Federal Research Funding: Essential to America’s Competitiveness and Security

**ACTION**

Congress should lift the caps on discretionary spending in FY20 and ensure sustained and robust funding levels for science.

**Sequestration-Level Budget Caps Put America’s Scientific Enterprise at Risk**
- Absent congressional action, sequestration-level budget caps are set to return in FY20. According to CBO estimates, this could mean an approximate 6% cut to non-defense discretionary spending and an 8.5% cut to defense spending.
- These cuts would have a devastating impact on the federal agencies that support early-stage research, jeopardizing America’s economic competitiveness and national security. Impacts could include a reduction of 1250 awards from NSF and 200 grants from DOE Office of Science.

**If Caps Are Not Raised, Immediate Impacts Could Include:**

**Slowing Innovation**
- Approximately 8,600 fewer patents could be granted annually

**Shrinking the Talent Pipeline**
- Approximately 47,000 fewer STEM degrees could be awarded per year

**Creating a Security Risk**
- Funding for 6.1 and 6.2 could decrease by $731M, jeopardizing our military capabilities.

**The Long Term Impact Could Be Devastating to Our Economy**
- A 2015 study of OECD countries – including the U.S. – estimated that a 1% decrease in R&D spending could shrink the overall economy by 0.61%
- Our international competitors, in particular China, have bolstered their funding for R&D in recent years, while ours has stagnated. In 2018, the National Science Board said that it “expects China to pass the United States in R&D investments by the end of this year.”

**Gross R&D Expenditures Over Time**
- Source: National Science Board S&E Indicators 2018

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