

Representing Over 110,000 Researchers

6120 Executive Blvd., Suite 230, Rockville, MD 20852 | faseb.org

December 18, 2025

White House Office of Science and Technology Policy Executive Office of the President Eisenhower Executive Office Building

ATTN: Sihao Huang 1650 Pennsylvania Avenue Washington, DC 20504

RE: Request for Information (RFI) on Accelerating the American Scientific Enterprise

Submitted electronically via regulations.gov

Dear Mr. Huang,

The Federation of American Societies for Experimental Biology (FASEB) appreciates the opportunity to provide comments on the Request for Information (RFI) Accelerating the American Scientific Enterprise (OSTP-TECH-2025-0100) issued by the White House Office of Science and Technology Policy (OSTP) on November 26, 2025. As a coalition of 22 scientific societies representing over 110,000 individual researchers across the biological and biomedical sciences, FASEB is committed to the adoption and implementation of policies that serve to strengthen the nation's leadership across science and technology disciplines.

Therefore, FASEB appreciates OSTP's commitment to accelerating scientific progress, enabling groundbreaking discoveries, and ensuring scientific research benefits all Americans. Below, we provide feedback on questions (v), (viii), and (ix).

(v) What empirically grounded findings from metascience research and progress studies could inform Federal grantmaking processes to maximize scientific productivity and increase total return on investment? Please provide specific examples of evidence-based reforms that could improve funding allocation, peer review, or grant evaluation.

FASEB affirms that funding allocation has a significant impact on scientific productivity and return on investment. Of particular interest is the allocation of federal funding to support the development of shared research resources and early-career researchers.

<u>Shared research resources</u>. Shared research resources make efficient use of research funds and broaden access to advanced technologies by promoting rigorous research practices, providing quality technical training, and fostering collaborative research. Stable and predictable funding enables shared facilities to operate efficiently and maintain high standards. In turn, this reduces costs associated with conducting cutting-edge research and provides greater reliability for researchers who use these facilities.

In 2017, FASEB initiated a survey to examine researcher perspectives on shared research facilities across the United States that was used to inform our report, <u>Maximizing Shared Research Resources</u>. Findings from this report suggest that shared facilities struggle to provide consistent, high-quality services at a

stable rate with many facility directors and staff noting that federal policies constrained their ability to offer services to external researchers. Thus, expanded funding to support the development and sustained use of shared resources and facilities are warranted. The NIH S10 programs and NSF Major Research Instrumentation Program are two examples of funding opportunities that support shared and cost-effective science. Allocating additional funding to these programs, as well as developing additional programs with lower minimum costs, can support efforts to increase scientific productivity and return on investment.

<u>Early-Career Researchers</u>. Recent analyses have demonstrated that the level of career instability within the biomedical sciences has increased. Facing diminishing career prospects, many early-career researchers leave science entirely, reducing the return on the U.S. investment in the training of these individuals and the establishment of their research programs. The loss of researchers and the termination of promising and productive lines of inquiry is wasteful. Similarly, the technical skills and expertise acquired by each will need to be replaced, increasing the cost of research and delaying discovery.

FASEB strongly supports implementation of programs and funding mechanisms to support early-career investigators, particularly those that enhance career development and foster a develop skills needed to foster the biomedical research workforce of the future. The National Institutes of Health's Stephen I. Katz Early Investigator Research Project Grant Program and Maximizing Investigators 'Research Award are excellent examples of providing flexibility for early-career investigators to pursue new research directions with stability and support for transitioning to independent careers. Moreover, these mechanisms offer distinct advantages for new investigators, such as longer award length and strict prohibition on submitting preliminary data. Additional funding mechanisms with similar features can reinforce support for early-career investigators at a critical point in their careers, thereby enhancing scientific productivity and the potential for important breakthroughs.

(viii) How can the Federal government leverage and prepare for advances in AI systems that may transform scientific research—including automated hypothesis generation, experimental design, literature synthesis, and autonomous experimentation? What infrastructure investments, organizational models, and workforce development strategies are needed to realize these capabilities while maintaining scientific rigor and research integrity?

FASEB recognizes that rapidly advancing artificial intelligence (AI) systems, including Gen AI, have the potential to transform scientific research. In January 2025, FASEB issued <u>Recommendations for Generative AI in the Biological and Biomedical Sciences</u> and provided additional comments on the use of Generative AI in research in a <u>response</u> to the June 2025 American Science Accelerations Project RFI. Several key points from these efforts are summarized below:

- Policy and Regulation. Federal agencies should collaborate to develop cohesive, aligned guidelines for the use and transparent reporting of AI and Gen AI in federally funded research. Federal agencies have released policies that are not fully aligned, creating confusion for researchers. A coordinated approach, potentially by OSTP, would support consistent expectations and clarify transparency and reporting requirements for AI and Gen AI use in grant applications and research output.
- Scientific Integrity. Protocols should be developed to ensure rigor and reproducibility in research involving AI and Gen AI. FASEB encourages policymakers to develop regulations requiring transparency for Gen AI tools. In addition, software developers should provide clear information on how these tools are created, how they work, and the source of data used in their development.

- Data Privacy and Security. FASEB emphasizes the importance of identifying AI use cases where misinterpretation or reuse of data poses elevated risk of harm, particularly in sectors such as healthcare and education. Enhanced levels of privacy and security are warranted for high-risk applications. In addition, stakeholders employing Gen AI should develop and routinely update data management and security protocols, and federal agencies should incorporate Gen AI guidance into data management and sharing requirements to support integrity, accuracy, and responsible use of data.
- Workforce Training. Adequate training is essential for both the research community and federal agencies. FASEB encourages federal agencies to ensure that agency staff and program officers receive training on the appropriate use of AI, bias monitoring, and oversight responsibilities. These efforts will better position funding agencies and researchers to responsibly leverage AI technologies while upholding scientific integrity.
- (ix) What specific Federal statutes, regulations, or policies create unnecessary barriers to scientific research or the deployment of research outcomes? Please describe the barrier, its impact on scientific progress, and potential remedies that would preserve legitimate policy objectives while enabling innovation.

FASEB affirms that reducing unnecessary administrative burden remains essential to promoting scientific progress and ensuring that efficient use of federal investments. In August 2024, FASEB responded to the Next-Generation Cures Bill RFI, commenting on the reduction of regulatory burden in biomedical research. While progress has been made on the issue of regulatory burden, several significant issues persist, particularly in the context of regulation of animal research.

A major source of unnecessary administrative burden in animal research is the grant-to-protocol congruence review process. Misalignment between Institutional Animal Care and Use Committee (IACUC) protocol review cycles (three years) and the length of NIH grants (typically four or five years) creates unnecessary research delays and interrupts animal care. Researchers are often compelled to defer or suspend experiments until protocol approvals are complete. Thus, while the relevant federal requirements are intended to enhance accountability, many of these tasks do not promote animal welfare or improve research quality. As stated in previous comments, FASEB recommends aligning IACUC protocol reviews with NIH grant length.

Conclusion

FASEB appreciates the opportunity to provide our expertise as OSTP considers approaches to advance and accelerate the American scientific enterprise. Our perspective and recommendations on grant funding allocation, preparation for AI advancement, and reduction of regulatory burden could significantly improve the scientific enterprise and better position us to remain global leaders in research. To ensure robust engagement on these and other issues in the future, we strongly encourage OSTP to allow more than 30 days for public comment.

Please do not hesitate to contact me should you have any questions related to our feedback.

Sincerely,

Eric E. Kelley, PhD

Σ. E. Kelly

FASEB President