Response to:
Request for Information: Public Access to Peer-Reviewed Scholarly Publications Resulting From Federally Funded Research [76 FR 68518]
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Submitted by:
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Background

As an institution, Bucknell University is a firm supporter of open access publishing and scholarship. In October 2011, the faculty of Bucknell University formally adopted an open access policy requiring faculty members to make all of their peer-reviewed journal articles open access and to place these articles in a repository that provides free public access without use restrictions. One of the principal arguments in support of this institutional open access policy is that research results are a public good, often funded directly or indirectly by public funds, and should therefore be made available to the public. Open access is also a form of social justice, allowing anyone to access research regardless of their own, or their institution's, ability to pay subscription fees. In this way, open access maximizes the value of publically funded research to its funders—the public—by enabling individuals, businesses, and educational institutions to more quickly and effectively utilize information to generate new and innovative ideas, products, and services, thus contributing to the overall development of knowledge, as well as the United States economy.

Comment 1(a)

[Are there steps that agencies could take to grow existing and new markets related to the access and analysis of peer-reviewed publications that result from federally funded scientific research?]

Library and Information Technology at Bucknell University believes that all federal agencies should adopt an open access policy requiring all articles resulting from publically funded research to be made immediately and freely accessible to the public. A policy of immediate public access would provide several economic benefits. By removing delays on access to information, an immediate access policy would enable companies and individuals to more quickly and efficiently build and launch products and services based on publically funded research. Furthermore, by generating new uses and applications for research, as well as enabling

the faster commercialization of this research, an immediate public access policy would support economic growth and job creation throughout the economy.

Comment 1(b)

[How can policies for archiving publications and making them publically accessible be used to grow the economy and improve the productivity of the scientific enterprise?]

Open access to scholarly publications is a key driver of scientific productivity. By removing barriers to access, these policies promote a diversity of research interests and pathways, enable follow-on and corroborating investigation, and enable interdisciplinary and collaborative approaches to research questions. Open access policies also allow scientists to utilize new bibliographic and informatics tools to more effectively and quickly incorporate new information and data, as well as to use these tools to make additional discoveries. Finally, and importantly, open access policies encourage participation by the public in the scientific process, as well as contributions by "unforeseen participants," which can often lead to new innovations.

Comment 1(c)

[What are the relative costs and benefits of such policies?]

As the National Institute of Health's public access policy has shown, open access policies can be extremely cost effective. NIH spends only about $1/100^{th}$ of 1 percent of its $30 billion annual budget on its public access policies. In return, NIH receives increased return on its research investment (through the mechanisms discussed above) as well as improved accounting and oversight of the outcomes produced by its research funding. NIH has not only demonstrated an effective open access policy model that could be scaled up to apply to all federally funded research, but has also made infrastructure investments that could be leveraged by a broader policy initiative.

Comment 1(d)

[What type of access to these publications is required to maximize U.S. economic growth and improve the productivity of the American scientific enterprise?]

Library and Information Technology at Bucknell University supports a policy of full open access, meaning free immediate access including re-use rights to all federally-funded research publications. These publications should be maintained in a fully digital, online environment, where they can be read, downloaded, searched, crawled, and indexed without restrictions. Restrictions on the use of these materials would place limits on the value that the public can derive from taxpayer-funded research as well as the return on taxpayer investment. Access alone without reuse rights is therefore insufficient to fully realize the value of these publications.

Comment 2

[What specific steps can be taken to protect the intellectual property interests of publishers, scientists, Federal agencies, and other stakeholders involved with the publication and dissemination of peer-reviewed scholarly publications resulting from federally funded scientific research? Conversely, are there policies that should not be adopted with respect to public access to peer-reviewed scholarly publications so as not to undermine any intellectual property rights of publishers, scientists, Federal agencies, and other stakeholders?]

Open access polices and be implemented in ways that are fully compatible with current copyright laws. Mechanisms should be put in place that enable the full use of publications resulting from federally funded research (e.g. the re-use and distribution of articles, data mining, computation, indexing, etc.), while still maintaining the intellectual property rights of stakeholders and ensuring that these stakeholders receive credit for their work. Implementing licenses that are enforceable under current copyright law, such as the Creative Commons CC-BY license, would be one way to achieve this goal. In this manner, a federally mandated public access policy would help eliminate the effective enclosure of publically-funded research by (often for-profit) publishers who require the transfer of copyright from authors as a condition of publication.

Comment 3

[What are the pros and cons of centralized and decentralized approaches to managing public access to peer-reviewed scholarly publications that result from federally funded research in terms of interoperability, search, development of analytic tools, and other scientific and commercial opportunities? Are there reasons why a Federal agency (or agencies) should maintain custody of all published content, and are there ways that the government can ensure long-term stewardship if content is distributed across multiple private sources?]

The federal government is uniquely able to mandate and ensure that articles resulting from publically funded research are made permanently accessible and useable. The federal government is therefore the appropriate entity to provide permanent stewardship of these articles, and any public access policy for these works must provide adequate rights to enable their archiving and distribution. A public access policy could include multiple repositories, provided that these repositories also support the same access and use policies and that they allow all interested parties to utilize them and the materials they contain.

Comment 4

[Are there models or new ideas for public-private partnerships that take advantage of existing publisher archives and encourage innovation in accessibility and interoperability, while ensuring long-term stewardship of the results of federally funded research?]

Public/private partnerships should be encouraged, so long as they meet standards and conditions for accessibility, use rights, preservation and interoperability. Given their experience with designing, implementing, and maintaining digital archives, libraries and universities should be specifically encouraged to partner with federal agencies. Open source rather than proprietary software should be utilized for final archive sites for publically funded articles, and under no condition should any single site be the only point of access of these materials or a subset of these materials.

Comment 5

[What steps can be taken by Federal agencies, publishers, and/or scholarly and professional societies to encourage interoperable search, discovery, and analysis capacity across disciplines and archives? What

are the minimum core metadata for scholarly publications that must be made available to the public to allow such capabilities? How should Federal agencies make certain that such minimum core metadata associated with peer-reviewed publications resulting from federally funded scientific research are publicly available to ensure that these publications can be easily found and linked to Federal science funding?]

First and foremost, the metadata maintained with scholarly publications should enable the use, reuse, and analysis of these works. To this end, the metadata should be machine-readable and machine-interoperable. Existing metadata standards should be utilized, and metadata should provide context for the published articles, such as attribution of funding agencies, grant IDs, and the relationship between entities and articles. The metadata should also be flexible enough to support different specifications for publishing standards that support the analysis of texts as data objects as well as providing a bridge between publications and underlying data.

Comment 6

[How can Federal agencies that fund science maximize the benefit of public access policies to U.S. taxpayers, and their investment in the peer-reviewed literature, while minimizing burden and costs for stakeholders, including awardee institutions, scientists, publishers, Federal agencies, and libraries?]

In order to minimize the compliance burden of a public access policy for federally funded research, care should be taken to create policies that ensure a consistency of requirements across all funding agencies which will both reduce the administrative complexity and cost of the policy and increase the rate of compliance by researchers. Public access policies can also maximize returns on taxpayer investment by using existing protocols (e.g. SWORD) to automate the deposit of articles in multiple repositories, integrating article management with grant management systems, and encouraging the development of enhanced productivity tools for authors, researchers, and universities.

Comment 7

[Besides scholarly journal articles, should other types of peer-reviewed publications resulting from federally funded research, such as book chapters and conference proceedings, be covered by these public access policies?]

Library and Information Technology at Bucknell University believes that all peer-reviewed publications resulting from federally funded research should be made readily accessible as soon as possible. However, the policies by which materials such as books, book chapters, and conference proceedings are made accessible may need to differ from those directed at journal articles due to the different conditions these materials are subject to upon publication. Policies should be developed that are cognizant of these differences.

Comment 8

[What is the appropriate embargo period after publication before the public is granted free access to the full content of peer-reviewed scholarly publications resulting from federally funded research? Please describe the empirical basis for the recommended embargo period. Analyses that weigh public and private benefits and account for external market factors, such as competition, price changes, library budgets, and other factors, will be particularly useful. Are there evidence-based arguments that can be made that the delay period should be different for specific disciplines or types of publications?]

Library and Information Technology at Bucknell University supports immediate open access as the ideal time frame for publicly funded articles to be made freely available. However, in deference to journal publishers that rely on subscription income, we find an embargo period of no more than 12 months to be an acceptable compromise.