

A June 23, 2025 [memorandum](#) from the Office of Science and Technology Policy (OSTP) provides guidance to Federal departments and agencies on implementing "Gold Standard Science" in their scientific activities. This guidance is in response to President Donald Trump's Executive Order (EO) 14303, "[Restoring Gold Standard Science](#)," issued on May 23, 2025.

Key aspects of the guidance include:

- **Tenets of Gold Standard Science:** The EO defines nine key tenets of Gold Standard Science, and this guidance outlines these tenets and the responsibilities of agencies regarding them.
- **Agency Implementation:** Federal agencies are required to implement these tenets in all agency-managed scientific activities, including both intramural and extramural research. Agencies are encouraged to adapt implementation to their specific missions while maintaining scientific merit and excellence. According to the memo, "agencies shall prioritize collaborative and interdisciplinary approaches in scientific research to accelerate discovery and innovation."
- **Streamlined Approaches:** Agencies should adopt streamlined approaches to implement Gold Standard Science, minimizing administrative burdens and avoiding excessive bureaucratic requirements.
- **Use of Technology:** To enhance efficiency, agencies should explore using artificial intelligence and other advanced technologies, such as automated tools for validating reproducible protocols, standardizing transparent data reporting, and quantifying uncertainty.
- **Reproducible and Replicable Science:** Agencies are directed to prioritize disciplined scientific methods and experimental design, including clear and standardized protocols, comprehensive documentation, robust statistical methods, adequate sample sizes, and validated methodologies.
- **Publicly Accessible Data:** Agencies should encourage the deposition of raw data and code in publicly accessible repositories where appropriate, to facilitate replication and reproducibility.
- **Reporting Uncertainty:** Agencies should encourage standardized formats for reporting uncertainty, such as graphical visualizations or concise summaries, and promote cautious, evidence-based language in reports and communications to prevent overstatement of results.

Agencies are required to report to the OSTP on their implementation actions within 60 days (by August 22, 2025). The overall goal is to strengthen scientific inquiry, rebuild public trust, and ensure the United States remains a global leader in rigorous, evidence-based science.