December 10, 2023

Martin Halbert, PhD
Program Director and Science Advisor for Public Access
Office of Integrative Activities | National Science Foundation
2415 Eisenhower Ave.
Alexandria, VA 22314

RE: Request for Information (RFI) on NSF Public Access Plan 2.0: Ensuring Open, Immediate, and Equitable Access to National Science Foundation Funded Research. Comments transmitted electronically via RFI Web form and e-mail: PublicAccess2-RFI@nsf.gov

Dear Dr. Halbert,

The Federation of American Societies for Experimental Biology (FASEB) appreciates the opportunity to provide comments in response to the Request for Information (RFI) regarding implementation of the NSF Public Access Plan 2.0: Ensuring Open, Immediate, and Equitable Access to National Science Foundation Funded Research. FASEB is comprised of 26 scientific societies, collectively representing over 110,000 biological and biomedical researchers. As nonprofit scholarly scientific societies, we advance scientific enterprise by reinvesting our income in the research community. Below, please find answers to selected RFI questions, with additional recommendations about promoting culture change, supporting academic freedom, and advancing our shared vision to improve equity throughout the research life cycle.

What opportunities or benefits do you anticipate you and/or your institution would realize from the requirement that NSF-funded peer-reviewed publications (or data) be made available in the NSF Public Access Repository (NSF–PAR)? FASEB appreciates NSF’s recognition of the value and importance of peer-reviewed research publications and the services provided by scholarly societies to further scientific understanding and improve human health. Given the post-pandemic realities and impacts of misinformation, FASEB encourages NSF to partner with scholarly societies who are actively working to reinvigorate focus on scientific integrity in peer-reviewed publications and data. When public access is accompanied by the building blocks of scientific integrity – best practices and standards, ethical behavior, and principles of honesty and objectivity – it will lead to more responsible research conduct. This includes improved rigor and reproducibility and enhanced scientific collaboration.

What challenges or barriers do you anticipate personally facing while complying with the requirement that NSF-funded peer reviewed publications be made available in NSF–PAR or that data underlying publications be made available? There are a variety of challenges related to peer-reviewed publications and underlying data. FASEB has summarized these into three major categories:

Full members: American Physiological Society · American Society for Biochemistry and Molecular Biology · American Society for Pharmacology and Experimental Therapeutics · American Society for Investigative Pathology · The American Association of Immunologists · American Association for Anatomy · Society for Developmental Biology · Association of Biomolecular Resource Facilities · The American Society for Bone and Mineral Research · The American Society for Clinical Investigation · Society for the Study of Reproduction · 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 · Society for Leukocyte Biology · American Federation for Medical Research · Shock Society

Associate members: American Society of Human Genetics · Society for Birth Defects Research & Prevention · American Society for Nutrition
1. Researcher, institution, funder, society, or publisher confusion on publication and data costs.
2. Difficulty in identifying and securing sufficient resources to support the diversity of business and publication models and the vulnerability of scholarly societies.
3. Inconsistent use and support for existing infrastructure and Persistent Identifiers (PID).

**Researcher, institution, funder, society, or publisher confusion.** Building flexibility and ensuring clarity in NSF’s implementation plan, specifically around how researchers and institutions may use research funds with scholarly societies and other publishers to comply with NSF public access goals, will facilitate easier adoption for all stakeholders. Currently, peer-reviewed publications and data frequently acknowledge multiple sources of funding. The current publications and data ecosystem is also complex and reliant on funding from a variety of sources, including, but not exclusive to, government and agency grant funding. To clarify agency expectations and minimize stakeholder confusion, FASEB recommends NSF describe all allowable paths for publication and data costs charged to research budgets, including direct and institutional support. Creating a “Publication and Data Costs” table outlining different approaches may be a useful tactic, particularly when included in the Proposal and Award Policies and Procedures Guide (PAPPG).

FASEB applauds NSF’s efforts to provide careful guidance and procedures for requesting reasonable accommodations for potential delays in dataset deposition timing. Considering NSF’s proposed timing to implement its public access plan by January 2025, we recommend NSF further clarify the specific manuscript types the policy applies to and the deposition timing expectations for dataset types in the 2025 PAPPG. Ensuring researchers have clear, consistent information across agency guidance documents is essential for achieving full compliance and advancing NSF’s public access goals.

**Difficulty in identifying and securing sufficient resources to support the diversity of business and publication models and the vulnerability of scholarly societies.** Recognizing the diverse range of publication and data models prevalent in the evolving, complex research ecosystem, FASEB recommends NSF consider public access implementation in two phases: a) Supporting and accommodating the transition of a complex ecosystem via a variety of models that are designed for differing researcher needs; b) Refining implementation and future guidance documents based on stakeholder feedback. Early, consistent engagement with the research community—such as through future RFIs, listening sessions, or workshops—will be essential for each of these phases.

To bolster this approach, FASEB encourages NSF to collaborate with scholarly societies who are particularly vulnerable during this transition. As central players in the broader scientific ecosystem, scientific societies can advance awareness of the agency’s public access plan and inform the development of new resources through conferences and meetings, best practices, award programs and incentives, and general advocacy efforts. Such activities will become even more essential as public access implementation evolves and adapts in line with new information and public feedback.

**Inconsistent use and support for existing infrastructure and Persistent Identifiers (PIPs).** FASEB applauds NSF’s commitment to work with existing infrastructure including generalist repositories and PIDs such as DOIs. Additionally, we appreciate NSF’s recognition that preservation of digital content will require additional support. While the current infrastructure—comprised of NSF’s Public Access Repository (PAR), a diverse publishing and data repository ecosystem, and community resources such as CHORUS—affords multiple paths for compliance, continued agency participation in community-accepted strategies and infrastructures could further strengthen the ecosystem while reducing overall costs. Regarding PIDs, FASEB encourages NSF to consider other broadly adopted PIDs such as ORCID, and engage in stakeholder efforts around PID strategies, including the National Information Standards Organization (NISO) and the Open Research Funders Group (ORFG).
How can NSF best engage affected communities regarding public access issues, in particular marginalized or underrepresented groups? As noted in FASEB comments to the 2024 PAPPG, overall continual engagement with the broad research community is central to the success of NSF’s implementation of the plan. We encourage partnering with scientific societies like FASEB to maximize their networking capabilities with historically underrepresented groups, and ensure future guidance and resources address the full breadth of stakeholder concerns.

FASEB recognizes that researchers from underserved populations, including early career researchers, those from historically excluded backgrounds, and those at less research-intensive institutions could be disproportionately impacted by the new public access requirements in the form of additional time, costs, and increased administrative burden. Furthermore, specific attention to accessibility challenges associated with public access implementation is warranted. We encourage NSF to actively consult with English language learners and scientists with disabilities to ensure agency resources are inclusive of their concerns, questions, and needs.

If you have any additional comments about NSF’s Public Access Plan, please share them here.

Promoting culture change and supporting academic freedom:
As public access implementation moves forward, commensurate support and attention to driving culture change is essential. NSF could support such efforts by partnering with domain-specific organizations to develop resources, incentives, and training modules. FASEB supports researchers having the academic freedom to choose where they communicate and share their research findings, including their preferred journal and license for reuse.

Improving equity throughout the research life cycle:
NSF’s commitment to equity throughout the research life cycle is laudable and consistent with FASEB’s belief that diversity, equity, accessibility, and inclusion are integral to maximizing the full potential of public access. Over the last decade, FASEB and its member societies have committed to improving diversity, equity, accessibility, and inclusion in the sciences by implementing major investments and activities to drive this change. Specific additional recommendations that NSF could consider include:

1) Dedicating resources to support researchers facing barriers in complying with public access goals;
2) Educating and providing guidance to agency program officers to foster equitable distribution of information and resources; and
3) Collaborating with domain-specific experts and organizations such as scholarly societies to ensure public access implementation translates into equitable policies and practices.

Conclusion
FASEB commends NSF for engaging with stakeholders and offering the opportunity for written comments on the implementation of its public access plan. As the largest coalition of biological and biomedical researchers in the U.S., we look forward to future opportunities to collaborate with NSF on issues related to public access to achieve our collective goal of building a research ecosystem that is accessible, fair, and secure.

Sincerely,

Mary-Ann Bjornsti, PhD
FASEB President