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Alternative Thinking: Using Science to Fix Science

A letter from David A. Brenner, MD, President and CEO of Sanford Burnham Prebys

In a recent <u>letter to Michael Kratsios</u>, President Trump implored his 38-year-old director of the White House Office of Science and Technology Policy to "blaze a trail to the next frontiers of science."

Trump spoke of creating new, innovative models for funding and sharing scientific research, of building "an ecosystem that attracts top talent, celebrates merit, protects our intellectual edge and enables scientists to focus on meaningful work rather than administrative box checking."

He said America's science and technology enterprise can be revitalized by "pursuing truth, reducing administrative burdens and empowering researchers to achieve groundbreaking discoveries."

Trump got the sentiment right and the facts wrong.

Science is not about absolute truths, not in any ultimate or philosophical sense. It is an ongoing process of exploration, discovery and refinement to better understand the natural world. Scientific knowledge changes with new data, understanding and time. It is based on empirical evidence — information gathered directly or indirectly through observation or experimentation, the cornerstone of the scientific method.



White House Science Advisor Michael Kratsios with President Trump

Here are some empirical facts:

The Trump administration has issued a series of executive orders and policies that adversely affect America's science and technology enterprise, beginning with the National Institutes of Health's proposed 15 percent cap on all indirect cost (IDC) reimbursements.

IDC helps cover some of the true costs of doing science. An across-the-board 15 percent cut represents a massive reduction in federal support of science. Rather than "accelerate research and development," per Trump's call to action, the cap will have the opposite effect. Less investment means less achievement. Slashing IDC slashes research.

The president says the United States "must maintain technological supremacy" in the world, but under his administration, hundreds of research grants have been terminated for non-scientific

reasons, creating chaos and uncertainty, especially among young or future scientists who are now second-guessing their career choices.

Kratsios is charged with finding new ways science can "fuel economic growth and better the lives of all Americans." But again, actions undermine words. Research universities and non-profit research institutions like Sanford Burnham Prebys confront difficult choices necessary to survive, such as hiring freezes, layoffs, closing labs, ending programs or shuttering facilities.

In 2023, according to Biocom, nearly 76,000 San Diegans worked directly in science, with 178,000 others in related jobs. Science generated more than \$56 billion in total economic output. Less science means fewer jobs, not exactly empowering economic growth and better lives.

There is broad consensus in the scientific community that improvements can be made to strengthen the historic partnership between the federal government and U.S. research institutions. It's not a new point of view. Kelvin Droegemeier, Trump's science adviser during his first term, said as much, advocating for greater transparency and a reduction in the regulatory burden.

Researchers agree. Greater transparency and the elimination of unnecessary regulations are good for science. Groups like the Association of Independent Research Institutes and the Association of American Medical Colleges are <u>working to propose</u> new ways to think about and fund science, to create a predictable, sustainable funding environment that reflects the scale and complexities of today's research, especially in the life sciences.

This effort is on the fast track, with the goal of releasing a new framework by the end of summer. The Trump administration apparently can't wait for a comprehensive and thoughtful plan prepared by people with genuine expertise in the biomedical research enterprise.

Instead, his administration is plowing ahead with their ill-advised and draconian cuts to science. Last week, the Department of Energy followed NIH in <u>proposing to slash IDC rates to 15</u> <u>percent</u>. This week, we learned that the administration plans to cut spending at the <u>Department of Health & Human Services</u> (HHS) by nearly a third and at the <u>NIH by 40 percent</u>.

In its own self-description, "the mission of the U.S. Department of Health and Human Services is to enhance the health and well-being of all Americans, by providing for effective health and human services and by fostering sound, sustained advances in the sciences underlying medicine, public health, and social services."

It's Orwellian gaslighting: Cut health and science funding while insisting less means more. The U.S. Constitution grants Congress exclusive power of the purse. Legislators can intervene to preserve and advance the scientific enterprise and the health of the country. Will they rise to the occasion?

Change is inevitable, but it should be shaped by careful and informed consideration, not by mindless cuts couched in magniloquent but malevolent phraseology. President Trump says we should all seek to "cement America's global technological leadership and usher in the Golden Age of American Innovation."

Absolutely, but doing so requires leadership and action based on empirical evidence.

Sincerely,

David A. Brenner, MD

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CUTS & EFFECTS



In a leaked "pre-decisional" Office of Management and Budget document, the Trump administration proposes to radically reduce and restructure the Department of Health & Human Services (HHS) in 2026, affecting all of its constituent agencies, most notably the National Institutes of Health.

A new \$20 billion agency called the Administration for a Healthy America would be created, incorporating pieces of other agencies with a focus on "Make America Healthy Again." However, many specific programs would be eliminated, including preventing childhood lead poisoning, Head Start, bolstering the healthcare workforce, advancing rural health initiatives, maintaining a registry of patients with amyotrophic lateral sclerosis and initiatives aimed at HIV/AIDS prevention and mental health.

Major cuts in science and health have already occurred. The HHS workforce, including the NIH, CDC and FDA, has already been downsized through

layoffs and restructuring, affecting roughly 20,000 employees.

- The HHS budget would decrease from \$121 billion to \$80 billion, a 30% cut.
- The NIH budget would decrease from \$47 billion to \$27 billion, a nearly 40% cut.
- The Centers for Disease and Control budget would decrease from \$9.2 billion to \$5.2 billion, a 44% cut.

The NIH's 27 institutes would be consolidated into 8, with four institutes and centers eliminated: the National Institute for Nursing Research, the National Center for Complementary and Integrative Health, the Fogarty International Center and the National Institute on Minority Health and Health Disparities.

The NIH has already terminated at least 780 previously approved grants or parts of grants.

SOURCES

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