



# HOW TRUMP UPENDED SCIENCE

A chaotic 100-day push to remake federal research will have lasting consequences

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**I**t is almost certainly the most consequential 100 days that scientists in the United States have experienced since the end of World War II.

Since taking his oath of office on 20 January, President Donald Trump has unleashed an unprecedented rapid-fire campaign to remake—some would say demolish—vast swaths of the federal government's scientific and public health infrastructure. His administration has erased entire agencies that fund research; fired or pushed out thousands of federal workers with technical backgrounds; terminated research and training grants and contracts worth billions of dollars; and banned new government funding for activities it finds offensive, from efforts to diversify the scientific workforce to studies of the health needs of LGBTQ people. The frenetic onslaught has touched nearly every field—from archaeology to zoology, from deep-sea research to deep-space science. And it has left researchers from postdocs to lab heads feeling bewildered, worried—and angry. Many fear that in just 14 weeks, Trump has irreversibly damaged a scientific enterprise that took many decades to build, and has long made the U.S. the envy of the world.

It is too soon to know whether those fears will prove prescient. But now that Trump has marked the 100th day of his second term, *Science* is putting a spotlight on just a few of the many ways his administration is reshaping U.S. science. Numbers tell part of the story (see graphics, p. 577), highlighting how the administration has slowed the flow of research spending at key agencies and threatened to deny vast sums to universities. At the National Institutes of Health, the world's largest funder of biomedical research, the body blows have left researchers uncertain and anxious about what's to come (see p. 578). A more personal perspective comes from a handful of researchers who agreed to share their experience of the first 100 days, which for some meant losing a job or hopes of a future career (see p. 581).

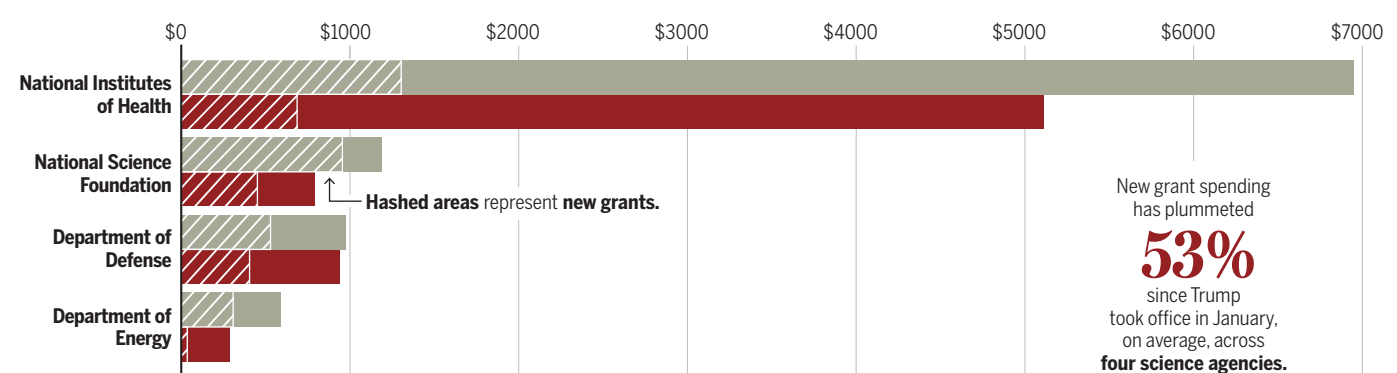
Although it can be hard to believe so much has already happened so quickly, many in the research community are now focusing on what might happen in the remaining 1361 days of Trump's term. Federal judges, for example, will be issuing rulings in numerous lawsuits that have implications for research, and the White House has released spending plans that could have major implications for science for years to come (see pp. 566 and 584). For better or worse, the story has just begun, and the end is nowhere in sight.

PHOTO: CHIP SOMODEVILLA/GETTY IMAGES

Science spending plummets

Since Donald Trump was inaugurated as president on 20 January, the largest federal agency funders of research have spent billions less on grants, compared with the same 3-month period in 2024. Causes include a freeze on federal spending and administration reviews to root out and terminate grants on topics banned by Trump’s executive orders on diversity and “gender ideology.”

Grant amounts (millions of dollars) provided between 20 January–15 April\*:



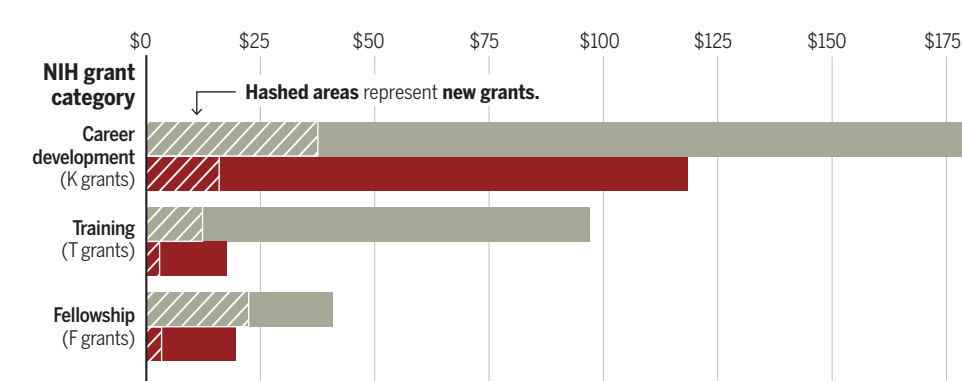
New grant spending has plummeted **53%** since Trump took office in January, on average, across four science agencies.

\*National Institutes of Health data are updated more frequently and include grants through 19 April.

Workforce funding slashed

A slowdown by the National Institutes of Health (NIH) and National Science Foundation (NSF) in grantmaking for training students and early-career scientists threatens to narrow the research workforce pipeline. The squeeze has affected several grant types designed specifically for that purpose. Some of the reductions likely resulted from directives from the Trump administration ending federal support for programs involving diversity, equity, and inclusion. (Grant money for training also comes from other sources, such as research grants, not shown here.)

Grant amounts (millions of dollars) provided between 20 January–18 April:



NSF fellowships halved

**2037** new awards for **graduate research fellowships** were given by NSF in 2024.

**1000** new fellowships have been awarded so far by NSF for 2025, which may be the final total for the year.

Big research universities take a hit

The Trump administration says it has frozen or terminated research grants at several elite institutions, citing concerns such as that they violated federal civil rights law by inadequately responding to alleged antisemitism on their campuses. Amounts shown reflect multiyear awards.

At least **\$5 billion** has been frozen at eight universities because of alleged civil rights violations.

<b>Harvard University</b> \$2.2 billion  In addition, <b>\$1 billion</b> in grant funding and <b>\$5.8 billion</b> in funds for Boston-area hospitals affiliated with Harvard Medical School are at stake.	<b>Cornell University</b> \$1 billion*	<b>Brown University</b> \$510 million
	<b>Northwestern University</b> \$790 million	<b>Columbia University</b> \$400 million
		<b>Princeton University</b> \$210 million
		<b>University of Pennsylvania</b> \$175 million
		<b>University of Maine*</b> \$36 million

Six of these institutions are among

**60 UNIVERSITIES** under investigation by the Trump administration for alleged antisemitic discrimination.

An additional **\$17 BILLION** of their federal research funds is at risk. Also at risk is research funding for **40 other academic institutions** the administration is investigating for alleged racial discrimination.

\*University of Maine frozen funds were restored after Senator Susan Collins (R-ME) interceded. Cornell University reported its cuts would amount to more than \$1 billion. All other figures are based on announcements from the Trump administration; in most cases, universities have not verified frozen or canceled funding. The estimate of \$17 billion is based on data reported by institutions in FY2023.

See <https://scim.ag/Trump100data> for data methodology used in all charts.