News and Perspective

Research Implications of Increased Political Oversight in the United States

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Key Takeaways

- The "Improving Oversight of Federal Grantmaking" Executive Order of August 7, 2025, formalizes a pattern of increasing political oversight of US research and funding
- There are a range of immediate and potential research implications resulting from this political oversight
- Increased uncertainty calls for strengthened collaboration, support, advocacy, commitment to scientific values, and renewed creativity in the scientific community

Research—and especially research funding—has become increasingly politicized in the United States.

The past several months have seen significant changes to the research landscape under the current Trump administration, including budget cuts, funding freezes, personnel layoffs, and grant and program terminations. These changes are affecting vital public health and research institutions, with many of the

changes deemed unconstitutional and facing legal challenges [1,2]. They reflect a rapidly expanding political oversight codified in the Improving Oversight of Federal Grantmaking Executive Order (EO 14332), which was released on August 7, 2025, and entered into the Federal Register on August 12, 2025 [3].



The "Improving Oversight of Federal Grantmaking" executive order of August 7, 2025.

A New Order in Federal Funding

EO 14332 introduces a framework that aims to "improve the process of Federal grantmaking while ending offensive waste of tax dollars" [3]. It references concerns such as perceived

misuse and inequitable distribution of public funds and the propagation of "absurd ideologies."

It includes changes such as the possibility of grant termination for convenience, including when the award "no longer advances agency priorities or the national interest." It also requires federal funding agencies to designate a *senior* appointee, either a senior federal employee or someone appointed by the President. This appointee is tasked with overseeing funding and discretionary awards, as well as:

- Ensuring projects align with American interests and "where applicable, demonstrably advance the President's policy priorities"
- Relying on their own independent judgment (with peer review serving an advisory function)
- Prioritizing, all else being equal, institutions with lower indirect cost rates

While some may view the order as necessary reform, a correction to undue political and ideological influence over grant-making, or a step toward addressing the overreliance of nonprofits on government funding [4], many in the research community have raised serious concerns about the implications of this increased oversight.

Immediate and Long-Term Implications

Provided it is reasonable, not subject to political or ideological whim, and represents a good faith effort to improve the return citizens see on their investment in the advancement of knowledge, political oversight is not necessarily a net negative. It serves an important safeguarding function. When exercised thoughtfully and within a culture of mutual respect and close collaboration with public agencies and research institutions, it helps ensure fiscal accountability, research integrity, and public welfare [5]. In some instances—for example, research with vulnerable populations such as those affected by conflict—more oversight, not less, is desirable [6].

For many, however, the current American administration's approach does not represent an appropriate, constructive level of oversight but rather the continuation of a trend of troubling overreach—the latest chapter being less a creeping tiptoe with diminishing returns and more a series of resounding leaps with immediate and far-reaching potential negative effects [5, 7]

The immediate effects are, first and foremost, human. Researchers and public health officials are abruptly finding themselves with their projects eliminated or jeopardized, their careers and lives in limbo, and the welfare of the populations they study at risk.

There are also long-term financial and knowledge advancement implications. A recent qualitative systems modeling analysis [8], for example, examined the potential tradeoffs associated with proposed budget cuts to the National Institutes of Health, the largest public funder of biomedical research in the world [9]. The authors' analysis highlights four reinforcing loops:

- Fundamental research contraction loop: potential reduction in discovery, innovation, and overall scientific progress because of reduced investment in basic research
- **Human capital erosion loop:** potential shrinking of the future biomedical workforce because of decreased

- training, funding, and role opportunities, as well as decreased tolerance for the indirect costs necessary to sustain research and public health activities
- Increasing costs of new treatments loop: potential early increases in the financial burden on public health care and consumers because of increased reliance on private funding sources for treatment development
- Lost savings from prevention loop: potential longterm increases in health care costs because of decreased investment in preventative interventions and translational research

Perhaps of particular concern for the digital health community is the potential chilling effect on creativity and innovation. Creativity is forged through uncertainty [10], but not when it creates uncontrollable stress [11]. Innovation requires a "friendly" environment characterized by political and economic stability, gender equality, free access to information, and clear rule of law [12]—all arguably under threat. Government funding is often critical for innovation in both the public and private sectors. It supports, for example, health research "with little commercial incentive" [13] and early phase, higher-risk corporate health initiatives [14]. It also allows more room for unexpected findings, which tend to be more common with larger grants and increased duration from grant onset [15]. EO 14332 does include a provision for awarding grants to "recipients with the potential for potentially longer-term, breakthrough results." Nonetheless, by constraining and politicizing research focus, favoring lower-cost projects, and creating heightened uncertainty and legal risk, the order risks undermining innovation.

Finally, there are implications for the public perception of science and public health institutions. A recent global survey study suggests that many still trust and endorse increased involvement of scientists in social and political decision-making [16]. The oversight and rhetoric included in EO 14332, however, may reflect and reinforce a growing distrust in science and scientific experts, with significant downstream effects on policy and public health [17,18].

Beyond the United States

These effects are not likely to be contained within the United States. Challenges for other nations include disrupted international research collaborations, financial burden, global disease risk, flux in global health governance, and existential threats to aid organizations. There may also be opportunities. A recent editorial [19], for example, called on low- and middle-income countries to seize the opportunity to diversify funding sources, strengthen South-South collaborations, and assert greater autonomy to build more sustainable, locally led research and health programs. Similarly, a recent policy analysis [20] assessing possible impacts on European nations noted the opportunity for increased global influence and leadership in research, education, and health governance "if [European policymakers] can mobilize the major investment needed to replace a retreating United States."

What Can Be Done?

Action is already being taken to address perceived overreach and mitigate potential negative effects. For example, a Senate committee rejected many of the proposed budget cuts to the National Institutes of Health and Centers for Disease Control and Prevention in August, and a new funding bill is set to be reviewed and revised this month [21]. Still, considerable uncertainty remains.

Such uncertain times call for resilience and action in the scientific community through advocacy and support for

one another; strengthened community via collaboration and discourse; reaffirmed commitment to transparency, integrity, and objectivity; and renewed creativity, which can be sparked despite, and sometimes because of, difficult conditions.

If you have been impacted by recent research oversight and/or funding changes and want to share your research or your story, or if you want to share a differing perspective, contact our Scientific News Editor, Kayleigh-Ann Clegg.

Keywords: policymaking; government regulation; research; research support as topic; science policy; innovation, organizational; diffusion of innovation; freedom; ethics, research; digital health; United States

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