Funding Fundamental Research: The Building Blocks of American Innovation

ACTION

To ensure U.S. competitiveness, Congress should provide sustained and robust funding for NSF, DOE, NIST STRS and DOD 6.1 and 6.2 in FY24.

Fundamental research is essential to U.S. competitiveness. Federal funding directly impacts the future US STEM workforce

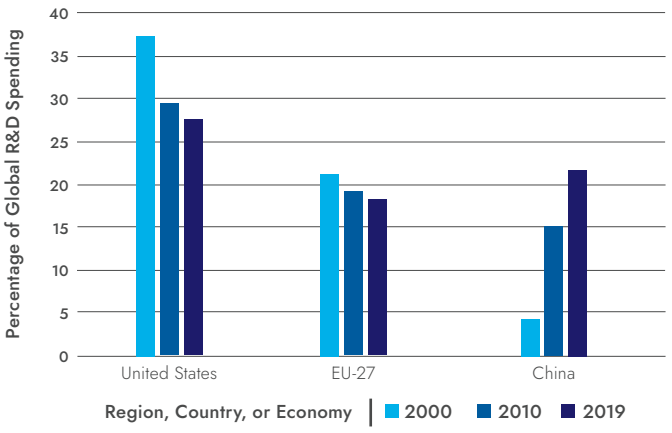
More than 85% of the long-term growth of the U.S. economy is attributed to advances in science and technology.

Physics research programs help generate the technical workforce demanded by our high-tech economy. Roughly 50% of new PhDs in physics take jobs in the private sector.

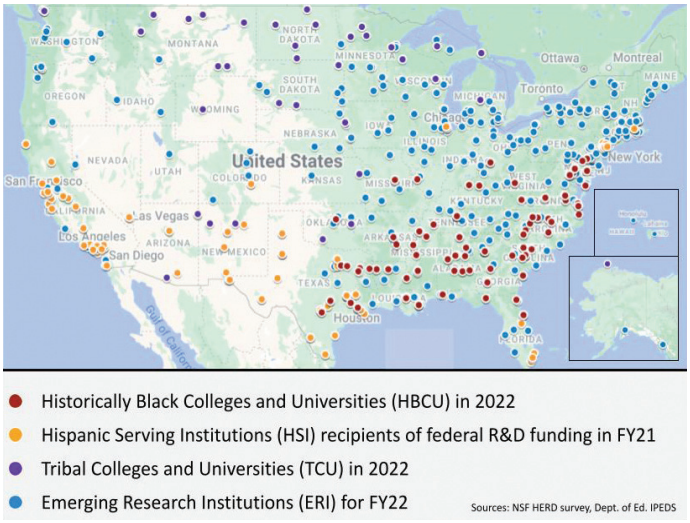
Investments in Research, People and Communities: Following Through on the CHIPS and Science Act

Not providing robust funding for the federal science agencies, as authorized in the CHIPS and Science Act, means missed opportunities for students and researchers. The U.S. needs to fulfill the "and Science" portion of the CHIPS bill to remain a global leader in science and technology.

Changing R&D Expenditures Indicate Increasing Global Competition



Source: NSF Science & Engineering Indicators 2022 https://ncses.nsf.gov/pubs/nsb20221/u-s-and-global-research-and-development#global-r-d



Broadening Participation and Building STEM Capacity Across All 50 States

Strong appropriations for the federal science agencies – in line with the CHIPS and Science Act – are vital to expanding participation in STEM as well as the geographical diversity of federal R&D investments. Initiatives include:

- Regional Innovation Hubs (NIST)
- Expanded partnerships with HBCUs, MSIs, ERIs, TCUs, (NSF, DOE)
- And more

Investing in the Future of US Innovation

Harnessing the full potential of our R&D enterprise requires appropriations that work towards matching the ambitious funding levels laid out in the CHIPS and Science Act. People are the bedrock of U.S. R&D, and these increases are vital to support them and the economic health of our nation.

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