

January 12, 2012

Dr. John Holdren, Director
Office of Science and Technology Policy
725 17th St NW
Room 5228
Washington, DC 20502

Re: Request for comments regarding public access to scholarly publications (76 FR 80418)

Dear Dr. Holdren,

Thank you for the opportunity to comment on public access to peer-reviewed scholarly publications resulting from federally funded research. As the publisher of a peer-reviewed journal, the American Institute of Biological Sciences (AIBS) is concerned about the probable impacts of open access on our ability to sustain the investments we make in editing, peer reviewing, and making accessible manuscripts published in our journal.

The AIBS is a nonprofit scientific association dedicated to advancing biological research and education for the welfare of society. AIBS works to ensure that the public, legislators, funders, and the community of biologists have access to and use information that will guide them in making informed decisions about matters that require biological knowledge. Founded in 1947 as a part of the National Academy of Sciences, AIBS became an independent, member-governed organization in the 1950s. Today, AIBS has nearly 160 member organizations with a combined individual membership of approximately 250,000. AIBS advances its mission through coalition activities in research, education, and public policy; publishing the peer-reviewed journal *BioScience* and the peer-reviewed education website ActionBioscience.org; providing scientific peer review and advisory services to government agencies and other clients; convening meetings; and managing scientific programs.

Our responses to the questions OSTP posed in its request for comments are below.

1) 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? 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? What are the relative costs and benefits of such policies? What type of access to these publications is required to maximize U.S. economic growth and improve the productivity of the American scientific enterprise?

Agencies can ensure the growth of existing and new markets related to the access to and analysis of peer-reviewed publications by ensuring that the intellectual property and commercial interests of researchers and publishers are respected, thus sustaining existing markets and providing the predictability needed for planning new ventures. Holding publishers of information resulting from federally-supported research to minimum standards for discoverability through online

access might be a plausible way to grow markets without putting unreasonable pressure on finances; discoverability—the ability to learn of the existence of a relevant resource and how to access it— does not mean free access to all, however.

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?

A published scientific article represents, in varying degrees, the outcome of a collaboration between a publisher and authors. Authors provide the initial input, but editors typically spend many hours refining and checking content, and improving its presentation to make it more readily understood. Publishers then invest in systems to safely archive the finished product and ensure its discoverability to researchers worldwide.

Regarding the intellectual property interests of publishers, copyright law has historically provided protection, although publishers may have to spend time and effort to monitor compliance and address apparent violations. For publications that have elected not to secure copyright on their articles, which may be a reasonable commercial decision in some cases, licenses such as those available from Creative Commons (creativecommons.org) may provide worthwhile protection against misappropriation.

Regarding the intellectual property interests of scientists generally, publishers that do secure copyright on their articles, including AIBS, commonly “give back” to the author rights to archive their articles on an institutional Web site, make copies for colleagues and for educational purposes, and/or make articles available on a personal Web site. Scientists also benefit from publishers’ efforts to prevent misappropriation. The federal government might advise scientists it supports to secure such rights commensurate with their needs before submitting an article for publication. Articles produced in the course of the official duties of a federal researcher may not be copyrighted; this ensures the federal government’s interest in having unimpeded rights to produce copies of reports resulting from federally supported research.

For-profit as well as not-for-profit publishers, such as AIBS, have to secure revenues to cover their costs, at a minimum, and more than that to innovate. Library subscriptions have historically been important, but publication fees from authors are becoming a larger part of revenue, and are the principal contributor for open-access publications. Advertising revenues may be important in fields where readers have budgets for expensive equipment that can sustain significant advertising revenues, but not all fields of science can support substantial advertising revenues. Libraries have little incentive to subscribe to journals if the content, including the relatively recent content, is certain to be publicly available through other channels in an easily searchable archive. For this reason, AIBS opposes measures that would mandate wider open access to publications in markets that lack alternative revenue streams adequate to compensate for the resulting predictable fall in subscription revenue.

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 presumably maintains copies of research reports resulting from work it supports, but this rationale does not extend to the government's making all such information routinely available at no cost to the public at large. Innovators do not require free source materials; rather, they need an environment with some predictability. Decentralized approaches to making information available are widely recognized to confer advantages in terms of reliability. The government might encourage these by requiring federally supported researchers to publish in outlets that adhere to recognized technical security standards. Interoperability standards could be encouraged in a similar way.

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?

Policy-makers should recognize that there are large disparities in the typical levels of funding available to investigators across different fields of science. There is marked variation even among researchers funded by e.g. the National Science Foundation. There are also differences in the sizes of collaborations and the amount of time typically required to generate a publication. As a consequence, no one-size-fits all approach is likely to be optimal. Investigators in some fields typically have grants that include funds adequate to defray the publication charges associated with open-access publication. Investigators in other fields do not, and will therefore often prefer to publish in journals that do not require large publication fees, even though that means their work will only be accessible to subscribers of the journal and those who have access to it through a library. Many publishers, including AIBS, would be willing to cooperate with the federal government to ensure compliance with minimum standards for discoverability and security.

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?

As indicated above, ensuring compliance with minimum standards could encourage interoperability of systems. Regarding metadata, traditional citation formats in combination with digital object identifiers seem to be adequate as a minimum.

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?

A public access policy that applies to research results should not apply to derivative works, such as reviews. The attempt to control the publication of such derivative works by stipulating that they become open access could impair the sustainability of publication of such items by scientific journals. Derivative works typically represent more work (per published page) by editors than do primary research reports. The quality of a review article (more so than a primary research article) is often in substantial part a result of sustained expert editorial attention that maximizes the effectiveness of the presentation; through successive rounds of peer review, mediated by editorial staff, articles or chapters are strengthened. It is in the national interest and the interest of science that publishers be able to realize sufficient revenues from publication of reviews to sustain this high-level editorial attention.

The federal government may hold its employees and grantees who publish research findings to minimum standards in terms of the discoverability and security of the publication products. Ensuring an environment in which publishers can survive and grow will minimize burdens and costs for parties that don't have that specialization: awardee institutions, scientists, Federal agencies, and to some extent libraries.

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?

As indicated in the preceding response, AIBS does not believe there is a vital public interest in the mandated open-access publication of peer-reviewed publications such as book chapters and conference proceedings. This would effectively prevent for-profit and not-for-profit publishers from developing such products.

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? Please identify any other items the Task Force might consider for Federal policies related to public access to peer-reviewed scholarly publications resulting from federally supported research.

BioScience has a 2010 ISI Impact Factor of 5.51, and a 5-year impact factor of 6.335, and a cited half-life of 9.5 years, according to the Institute for Scientific Information. These statistics establish that articles published in a journal, considered a leader in its field, may still be gathering citations and be valuable to scholars a decade after publication. It is therefore appropriate that AIBS be able to secure revenues from the republication of articles years after their original publication. These revenues help to support the costs of on ongoing publication, including the incorporation of technical innovations (e.g. automated cross-linking, multi-media formats, etc.). Mandating open access of scientific journals with such a long shelf life threatens

the ability of AIBS to preserve the value of its archive and realize returns from its past investment in producing useful and discoverable presentations of research results. This in turn threatens our ability to continue providing peer review and editing services on new manuscripts.

If AIBS may be of further assistance to you on this or any other matter, please contact Dr. Robert Gropp, AIBS Director of Public Policy at 202-628-1500 x 250 or rgropp@aibs.org.

Sincerely,



Richard O'Grady, Ph.D.
Executive Director