

LEGAL UPDATES

Trump Executive Order Restricts Funding for “Dangerous Gain-of-Function Research”

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On May 5, the Trump administration issued Executive Order 14292, [“Improving the Safety and Security of Biological Research,”](#) which effectively ends federal funding for “dangerous gain-of-function research” and other life science research by foreign entities in certain countries of concern or countries where there is not adequate oversight to ensure that the countries are compliant with U.S. oversight standards.

This Executive Order also directs agency heads to establish guidance for suspension of federally funded dangerous gain-of-function research until a new policy regarding such research is completed. Lastly, the order instructs agency heads to develop and implement a strategy to govern, limit and track certain research occurring in the United States without federal funding, including dangerous gain-of-function research and other life science research that could cause significant societal consequences.

What Is “Dangerous” Gain-of-Function Research?

Generally, gain-of-function research (GOFR) refers to research in which an organism is genetically altered in a way to increase functions such as transmissibility, virulence, immunogenicity and host tropism. In other words, GOFR seeks to understand how a pathogen adapts to selective pressure applied to the organism and can be used, for example, to develop vaccines and therapeutics.

Executive Order 14292 defines a “dangerous” GOFR as “scientific research on an infectious agent or toxin with the potential to cause disease by enhancing its pathogenicity or increasing its transmissibility,” which “could result in significant societal consequences.” The order further includes a list of outcomes that fall under dangerous GOFR, such as enhancing the harmful consequences of the agent or toxin, enhancing the susceptibility of a human host population to the agent or toxin, etc.

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2024 Restrictions Regarding Dangerous GOFR Prior To EO 14292

In 2024 and prior to Executive Order 14292, the Office of Science and Technology Policy (OSTP) had released the "United States Government Policy for Oversight of Dual Use Research of Concern and Pathogens with Enhanced Pandemic Potential," which provided a framework for oversight of research on biological agents and toxins. The National Institutes of Health (NIH), the largest source of federal funding for medical research, had planned to implement the policy on May 6, 2025, for federal funding provided by the NIH.

The OSTP also released the "2024 Framework for Nucleic Acid Synthesis Screening," which established requirements for recipients of federal funding for research related to sources capable of producing synthetic nucleic acids.

The Executive Order Policy Changes

Executive Order 14292 calls for the director of OSTP to revise or replace both the policy and the "2024 Framework for Nucleic Acid Synthesis Screening." The order also calls for the new policy to include mandatory reporting of dangerous GOFR by research institutions that receive federal funding. Additionally, the order calls for the director of OSTP to implement a strategy to "govern, limit, and track" non-federally funded dangerous gain-of-function research across the United States.

Further, violation of any regulations promulgated under the order by any grant recipient, employer or institution can be subject to revocation of federal funding and up to a five-year period of ineligibility for federal life-sciences grant funds.

End of Federal Funding for Foreign Entities

This Executive Order also ends federal funding in two cases:

1. Dangerous GOFR "conducted by foreign entities in countries of concern (e.g., China). . . or in other countries where there is not adequate oversight to ensure that the countries are compliant with United States oversight standards and policies;" and
2. "[O]ther life-science research that is occurring in countries of concern or foreign countries where there is not adequate oversight to ensure that the countries are compliant with United States oversight standards and policies and that could reasonably pose a threat to public health, public safety, and economic or national security."

What This Means for Current Dangerous GOFR

The NIH issued notice NOT-OD-25-112 on May 7, 2025, which rescinds implementation of the policy. The notice also states that the NIH will no longer accept applications for grants and cooperative agreements for dangerous GOFR as defined by the Executive Order, and instructs all NIH awardees to halt any research on potential dangerous GOFR until the new policy and guidance are in place.

Thus, it is imperative for those with federal funding, in particular from NIH, to identify whether current research may be considered dangerous GOFR and consider ceasing such research until a new policy – which is to be delivered within 120 days of the Executive Order (e.g., by September 2, 2025) – is in place.

For privately funded research of dangerous GOFR, it will be imperative to track and review the strategy regarding non-federally funded research promulgated under the Executive Order, which is to be delivered within 180 days of the Executive Order (e.g., by November 1, 2025).



Looking Ahead

Numerous lawsuits challenging the termination or reduction of federal funding in similar cases have been filed, with many lawsuits still pending. One such case is *American Public Health Assoc. v. National Institutes of Health*, in which the U.S. Department of Health and Human Services (HHS) terminated various grants for biomedical and behavioral research at the NIH and ceased considering certain categories of pending grant applications in February 2025 (No. 25-10787 (D. Mass. filed April 2, 2025)). On April 2, a group of leading health research organizations and research scientists sued the NIH; the director of the NIH; HHS; and the secretary of HHS, alleging these terminations are unlawful under the Administrative Procedure Act (APA) and requesting that the court halt the government's actions. On April 4, the U.S. District Court for the District of Massachusetts granted a permanent injunction and concluded, among other things, that the NIH's actions were arbitrary and capricious and failed to follow notice-and-comment procedures.

Thus, federal funding as restricted in Executive Order 14292 may be challenged in a similar manner as *American Public Health Assoc. v. National Institutes of Health* or other similar cases. (see *Association of American Universities v. Dept. of Energy*, No. 25-10912 (D.D.C. filed April 14, 2025); *American Assoc. of University Professors – Harvard Chapter v. DOJ*, No. 25-10910 (D. Mass. April 11, 2025); and *American Association of University Professors v. United States Department of Justice*, 25-cv-02429 (S.D.N.Y. filed March 25, 2025)).

Researchers and institutions that conduct GOFR can [subscribe](#) to Lathrop GPM's client alerts to receive news on this and other relevant Executive Orders, and can access a Trump Administration Client Resource Center with up-to-date Executive Order and Litigation Trackers on our [website](#).

If you have specific questions about how Executive Order 14292 action may affect your organizational operations, please contact [Stephanie Vu](#) or your regular Lathrop GPM attorney.