



January 12, 2012

National Science and Technology Council
Task Force on Public Access to Scholarly Publications
c/o Office of Science and Technology Policy
Attn: Open Government Recommendations
725 17th Street
Washington, DC 20502

Re: ***Public Access to Peer-Reviewed Scholarly Publications Resulting From Federally Funded Research; Request for Information [FR Docket No. 2011-32943]***

Dear Task Force Members:

The American College of Rheumatology, representing over 8500 rheumatologists and health professionals, welcomes the opportunity to comment on the Administration's approach to public access components of the scientific research enterprise.

Rheumatologists treat patients with arthritis and other rheumatic and musculoskeletal diseases. These conditions can be painful, debilitating, life threatening and costly. Biomedical research plays a pivotal role in advancing diagnostics, treatments, and prevention strategies for patients with chronic diseases. Advancements in arthritis-related research have helped to prevent disabilities, allowing patients to continue working or return to work and contribute to their communities and the economy.

The ACR believes that scientific research publishing, like all other publishing, is a business governed by the copyright laws of the United States and most other countries. Unfortunately in some of the dialogues surrounding research publishing there is a conflation of the terms "public" and "free." We believe that the global journal corpus already provides a robust public access model for the dissemination of the peer-reviewed results of taxpayer funded research and other research. Government agencies that dispense funds to support taxpayer-funded research may wish to collect and publish free-of-charge reports generated by the recipients of those funds. However, we support the argument that these agencies do not have rights to the research articles written for and published by journals, nor is such a claim justified by any notion of an absence of access. Further, there is no evidence that making the current broad public access to the journal literature free will improve research productivity or the public welfare. We believe that free access, like copyright piracy, will be more likely to have the opposite effect.

(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?

The ACR is aware of no studies that support an argument that free access to the research literature will increase research productivity or economic growth. We do not believe it to be true that access to the research literature by those able to make use of it is rate limiting, and that there is untapped creativity that will be released if access is made free. The modern research enterprise is complex and requires major investments. Access to the research literature is not a constraint on this enterprise.

We do not accept the premise that because government funds scientific research, it is entitled to full access to and control of manuscripts reporting on this research. Publishing peer-reviewed research is expensive and has to be paid for. While the government pays for research, it cannot lay claim to the final publication. Having each funding agency open its database of funded projects, including research project reports and lay summaries, best serves the public interest and protects the scientific research enterprise.

Society today depends on a system of research communication that provides extremely broad access and strong quality controls. Research publishers are custodians of this system today because of the essential role that they play in the communication of scientific, technical, and medical research results. While it is the case that peer reviewers are generally not paid for performing the work of peer review, peer review is not free. Publishers invest hundreds of millions of dollars in end-to-end software tools to manage the peer review process and often also financially support the editorial groups who manage and perform peer review of submitted articles.

Government should not impose unfunded mandates that pertain to the outputs of the publishing process, including accepted author manuscripts and published journal articles. Such policies would not be justifiable, warranted or productive. Government-imposed public access policies would violate fundamental copyright principles by allowing the government to diminish existing copyright protections for private sector journal articles. Publishers make ongoing capital investments and incur significant operating expenses in carrying out these value-added activities. These are not paid for by taxpayer dollars. Any unfunded mandate has the potential to limit our ability to create the peer-reviewed literature in the first place. Nobody questions the considerable scientific value of peer-reviewed publications.

(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?

The federal government should not take accepted or published articles from publishers or learned societies, either directly or via a mandate placed on grantees, and make them freely available. However, several steps could be taken, including the following:

- Make funds available for the purchase of open access to published articles - these costs are a small fraction of the investment in the research.
- License content from publishers and learned societies and make it available to specific audiences.

- Make the funder-collected and maintained outputs of taxpayer-funded research, including grant reports or research progress reports, freely available to the public; private sector publishers could help make that content discoverable and linked to the journal literature.

(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?

Scholarly journal articles have been published for hundreds of years by a combination of society, not-for-profit, and for-profit publishers. This infrastructure has provided access to the literature for scholars and researchers, and the multiplicity of publishers has not prevented broad public access. In fact we strongly believe that the complexity of the system has promoted competition which has driven development of increasingly sophisticated platforms to deliver this content.

Publishers over the past decade have developed the Digital Object Identifier, a unique identifier for each piece of content, in this case a journal article. CrossRef, a not-for-profit group founded by a group of publishers, maintains 50 million DOIs. Almost 1,000 publishers and societies participate and assign DOIs to their published content items. Development of the CrossRef service has resulted in seamless navigation of the research literature by users, so that researchers using the bibliography in one article can link from a reference in the bibliography to the full text of the referenced article.

For many reasons including government budget constraints, we do not believe that the federal government is the best provider of these services, in particular as that development would involve using taxpayer dollars to duplicate an existing, well-functioning service.

(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?

There are a number of projects underway or envisioned for public-private partnerships. Please see our comments below.

Funding agency information

Most researchers acknowledge in their publications the research funder support they have received. However, there are no standards on how authors should do this. Consequently, funders find it difficult to know and track what publications have arisen from the research they have funded. Publishers are developing a means of standardizing funder information so that this information could be made easily available to funders. We believe that a community-wide solution of this type will be easier and far less expensive to construct than each agency developing its own response to the problem. Publishers are in the best position to provide a simple way of ensuring that journal articles are accompanied by standardized, high-quality metadata providing information about the agency, program, and even specific grant that funded the research. This proposal has been endorsed by CrossRef and major STM publishing trade associations.

With the successful implementation of this proposal, research funders would have access to the standard metadata from published articles that have arisen from the research they have funded. By displaying this information on their funder websites visitors will be able to follow the link to the publisher's platform, where article abstracts are freely available and the Version of Record, maintained by the publishers, is available through a variety of access mechanisms.

DOIs for data sets

Increasingly, investigators are being asked to share, or provide plans regarding how they will share with other researchers, the primary data and other supporting materials created or gathered in the course of their work. STM publishers and societies make significant amounts of this material available as supplementary material to published articles and are already participating in a number of initiatives designed to facilitate the sharing of data. Scholarly research publishers are willing to work with funders and database/repository operators to develop recommended practices for assigning DOIs to data sets and supplementary material so that datasets can be linked to primary research articles.

Author disambiguation

Name ambiguity and attribution are persistent, critical problems embedded in scholarly research. STM publishers are working to eliminate this problem through an initiative called the Open Researcher & Contributor ID project. ORCID is a newly established non-profit organization working to establish an open, independent registry of researchers that is adopted as an industry-wide standard to resolve systemic name ambiguity by means of assigning unique identifiers linkable to an individual's research contributions. Researchers will be able to create, edit, and maintain an ORCID ID and profile free of charge, including defining and controlling their own privacy setting.

Such a standard will not only enhance the scientific discovery process but also improve the efficiency of funding and collaboration. Participation in ORCID is open to any organization that has an interest in scholarly communications. All software developed by ORCID will be publicly released under an open-source software license approved by the Open Source Initiative. ORCID is governed by representatives from a broad cross-section of stakeholders including publishers, societies, libraries, and other institutions.

Content mining

Content mining has the potential to be useful to the scientific community in driving interdisciplinary research and supporting the identification of new areas of discovery. Publishers and their society partners are committed to managing content in digital formats to ensure that users gain maximum benefit. Publishers should work with research funders to develop pilot projects for journal content mining that would identify, organize, and perform analysis to identify and create conceptual links within and between that content that are not obvious to initial human inspection. Although there are various ways to perform this type of processing, certain elements are common to all methods, including an automated way to process all sizes and types of content in which to identify relevant information, and facilitate its extraction and analysis.

Such pilots would focus on goals such as:

- Structuring input text, deriving patterns within the structured text, and evaluating and interpreting the output;
- Extracting semantic entities from publisher content for the purpose of recognition and classification of the relations among them; and

- Enabling developers who wish to design and implement applications to analyze our content or test applications as part of their research within publisher content.

Consensus approaches within the community could also be explored for developing better standardized, mining-friendly content formats, a shared content mining platform, and commonly agreed permission rules for content mining.

Linking to/from research reports

Publishers of scholarly research should collaborate with research funders to determine whether and, if so, how publisher content could be “mapped” against research reports and other funder content. The goal would be to make connections between content items that would add value and richness to both groups’ digital offerings. Specifically, this collaboration would send users from publisher websites to the funder web site to view free government-sponsored research reports, and would send users from funder sites to view free abstracts and links to the Version of Record of articles connected to a particular research report or funded project.

If successful, this will result in interoperability between funder and publisher content and would enable publishers to work with research funders to identify, organize, evaluate, and highlight published results from their research funding and identify relationships, projects, and offerings.

Possible outcomes of the pilot could include:

- The ability to identify all agency-funded research within publisher offerings and the ability to deliver associated metadata to that funder;
- The ability to establish mechanisms and approaches that could be implemented (for all research funders) across the industry;
- A capability to report to major funders on the impact of the research they fund, e.g. through bibliometric and other tools;
- A “research dashboard” capability or the ability to contribute to one already in existence – e.g. <http://rd-dashboard.nitrd.gov/>;
- A mechanism for low-cost content rental access to published articles (VoR);
- Subject area content portfolios of NSF-funded research articles for internal NSF use (e.g. study sections); and
- The opportunity to use the <http://www.science.gov/> and <http://www.research.gov> platforms to extend this pilot to other federal funding agencies.

(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?

Please see comments for question four related to public-private partnerships.

(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 awardees institutions, scientists, publishers, Federal agencies, and libraries?

As surveys of researchers show, those who can benefit from access to the peer-reviewed journal literature already have access. We also believe that the publishers own and have copyrighted journal articles which are published in the journal titles they publish.

Both publishers and learned societies are committed to the wide dissemination of content. We support any and all sustainable access models that ensure the integrity and permanence of the scholarly record. This includes 'gold' open access, where publication is funded by a publication fee or article processing charge. Many publishers now offer open access options and/or publish open access journals, and work closely with funders, institutions, and governments to facilitate these developments. We believe that authors should be able to publish in the journal of their choice, where they feel their work will be best reviewed by their peers and where its publication will have the greatest potential to advance their field. Research funders could provide a fund to publishers to cover gold open access publishing fees.

(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?

They should not. Publishers also invest in these other types of content used by researchers, often by conceptualizing the project, commissioning the content, and investing heavily in its development. Any kind of mandated free access to that content is simply an expropriation of that content.

(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?

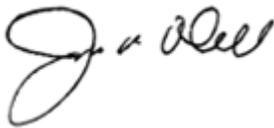
We believe that peer-reviewed papers should not be made public within the duration of the article's copyright without the copyright holder's permission. For accepted author manuscripts and published journal articles, both of which publishers have invested in heavily, we believe that publishers – and learned societies – themselves should be able to determine the business models under which their publications operate. This should include the time, if any, at which the final peer-reviewed manuscript or final published article are made publicly available.

Peer-reviewed papers are not the direct result of the Federal Government's investment. They should not be made freely available to the public unless the copyright owner authorizes the government to do so. Since the mid-1990s, the science journal publishing industry has been a key player in the truly dramatic digital revolution in the sciences, investing heavily to drive the shift of published research from print-only to "E-only." Rapid innovation in the publishing industry has dramatically improved functionality and efficiency for doctors and researchers, who can now perform complex searches of journals, immediately retrieve and print full text articles, link instantly to other cited articles, export text to other databases and programs, and receive e-mail alerts when new journal issues are released. Mandating free access will stifle innovation in what is

now a rapidly changing environment, both by decreasing the amount that publishers are able to invest and reducing their incentive to try new approaches.

The ACR appreciates the task force's review of recommendations for ensuring long-term stewardship and broad public access to the peer-reviewed scholarly publications that result from federally-funded scientific research. Particularly in these challenging financial times, we believe the task force should strongly consider the recommendations we have provided in these comments. We stand ready to assist you further on these issues that affect the conduct of scientific research related to rheumatology and the broader rheumatology community, including the health and quality of life of our patients. If we can be of assistance to you in any way, please contact Adam Cooper, ACR director of government affairs, at acooper@rheumatology.org or (404) 633-3777.

Sincerely,

A handwritten signature in black ink, appearing to read "J. R. O'Dell". The signature is fluid and cursive, with the first letter of the first name being a large, stylized 'J'.

James R. O'Dell, MD
President
American College of Rheumatology