

8/10/2018

Science as an Institution

Nathan Foster

FYI Science Policy News Intern

The life of an intern



- Lots of notes on
 - Congressional hearings
 - Reports
 - Outside events (lobbyist and otherwise)
- Copy editing and link checking
- Blurbs for weekly newsletter
- 1 (maybe 2!) full-length articles

Key Questions

- What science gets funded?
- Who decides?
- Who benefits?

What gets funded?



What gets funded?



What gets funded?



FYI Science Policy @FYIscipolicy · Aug 3

The @HouseScience committee discussed @ENERGY's role in supporting advanced computing infrastructure and #MachineLearning research at a recent hearing:



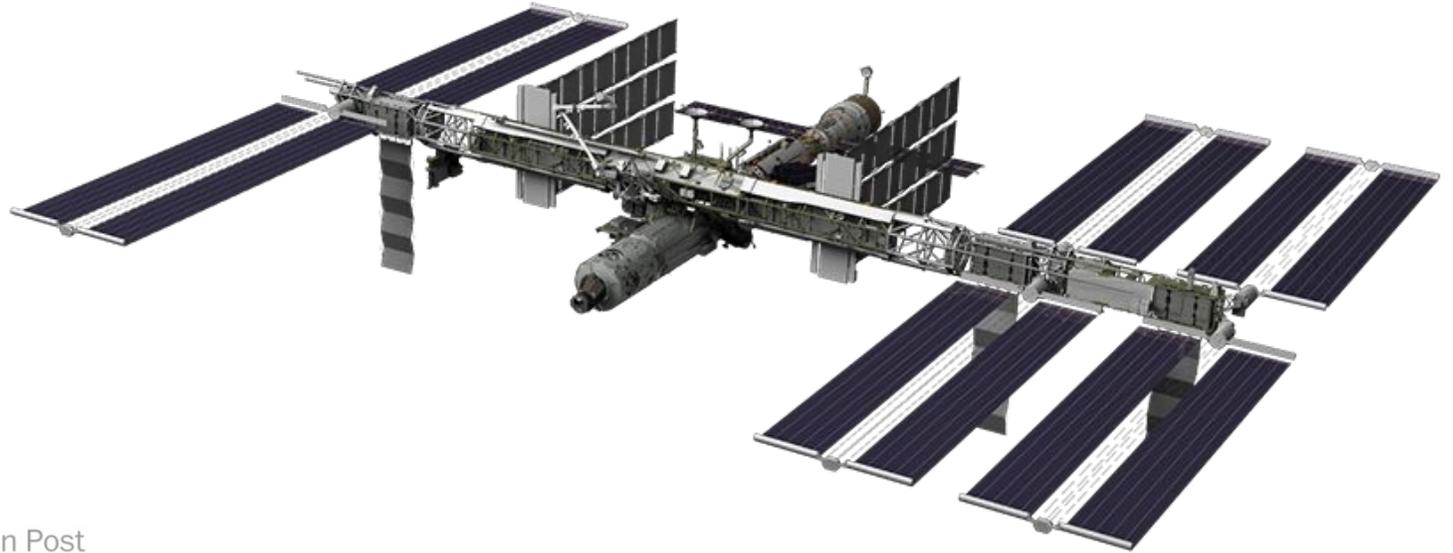
House Panel Explores Implications of Machine Learning for Science

At a July hearing, the House Science Committee discussed promising applications of machine learning techniques to scientific research and the...

aip.org



Who decides?



The Washington Post

The Switch

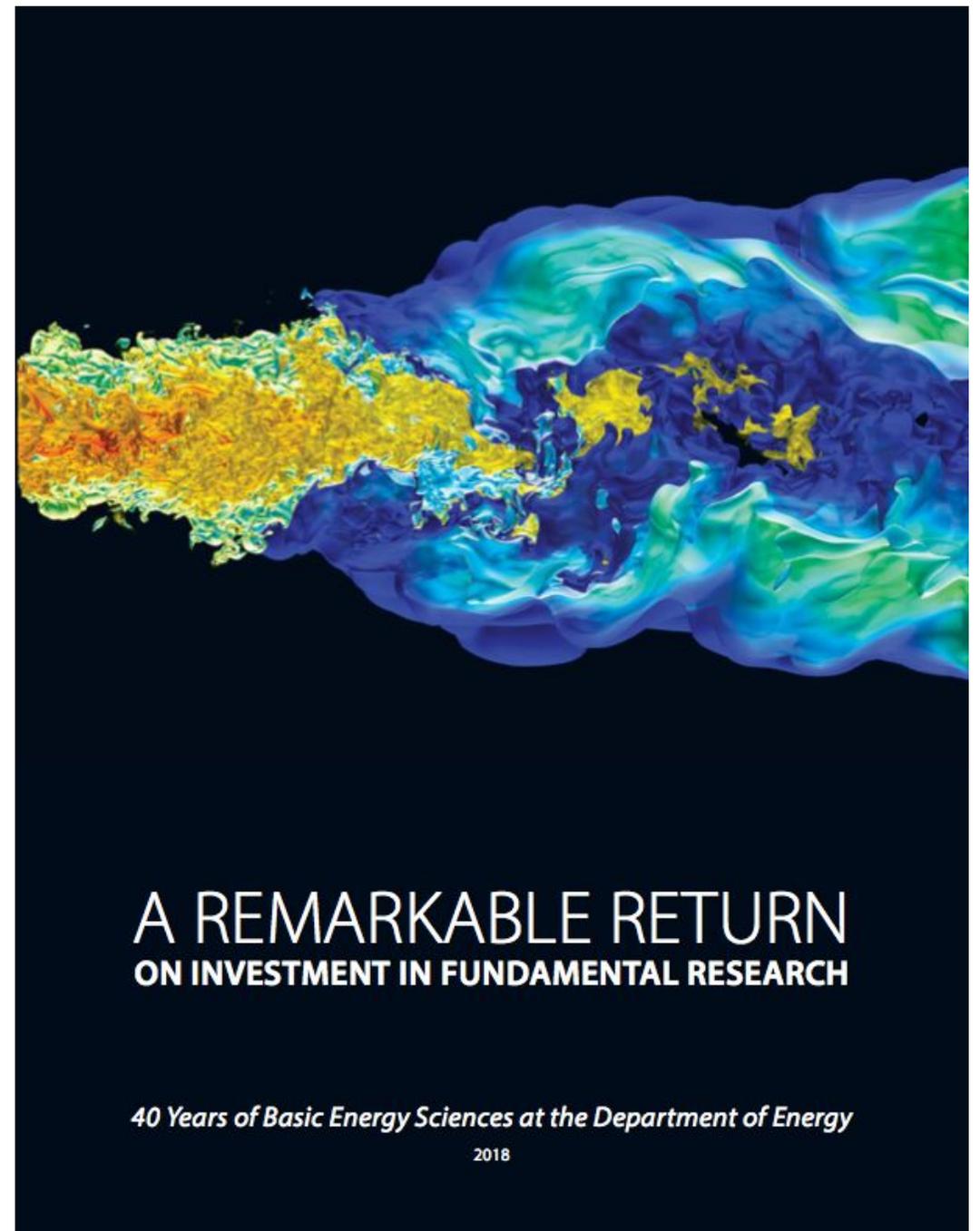
The Trump administration wants to turn the International Space Station into a commercially run venture, NASA document shows

by **Christian Davenport** February 11

The Trump administration wants to turn the International Space Station into a kind of orbiting real estate venture run not by the government, but by private industry.

Who benefits?

“These discoveries... have led to new technologies and industries that contribute to American innovation and prosperity.”



Who benefits?



“New scientific and technological capacities introduced into a highly stratified society will tend disproportionately to benefit the affluent and powerful.”
- Daniel Sarewitz

Who *should*
benefit?



“The mission of the American Institute of Physics is to advance, promote, and serve the physical sciences for the benefit of humanity.”

Nation-State Competition



New US Visa Screening Measures Target Chinese Citizens Studying 'Sensitive' Subjects

SHARE THIS



Publication date: 13 June 2018

Number: 71

Under new screening measures implemented by the Trump administration on June 11, U.S. consular

Nation-State Competition



National Science Board
Science and Engineering Indicators

2018

THE RISE OF CHINA IN SCIENCE AND ENGINEERING



The global landscape of science and engineering (S&E) research, education, and business activities has undergone dramatic shifts since the turn of the century. China, as it invests heavily in building its S&E capabilities, is challenging the traditional leaders in the S&E enterprise - the United States, European Union, and Japan.

A country's strength in S&E arises from a skilled, STEM-capable workforce and sustained investment in research and development (R&D) to produce new knowledge and innovations. Four vital benchmarks of S&E performance are drawn from the *Overview* of the *2018 Science and Engineering Indicators* report, and highlighted here: R&D expenditures, production from high-technology manufacturing, bachelor's degree awards in S&E, and peer-reviewed S&E publications.

“If current trends continue, the National Science Board expects China to pass the U.S. in R&D expenditures by the end of 2018. ”

Nation-State Competition

2018 House funding bill for the NSF

NATIONAL SCIENCE FOUNDATION

This Act includes \$7,767,356,000 for the National Science Foundation (NSF). This strong investment in basic research reflects the Congress' growing concern that China and other competitors are outpacing the United States in terms of research spending, as noted in the 2018 Science and Engineering Indicators report of the National Science Board.

Thanks to

- Mitch Ambrose
- Michael Henry
- Alexis Wolfe
- Will Thomas
- Brad Conrad
- Danielle Weiland
- James Merrick
- Kerry Kidwell-Slak
- All the other interns!



Sources

- Sarewitz, Daniel. "Does Science Policy Matter?" *Issues in Science and Technology* 23, no. 4 (Summer 2007).
- <https://nsf.gov/nsb/sei/one-pagers/China-2018.pdf>

Open Science

Image credit: Barend Mons

