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August 14, 2023

Dr. Katherine Sharpless
Open Access Officer
National Institute of Standards and Technology
100 Bureau Drive, Stop 4701
Gaithersburg, MD 20899

Submitted via www.regulations.gov

Re: Docket Number: 230612-0147

Dear Dr. Sharpless,

Thank you for the opportunity to provide input on NIST's updated Public Access Plan. We are writing on behalf of [SPARC](#), a non-profit advocacy organization that supports systems for research and education that are open by default and equitable by design. Our [membership](#) includes over 200 academic and research libraries across the U.S., with institutions ranging from large research intensive universities to community colleges. We believe that sharing knowledge is a human right, and that everyone should be able to access, contribute to, and benefit from the knowledge that shapes our world. Our members are committed to supporting equitable systems of research and education, and we appreciate the opportunity to provide feedback on NIST's plan to implement the landmark 2022 OSTP Memorandum on [Ensuring Free, Immediate, and Equitable Access to Federally Funded Research](#).

NIST's updated plan is an important step in implementing the provisions of the 2022 OSTP Memorandum in pursuit of its mission to promote U.S. innovation and industrial competitiveness. Our responses to the questions outlined in the *Federal Register* notice offer additional suggestions to further strengthen the plan and ensure research funded by NIST is made immediately available, with no embargo, to the public.

Question 1: How can NIST ensure equity in publication opportunities?

SPARC strongly supports the OSTP Memorandum's emphasis on ensuring equity in contributing to, accessing, and benefitting from the results of federally funded research, and we appreciate NIST's specific attention on how to ensure equity in publication opportunities for its funded authors. To ensure equity in publication opportunities, NIST should provide authors with compliance options that do not present financial barriers. To this end, NIST's plan and associated policies and guidance should clearly state that authors can fully comply with its public access policy at no cost by depositing their author's accepted manuscripts into PubMed Central (PMC) or any other agency-approved repository.

Further, NIST should clarify that any fee that authors may be asked to pay is a publication fee, and not a fee required by NIST for compliance. It is critical that authors do not conflate compliance with article processing charges (APCs), which create significant barriers for less-well-resourced authors and institutions to make their research available.

NIST should highlight the diversity of publication models available to authors who may face financial barriers in paying for APCs—including [Subscribe to Open](#) (S2O) and Diamond Open Access. Additionally, institutional repositories run by libraries and other research institutions generally do not charge authors to deposit articles or manuscripts, and can play an important role in easing compliance burdens on authors, improving discoverability of research outputs, and providing long-term preservation support. Therefore, we strongly recommend that NIST allow for the deposit of publications into other repositories beyond PMC, and suggest that NIST utilize the guidance set out in the U.S. Repository Network's [Desirable Characteristics of Digital Publications Repositories](#).

NIST's efforts to ensure equity in publication opportunities for its investigators naturally align with the critical work of the National Science & Technology Committee's (NSTC) Subcommittee on Equitable Data. SPARC strongly supports the Subcommittee's [recommendation](#) to "Build Capacity for Robust Equity Assessment for Policymaking and Program Implementation," and we recommend NIST coordinate the implementation of its public access plan with the NSTC Subcommittee and the Department of Commerce's Equity Action Plan. Relatedly, we appreciate NIST's continued engagement in the National Academies' [Roundtable on Aligning Incentives for Open Scholarship](#) to promote the growth of sustainable, equitable open scholarship policies and practices and encourage NIST to engage with the [Higher Education Leadership Initiative for Open Scholarship](#) (HELIOS) to align the agency's grant review process with efforts to recognize more equitable research sharing activities.

Question 2: How can NIST ensure public access and accessibility to outputs of NIST-funded research?

The OSTP Memorandum asks agencies to "make federally funded publications, data, and other such research outputs and their metadata...findable, accessible, interoperable, and reusable to the American public and the scientific community in an equitable and secure manner." To meet

these requirements, we recommend that NIST require that all publications resulting from its funded research carry full reuse rights, such as those provided by a [CC BY 4.0 International License](#) or its functional equivalent. NIST should also require that its publications are made publicly available in standardized, machine-readable formats.

To be certain that all agency publications carry sufficient re-use rights, we suggest that NIST require grantees, as a term and condition of funding agreements, to ensure that the agency receives a license to agency publications sufficient for NIST to grant the public re-use rights. This is the most straightforward approach that minimizes complexity and burden in compliance by grantee institutions and authors.

To do this, the agency could rely on its existing federal purpose license under [2 C.F.R. § 200.315\(b\)](#) or it could require grantees to ensure that NIST receives an analogous additional license that specifically provides the right to grant the public re-use rights to agency publications covered by the Public Access Policy.

Requiring that this additional license be granted as a term and condition of funding ensures that the agency receives its additional license at the moment the scholarly publication is created, which is how the longstanding federal purpose license operates. In this way, even if an author from the grantee's institution signs a publication agreement that conflicts with the agency's license, the agency's license remains intact, as is the case with the agency's federal purpose license.

We also recommend the agency develop template language that can be attached to or included with the publication, either by the author or PMC staff, to indicate the publication is available under an open license.

We have included a more thorough explanation of these recommendations in Appendix A of this submission.

The section of the plan starting on *line 114 found on page four* suggests that a publisher's policy or claims to a publication can override the agency's authority to make its own articles public. In order to meet the updated OSTP policy guidance, immediate availability of funded articles cannot be contingent on publisher policies. As discussed above, NIST has the authority to make its own research immediately available under [2 CFR §200.315\(b\)](#) regardless of any stated conflict by a publisher or other party. To avoid confusion by grantees and authors, NIST should remove the language stating "if law allows and no later than 12 months following publication if publisher policies permit."

NIST should also remove lines 117-120 completely to further clarify its existing authority to make the research it funds immediately available. These changes will also ensure conformity

with the OSTP Memorandum which requires that publications be made immediately available “without any embargo or delay after publication.”

Question 3: How can NIST monitor impacts on affected communities—authors and readers alike?

We are deeply concerned about the financial barriers that author-side fees, particularly article processing charges (APCs), present to authors and the significant additional negative effects these have on the research ecosystem. APCs [continue to increase](#) year over year, driving up the cost of research communication which may result in tradeoffs that divert funds away from the research process itself.

Further, the barriers to publication created by APCs negatively impact authors, especially in instances where publishing in particular APC-based journals is viewed as important for career advancement. This results in fewer opportunities for individual researchers to share their results with the scientific community and the public. This is extremely troubling from an equity perspective, as [studies](#) have documented that APC costs disproportionately affect younger researchers, female researchers, and those at less well-funded institutions.

Given the diversity of author experiences, NIST should establish a baseline understanding of the environment by collecting data on the number and makeup of its current funding recipients who are charging publication fees (APCs) as direct costs to their research grants and analyzing that data across different demographics (e.g., minority-serving institutions (MSIs), [EPSCoR-eligible](#) institutions, [IDeA-eligible](#) institutions, researchers in less-well-resourced disciplines, etc.)

This work to monitor impacts on authors and the general public should be part of NIST’s existing effort to “measure the reach and impact of NIST programs and/or services to underserved communities, as well as the full fields of science” as outlined in the Department of Commerce’s Equity Action Plan.

Given the importance of NIST’s work to both the public and American businesses, we also recommend that the agency actively review the wider use of NIST research by collecting information on the number of times a paper or dataset has been accessed, downloaded, or reused following implementation of the plan.

Question 4: How can NIST improve the plan to provide greater public access to NIST-funded research results?

To provide greater public access to NIST-funded research results, the plan must ensure *immediate* public access to the articles and underlying data resulting from its research. As outlined in the OSTP Memorandum, this means “without any embargo or delay after publication.” To meet these requirements in the memorandum, NIST must remove the language

starting on line 116 and continuing through line 120 of the plan, to clarify that *no embargo* is allowed or will be accepted.

SPARC appreciates the opportunity to provide comments on NIST's updated Plan for Providing Public Access to the Results of Federally Funded Research. We look forward to working with the agency to fully accomplish the goals outlined in the OSTP Memorandum and to leverage the full value and utility of NIST-funded research.

Sincerely,



Katie Steen-James
Manager of Public Policy & Advocacy



Heather Joseph
Executive Director

Appendix A

Compliance Steps to Ensure Public Access with Reuse Rights

Goal: Ensure scholarly publications subject to the 2022 OSTP Memorandum, [Ensuring Free, Immediate, and Equitable Access to Federally Funded Research](#), are openly licensed to maximize global public reuse.

Strategy: Provide agencies, universities, and authors with a menu of compliance steps/options that retain the rights needed to openly license the publications.

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This document provides recommendations to ensure that public access is provided in a manner that is consistent with copyright law and the obligation under Section 5(j) of the *2022 OSTP Memorandum* to make these publications “findable, accessible, interoperable, and re-useable, to the American public and the scientific community in an equitable and secure manner.”

This document provides agencies with recommended policy language, contract language, and operational steps to ensure that grantees comply with the obligation to make agency-funded peer-reviewed scholarly publications publicly accessible.

For reference, that obligation in Section 3(a) is that “all peer-reviewed scholarly publications authored or co-authored by individuals or institutions resulting from federally funded research are made freely available and publicly accessible by default in agency-designated repositories without any embargo or delay after publication.”

Under longstanding policy, agencies already receive a license to any copyrighted work created with federal funds that authorizes the agency to make broad use of the work for federal purposes and to authorize others to do so. This language likely already provides agencies with sufficient authority to require that publicly accessible copies of scholarly publications are provided to the public with reuse rights.

To avoid any doubt on this issue, the policy language below recommends that the most straightforward means by which a grantee can provide public access is to require that as part of the grant agreement, the grantee provides the agency with an additional copyright license that is analogous to the longstanding federal purpose license. The scope of this additional license directly correlates to the agency’s public access obligation under the *2022 OSTP Memorandum*.

The recommended policy language is stated generally. We also recommend more specific language that an agency can use in its contracts with its grantees to ensure that copyright is properly managed to provide public access with broad rights of reuse.

The legal effect of this contract language is that the agency receives its additional license at the moment the scholarly publication is created, which is how the longstanding federal purpose license operates. In this way, even if an author from the grantee's institution signs a publication agreement that conflicts with the agency's license, the agency's license remains intact.

Finally, it is important that information about this license is communicated to the public with any copy of the scholarly publication that is made publicly accessible to comply with the agency's public access policy.

The most straightforward method to achieve this is to create a required template that is attached to copies of scholarly publications that are deposited in agency-designated repositories or otherwise in compliance with the agency's public access policy. The contents of this template can include information about the copyright license along with other useful information, such as the funding agreement number, perhaps the author's ORCID ID and any other information that the agency may want to require. The template would ideally be attached by the author, but it also could be attached by the repository manager or a publisher in cases in which the publisher agrees to deposit public access copies in an agency-designated repository.

The following language is limited to the license required to make the work publicly accessible with reuse rights. It does not include language on other areas covered by the *2022 OSTP Memorandum*, such as mandatory deposit in agency-designated repositories, mandatory metadata, and so on.

(1) Agency Policy Language

In the event that it is deemed not already provided for by the license reserved by the agency to all copyrighted works subject to the requirements of [2 C.F.R. § 200.315\(b\)](#), the agency reserves an additional license in any peer-reviewed scholarly publications covered by the 2022 OSTP Memorandum to apply a public license to such publications. The terms of the agency's public license authorize members of the public to exercise all rights under copyright and related or neighboring rights in any covered peer-reviewed scholarly publication subject to the condition that they provide attribution as required by the agency.

(2) Agency Contract Language (Terms & Conditions of an Award)

License Grant

In the event that it is deemed not already provided for by the license reserved by the agency to all copyrighted works subject to the requirements of [2 C.F.R. § 200.315\(b\)](#), the agency reserves an additional license in any peer-reviewed scholarly publications covered by the 2022 OSTP Memorandum to apply a public license to such publications. The terms of the agency's public license authorize members of the public to exercise all rights under copyright and related or neighboring rights in any covered peer-reviewed scholarly publication subject to the condition that

they provide attribution as required by the agency.

The "additional license" reserved by the agency is a worldwide, royalty-free, non-exclusive, perpetual, irrevocable, standard open copyright license granting the public permission to access, reproduce, publicly perform, publicly display, adapt, distribute, and otherwise use the work and adaptations of the work for any purpose, conditioned only on the requirement that attribution be given to authors and rights holders as designated. The "additional license" must be widely adopted and must contain (i) a symbol that readily communicates to users the permissions granted concerning the use of the copyrightable work; (ii) machine-readable code for digital resources; and (iii) readily accessed legal terms.

Obligation to Communicate

The grantee agrees to take all necessary actions to ensure that the publicly accessible copy of the article will conform to the template for policy-covered works.

"Publicly accessible copy" means any copy of the peer-reviewed scholarly publication that is made freely available and publicly accessible to comply with the 2022 OSTP Memorandum.

(3) Template for Covered Works

Policy-covered works must include the language from one of the two options below when deposited in agency-designated repositories or distributed by any other means in order to meet the grantee's public access obligation.

Template Option 1

"Research reported in this [publication] was supported by [name of the Institute(s), Center, or other agency offices] of the [federal agency] under award number [specific agency grant number(s)]. Pursuant to [cite specific agency policy] and [relevant university policy], this work is made available under the [CC BY 4.0 license](#)."

Template Option 2

"Research reported in this [publication] was supported by [name of the Institute(s), Center, or other agency offices] of the [federal agency] under award number [specific agency grant number(s)]. Pursuant to [cite specific agency policy] and [relevant university policy], the authors of this work provide the [federal agency] with a worldwide, royalty-free, non-exclusive, perpetual, irrevocable, standard open copyright license granting the public permission to access, reproduce, publicly perform, publicly display, adapt, distribute, and otherwise use the work and adaptations of the work for any purpose, conditioned only on the requirement that attribution be given to the authors and rights holders as designated."

(4) Agency-designated Repositories

Agencies should instruct agency-designated repositories to check submissions for compliance with the agency template. When policy-covered submissions do not contain the language specified in the template, repositories should add the language before the works are made public. Agencies may instruct repositories to add template language Option 1 or Option 2, at their discretion.

(5) Universities

Most university IP policies allocate copyright ownership in works of scholarship to individual creators, not the university. However, most university copyright or IP policies also already contain language that will enable compliance with this licensing requirement by modifying that default allocation of rights. This is typically accomplished by university policy ensuring that either the university owns all rights in works created under a grant,¹ or by stating that the university will retain whatever slice of rights is necessary to comply with grant or contract obligations.² Retaining those rights is necessary so the university holds the requisite rights to apply the CC BY 4.0 license or functional equivalent.

Universities also have other options to comply. For example, some universities retain a broad license that allows it to reuse all scholarly works produced by university employees. Others have adopted institutional rights retention policies aimed specifically at public availability and reuse. It is important, particularly for universities with policies that hold that individual creators are the initial owners of rights, to ensure that PIs and other creators under the grants affirm their compliance and agreement with the applicable IP policies.³

¹ See, for example, The University of Texas IP Policy, which provides that “Intellectual property resulting from research supported by a grant or contract with the government (federal and/or state) or an agency thereof is owned by the Board of Regents.”

<https://www.utsystem.edu/board-of-regents/rules/90101-intellectual-property>.

² See, for example, Stanford University’s IP policy, which provides that rights are typically held by individual creators but that “Copyrightable works that are subject to sponsored research agreements or other contractual obligations of the University shall be owned by the University, so that the University may satisfy its contractual obligations.” See

<https://doresearch.stanford.edu/policies/research-policy-handbook/intellectual-property/copyright-policy>.

³ For example, the University of Wisconsin requires PIs to attest that they will adhere to the University IP policy and license using this form: <https://kb.wisc.edu/images/group156/33081/ipagreement.pdf>.