

12 January 2012

To: Office of Science and Technology Policy

From: Stephen G. Weller, President
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Botanical Society of America
St. Louis, MO

Re: Request for Information: Public Access to Peer-Reviewed Scholarly Publications Resulting from Federally Funded Research (FR Doc. 2011-28623)

I write as President of the Botanical Society of America, a non-profit scientific society with nearly 3300 members worldwide, and I am pleased to respond to your 3 November 2011 request for information “on approaches for ensuring long-term stewardship and broad-public access to the peer-reviewed scholarly publications that result from federally funded scientific research”. Your request includes eight specific questions. I respond to three of those questions below, numbers 5, 6, and 8.

(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?

Encouraging interoperable search, discovery, and analysis capacity first requires wide access both to finished publications and to the data underlying those publications, but it also requires that those data be provided in a standard, machine-readable format. Interoperable search of published work would be facilitated if publishers adopted a single Document Type Definition (DTD), with local specializations as needed, and allowed data mining of the full text of their publications for purposes of search and discovery. Many science and technology publishers have adopted the Journal Publishing Tag Set of the National Library of Medicine and that might form the basis of a universal DTD.

Interoperable search of the data underlying finished publications would be enhanced if standard formats and application programming interfaces (APIs) for automated access were more broadly adopted. Publicly accessible databases provided through the National Center for Biotechnology Information (NCBI) are an essential resource for research in important segments in the life and biomedical sciences, but the development of similar resources for other life science fields is in its infancy. The requirement that all proposals to the National Science Foundation include a data management plan is a step in the right direction, but long-term success will require that Federal agencies, publishers, and scholarly and professional societies work closely together to develop the data and metadata standards, APIs, application software, and institutions to sustain long-term access to data underlying published research. Such an effort will require new financial resources to be invested both in developing new standards and software and in supporting the institutions responsible for maintaining long-term access to the data.

(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?

Many non-profit scientific society publishers are committed to sharing research as broadly as possible. For example, research published in our journal, the *American Journal of Botany*, is currently free to scientists from all developing nations through programs sponsored by the World Health Organization and the United Nations: Access to Global Online Research in Agriculture (AGORA); the Access to Research Initiative (HINARI); and Online Access to Research in the Environment (OARE). All articles published in the *American Journal of Botany* are freely accessible through our web site (www.amjbot.org) 12 months after publication. Authors and funding agencies can also provide access to papers accepted for publication as soon as they are available for online publication by paying a modest fee. Our policies also ensure that authors can distribute their published papers on personal or institutional websites and use them freely in teaching without additional charge. In addition, like many non-profit scientific society publishers, we provide subscriptions to institutional libraries at rates substantially lower than comparable journals published by for-profit. In short, the Botanical Society of America seeks to provide the widest possible public access to the *American Journal of Botany* consistent with obtaining the income necessary to sustain it. Professional librarians recognize that non-profit scientific society publishers publish excellent journals at relatively low cost, make the contents of those journals freely available after periods that allow them to recoup their expenses, and foster the development of new generations of scientists. Federal agencies that fund science can maximize the benefit of public access policies by working closely with non-profit publishers, like the Botanical Society of America, to ensure that policies they adopt reach the same balance, ensuring that the unavoidable costs of peer review, editing, and journal production are minimized, that non-profit publishers are able to recover those costs, and that access to the publications is provided to the widest possible audience.

(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?

An embargo period of 12 months is appropriate for the *American Journal of Botany*, but we cannot comment on whether an embargo period of 12 months is appropriate for other journals or other fields of science. We began making our content freely available after 12 months beginning in 2005. While institutional subscriptions have continued to decline at approximately 4-5 percent per year, we saw no evidence that the rate of decline changed when we adopted this policy. In contrast, an informal survey of librarians from many institutions suggested that if we reduced our embargo period to 6 months, the decline in institutional subscriptions would threaten the financial viability of the *American Journal of Botany*.