



# FASEB

Federation of American Societies  
for Experimental Biology

Representing Over 130,000 Researchers

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Office of Science & Technology Policy  
ATTN: Scientific Integrity Fast-Track Action Committee  
Executive Office of the President  
Eisenhower Executive Office Building  
1650 Pennsylvania Avenue  
Washington, DC 20504

Submitted electronically via email: [ScientificIntegrityRFI@ostp.eop.gov](mailto:ScientificIntegrityRFI@ostp.eop.gov)

Dear Scientific Integrity Fast-Track Action Committee Members,

The Federation of American Societies for Experimental Biology (FASEB) appreciates the opportunity to provide input on [FR Doc. 2021-13640](#), “Request for Information to Improve Federal Scientific Integrity Policies.” As a coalition of 30 scientific societies representing a range of biological and biomedical research fields, FASEB appreciates the importance of scientific integrity policies both for ensuring sound science and fostering public trust in science, both of which are critical for science-based policymaking. Following a period during which scientific information was suppressed, distorted, or ignored, we commend the efforts of your committee to assess existing Federal scientific integrity policies and practices while exploring new ways to build public trust in science-based policymaking.

Before addressing the specific questions posed in the RFI, we would like to make the committee aware of several recent FASEB efforts that could further inform your work. In 2015, FASEB’s Science Policy Committee hosted a symposium that explored emerging concerns about the inability to reproduce published biomedical research findings and determine ways in which a variety of stakeholders, ranging from individual researchers and research institutions to scientific societies and publishers, could enhance the transparency of research methods and results. This symposium and three follow-on roundtables informed the 2016 report, “[Enhancing Research Reproducibility: Recommendations from the Federation of American Societies for Experimental Biology](#).” While initially intended to prepare researchers for forthcoming changes in the National Institutes of Health (NIH) grant application requirements, many of the recommendations are applicable to the broader scientific community.

In 2017, FASEB partnered with NIH’s National Institute of General Medical Sciences to host a workshop on “[Responsible Communication of Basic Biomedical Research: Enhancing Awareness and Avoiding Hype](#).” The goal of this workshop was to explore the role of “hype” – overselling or misrepresenting research findings – on the scientific enterprise and public trust in science. Participants included a diverse group of experts, including scientists, communications scholars, academic and corporate communications officers, policy advisors, and journalists. Discussion topics included the challenges of communicating science in the current media landscape, motivations for certain forms of

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**Full members:** The American Physiological Society • American Society for Biochemistry and Molecular Biology • American Society for Pharmacology and Experimental Therapeutics • American Society for Investigative Pathology • American Society for Nutrition • The American Association of Immunologists • American Association for Anatomy • Society for Developmental Biology • American Peptide Society • Association of Biomolecular Resource Facilities • The American Society for Bone and Mineral Research • American Society for Clinical Investigation • Society for the Study of Reproduction • The Society for Birth Defects Research & Prevention • The Endocrine Society • American College of Sports Medicine • Genetics Society of America • The Histochemical Society • Society for Glycobiology • Association for Molecular Pathology • Society for Redox Biology and Medicine • Society For Experimental Biology and Medicine • American Aging Association • U. S. Human Proteome Organization • Society of Toxicology • Society for Leukocyte Biology • American Federation for Medical Research • Environmental Mutagenesis and Genomics Society • Shock Society • **Associate members:** The American Society of Human Genetics

science communications, inherent features of science that make communicating about it challenging, and the role of press releases in promoting research progress. Again, while the emphasis was on basic biomedical research, many of the discussions and suggestions are broadly applicable across STEM fields.

As a result of our deliberations leading up to the 2016 report on research reproducibility, FASEB has explored the ways in which shared research resources or “cores” support the efforts of individual investigators with high-quality equipment and reagents as well as designated technical expertise. In 2017, these efforts culminated in series of [recommendations](#) that highlighted the potential of shared research resources to promote rigorous research practices, quality technical training, and collaborative research gleaned from a [community survey](#). Earlier this year, a FASEB Task Force issued a [report](#) that explored opportunities for overcoming systemic challenges related to effective incorporation of shared research resources across the research enterprise.

In addition to our more extensive efforts, FASEB also submitted [comments](#) in response to an RFI issued last year by the Department of Health and Human Services’ Office of Research Integrity seeking input on strategies for fostering research integrity and responsible conduct of research. Key themes from those comments that the committee might want to consider for the current RFI include:

1. Supporting development and implementation of research integrity and responsible conduct of research training for all members of a laboratory, including principal investigators, core facility staff, staff scientists, postdoctoral scholars, graduate and undergraduate students, and technicians;
2. Working with scientific publishers to establish uniform expectations to address research integrity, as many have developed extensive resources that could serve as excellent resources for Federal training modules;
3. Offering research integrity and responsible conduct of research training modules in conjunction with scientific conferences, workshops, and other professional development opportunities.

For the current RFI, FASEB offers the following specific feedback:

## **Topic 2: Effective policies and practices Federal agencies could adopt to improve the communication of scientific and technical information**

The COVID-19 pandemic has provided a unique opportunity for Federal agencies to gather real-time data about communication of scientific information that resonate with non-technical audiences. First and foremost, Federal agencies should strive to offer uniform messaging on a specific issue, be it a virus or an emerging technology. Uniform messaging minimizes confusion – both for those receiving and delivering information – and also maximizes resources, both staff and documentation. By pooling resources, staff efforts can be focused on tailoring communications to the specific audiences to ensure clarity and retention of key information.

Uniform messaging can only be effective if the audience trusts the individual delivering the information. For technical information, trust can be established by highlighting the credentials of those communicating the information to reassure audiences that the message reflects scientific information rather than partisan preference. Pairing a technical expert with an appropriate and respected community leader is also an effective strategy for relaying technical information.

**Topic 3: Effective policies and practices Federal agencies could adopt to address scientific issues and the scientific workforce.**

A key challenge for Federal scientific integrity policies and practices is the rate at which potential problems are detected and addressed. Investigations of potential violations of scientific integrity policies frequently take several months and sometimes years to reach a public resolution, and in many cases, there is an additional lag associated with correcting the publication record. To ensure timely processing of reports of potential scientific integrity violations, agency integrity offices should be provided sufficient resources to investigate such inquiries.

Additionally, there should be a clearer articulation that violations of scientific integrity policies have consequences. Stating potential penalties for violating these policies, such as canceling current grant funds and limiting the ability to apply for future research grants, should serve to deter most scientific malfeasance. However, when penalties are assessed, we recommend broadly publicizing the infractions and resulting penalties to reiterate commitment to scientific integrity and proper stewardship of Federal resources.

FASEB also encourages Federal agencies to seek ways to reward research teams and organizations demonstrating excellence in scientific integrity. This could include spotlighting effective training modules and practices or even rewarding efforts to correct the scientific record in the case of evolving experimental methods and data analysis capabilities. Rewarding desired behaviors is just as – if not more – important than punitive actions against bad actors.

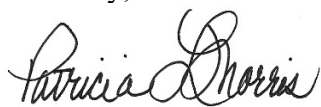
**Topic 4: Effective practices Federal agencies could adopt to improve training of scientific staff about scientific integrity and the transparency into their scientific integrity practices.**

Reiterating our [2020 feedback](#) to the Department of Health and Human Services Office of Research Integrity, FASEB strongly recommends regular training in research integrity and responsible conduct of research for all members of a research team, not just trainees. Principal Investigators are critical for setting the tone for good lab practices, and thus including them as well as other scientific staff members in such training highlights the fact that responsible research practices are dependent upon the research team and laboratory culture.

As indicated throughout our comments, scientific integrity is dependent upon effective communication with a range of stakeholders. Therefore, FASEB also recommends that Federal scientific integrity and responsible conduct of research training include communications modules as part of the core curriculum.

FASEB appreciates the opportunity to provide input on this important topic. We look forward to working with OSTP and Federal science agencies to reinforce the importance of scientific integrity as a core value of research community and an integral component for fostering public trust in science.

Sincerely,



Patricia L. Morris, MS, PhD  
FASEB President