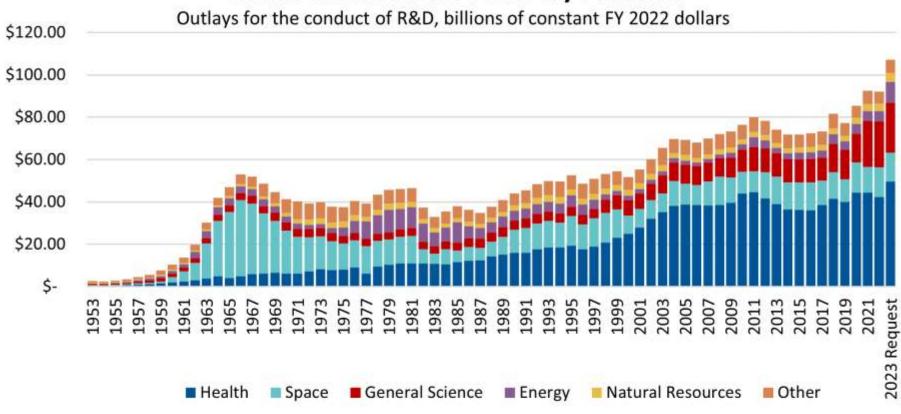


Source: OMB Historical Tables in Budget of the United States Government FY 2023.

Constant dollar conversions are based on chained GDP price index. | AAAS 2022

Nondefense Spending Reflects National Priorities

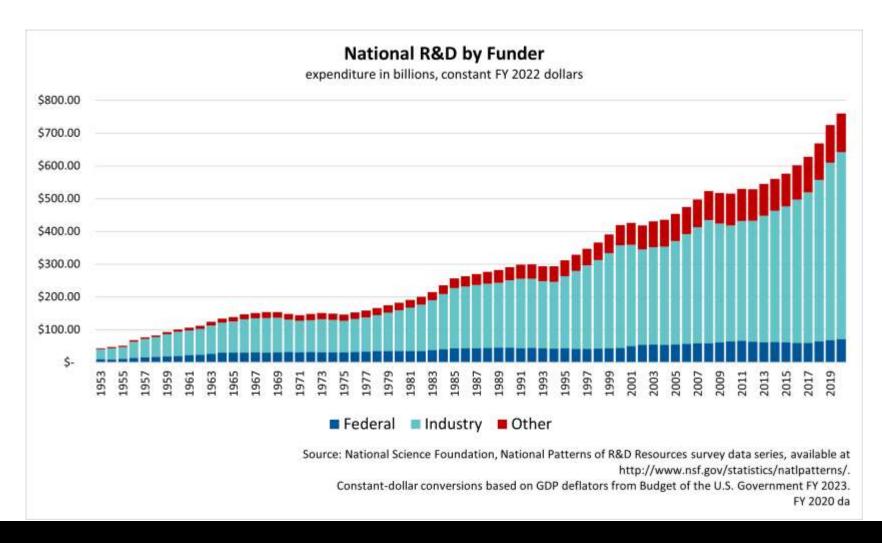
Trends in Nondefense R&D by Function



Source: OMB Historical Tables in Budget of the United States Government FY 2023.

Constant dollar conversions are based on chained GDP price index. | AAAS 2022

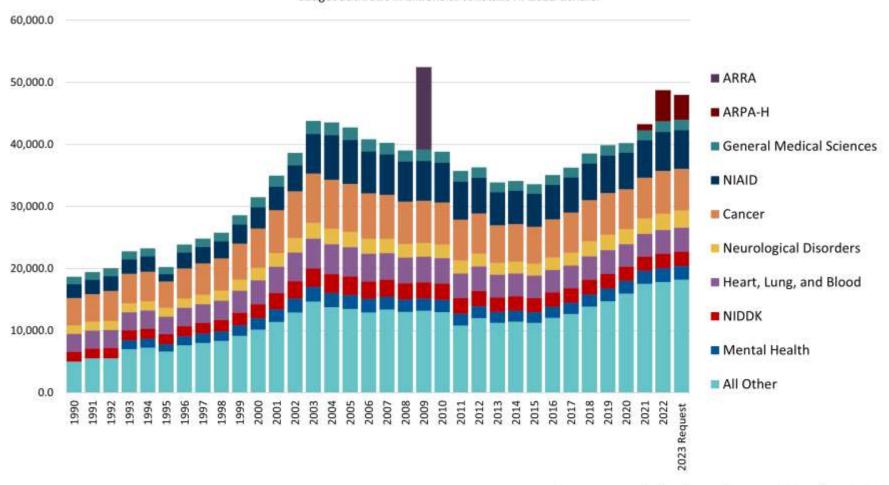
Innovation Requires both Federal and Industry Investments



NIH's Mission is to Improve Public Health

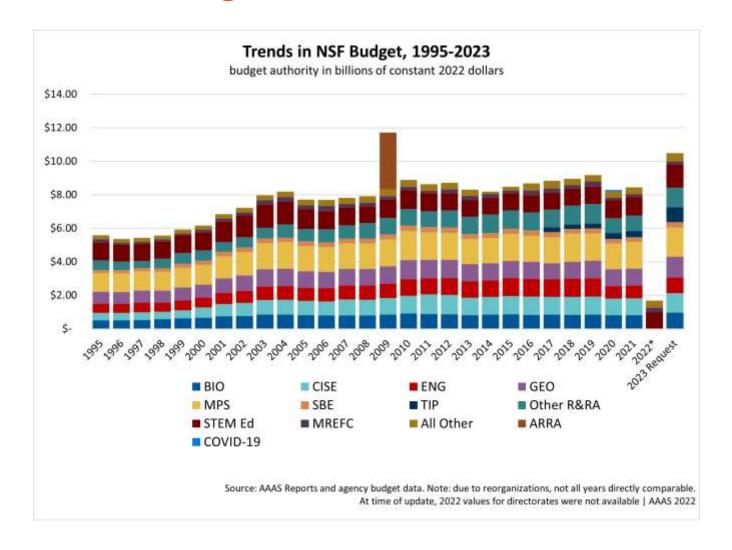
NIH Budget, FY 1990-2023

budget authroirt in billions of constant FY 2022 dollars



Source: Agency budget data and appropriations | AAAS 2022

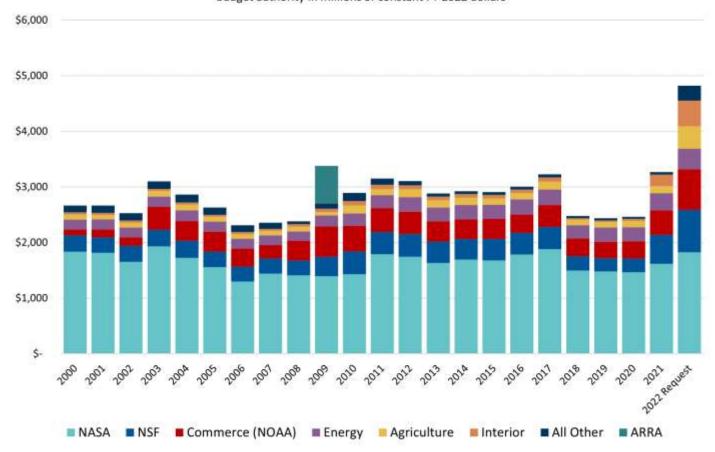
Majority of Research Agencies are Mission-driven: NSF an Exception



Addressing Global Challenges Requires Many Agencies

U. S. Global Change Research Program

budget authority in millions of constant FY 2022 dollars



Source: OSTP R&D documents and initiative budget supplements | AAAS 2022

President Biden's 2024 Budget – Science Priorities

- National Institutes of Health
 - Cancer Moonshot
 - New Precision Medicine Psychiatric Initiative
 - Health Effects of Climate Change
- National Science Foundation
 - Scientific Workforce
 - Technology, Innovation, and Partnerships
- NASA
 - Earth Sciences
- Department of Energy
 - Office of Science

CHIPS and Science Act of 2022

- Strong authorizations: NSF, NIST, DOE Office of Science
- Some real \$: microelectronics workforce @NSF
- Funding models, use-inspired/translational research
- Test beds to advance critical tech
- Regional innovation hubs/engines
- Support for women, underrepresented minorities, and early-career researchers
- Balanced approach to research security
- Quadrennial S&T Review





Thank you!