

Without a renewed commitment to federal investment in research and development (R&D), the United States risks losing its status as the undisputed global leader in science and innovation – threatening our innovations and national security. China continues to seek every opportunity to outperform, outspend and outpace the U.S. in R&D.

We urge Congress to provide critical increases for the federal science agencies in the FY 2026 appropriations to support robust funding for research, education and scientific infrastructure.

Powering American Scientific and Technological Leadership

Federal R&D funding has produced life-changing technological breakthroughs and powered the United States' economic and geopolitical dominance for generations.

Federal funding has supported the development of:

- The Internet
- Global Positioning System (GPS)
- Search engines
- Magnetic Resonance Imaging (MRI)

Federal science research agencies are driving discoveries in areas vital to the nation's ongoing economic and national security, including:

- Artificial intelligence
- Quantum computing
- Wireless technology

Federal R&D funding has led to:

> 1 in 3

VENTURE-BACKED
STARTUP PATENTS THAT
CAN BE TRACED BACK TO
FEDERAL R&D FUNDING

400

COMPANIES FUNDED BY
NSF ACROSS NEARLY ALL
TECHNOLOGY AND MARKET
SECTORS

15%

FULL-TIME SCIENCE AND
ENGINEERING GRADUATE
STUDENTS SUPPORTED BY
THE FEDERAL GOVERNMENT

307,000

RESEARCHERS, TECHNICAL
PROFESSIONALS, POST-DOCTORAL
AND GRADUATE STUDENTS, AND
K-12 TEACHERS AND STUDENTS
IMPACTED BY NSF FUNDING

A Strong Federal Partnership Fuels Innovation

The University of California is a key partner to the federal government, providing the workforce and expertise needed to meet the nation's challenges.

4

INVENTIONS PER DAY

1,440

INVENTIONS
(UC FY 2023)

78

STARTUPS
(UC FY 2023)

13,810

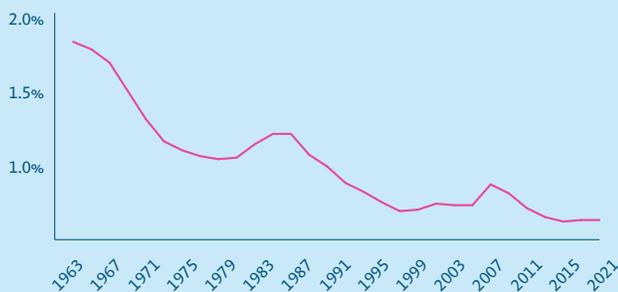
ACTIVE PATENTS
(THROUGH UC FY 2023)

Economic Vulnerability and Declining Federal R&D Funding

Emerging economies, including China, are ramping up government R&D funding, while U.S. federal R&D funding has been in decline for 60 years.

In the mid-1960s, the U.S. government's R&D spending equaled nearly 2% of U.S. GDP. That number has since fallen by more than half.

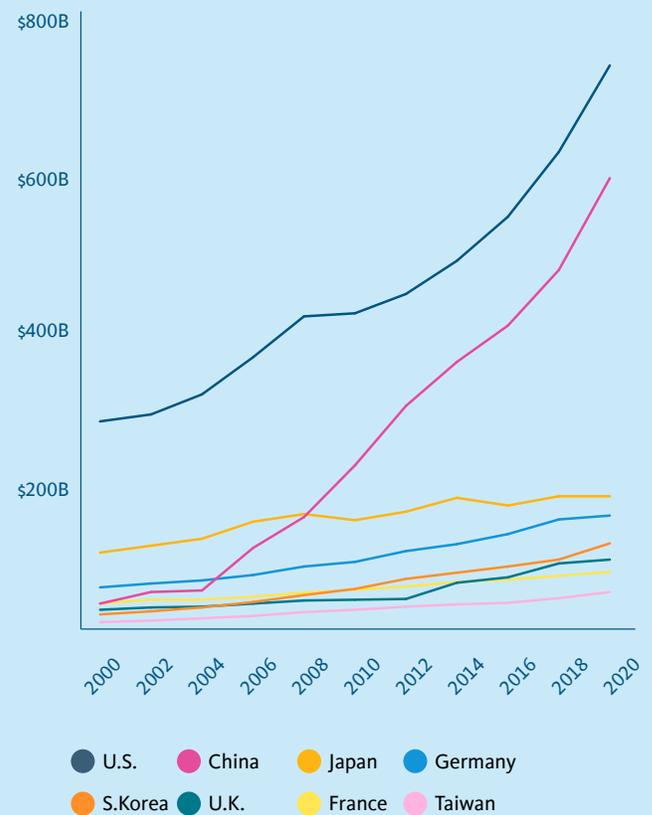
Federally funded R&D as a percentage of GDP



- U.S. productivity growth has slowed dramatically over the last three decades. Declining federal R&D spending can explain up to a third of this productivity drop.
- Due to significant growth in R&D funded by businesses, the share of total U.S. R&D funded by the federal government decreased from 30% in 2011 to 19% in 2021.
- The business sector now funds 36% of basic research, close to the 40% share of basic research funded by the federal government.
- From 2000 to 2020, China grew its R&D spending by 16% each year, the fastest growth rate in the world.
- Over the same period, U.S. annual R&D spending growth rate was 6%.
- China's absolute spending on R&D is now second only to the U.S.

From 2000 to 2021, China has steadily invested billions in gross domestic expenditures on R&D, now trailing only the United States.

Gross Domestic Expenditures on R&D by Country



- China's R&D investments have seeded significant advances in wireless communications, advanced materials, quantum sensing, biotechnology, advanced robotics and other key areas.
- The U.S. is in danger of losing dominance in many emerging technology sectors.

For more information, please contact UC's Office of Federal Governmental Relations at (202) 974-6300.