

Subject: RFI response on Public Access to Peer-Reviewed....

Date: December 28, 2011 8:10:13 PM EST

Dear Task Force on Public Access to Scholarly Publications:

Thank you for providing the opportunity to comment on the several questions posed below (in snippet form)--

Comment 1. Are there steps....

All articles resulting from publicly funded (or publicly subsidized) research should be immediately and freely accessible ("Open Access" hereafter), so that the public can fully use them without commercial restriction. This accessibility maximizes public good from taxpayer investments.

Open Access:

Increases scientific productivity and generates new uses and applications for this research

Allows everybody to stay on top of cutting-edge ideas and discoveries

Increases the usage of each research article as established with bibliometric measures (the number of reads, citations, and uses of the article).

Expands the potential for interdisciplinary research, and encourages contributions by "unexpected" colleagues

Allows scientists to extract useful information, by automated sifting of text, images, tables, and contained data. The "machine readable" form of articles (the XML version) inherent in Open Access means that data mining and searching capabilities can be applied to large numbers of articles impossible by manual methods.

Federal agencies will have an improved accounting on the outcomes of their funded research: Agencies will have better information to assess the value of existing expenditures and target funding on the most promising research

A public-access policy is cost effective by leveraging existing infrastructure from the NIH's PubMed and PubMed Central.

Under the current system, the taxpayer pays for the research and then must pay again to read the results! A public access policy eliminates this "double charge".

It is critical to note that much of the money paid for subscriptions or access to commercial journals goes to major publishing firms headquartered OUTSIDE the US, contributing to their substantial profit margins and draining US coffers (federal and private) and contributing to the current highly unfavorable balance of payments. Major research libraries around the country pay exorbitant subscription fees, as they have no alternative, excepting open access repositories.

What type of access is needed? To derive the maximum benefit from federal research paid for by the taxpayer, full Open Access is absolutely necessary: free immediate access coupled with full rights to re-use fully in digital environment.

"Full Use" includes not only access to the content but also distribution, reuse, text mining, data mining, computation, creation of derivative works, IN PERPETUITY. Such use allows researchers to unlock additional value from the research investment and build on the results of others rather than repeating what has already been done.

Comment 2. What specific steps can be taken to protect the intellectual property...

It is important to clearly enunciate that commercial publishers do nothing to generate the new intellectual property in a scholarly research article. The authors write the article. The authors write the article. The authors write the article. Not the publisher! The publisher does the barest minimum in terms of service and added value that they can get away with.

Publishers claim that they run the peer review system, but nowadays that is farmed out to a journal management service that charges about \$20 per paper to handle submission and review. The Senior Editors or Editor in Chief, almost always uncompensated (and almost always faculty at leading universities), chose the reviewers. The journal management systems are automated enough so that little manual assistance is required on the part of the publisher. The publishers claim that they serve to grade the quality of the article and confer approval and prestige to the work. Excepting a handful of journals, this "prestige" depends on the quality and insightfulness of the Editors, Editorial Board, and peer reviewers more than the reputation of the journal itself.

New statistics on article usage now largely supplant the qualitative importance of publishing in such and such a journal, because the cumulative use and impact of each article can now be directly measured. This eliminates the highly subjective importance of publishing in Science versus Nature versus Cell or New England Journal of Medicine and so on. Each article now stands on its own, with its

individual quantitative statistics of impact, regardless of where it was published. "Journal prestige" is becoming an outmoded concept, a remnant of the past.

Sometimes the authors pay for copyediting before an article is accepted for publication. The Scientific Editors and the Peer Reviewers of most journals provide their services for free (to emphasize, the publisher does NOT pay them anything). The copyediting and proofreading of an accepted article are paid for by the authors with processing or handling fees or minimum reprint orders charged by the publisher. Commercial copy editing services are about \$60 per article for a typical scientific article on the current fee-for-service free market. Many publishers have invented artificial "styles" for each specific journal that they manage to exclude competition in the free market for copy editing services. The publisher often breaks at least a few standard rules of scientific and technical editing guidelines set forth in classic style guides c.f., the Council of Science Editors guide entitled, "Scientific Style and Format". This trick allows the publisher to re-edit and re-proof read to meet a given journal's deliberately contrived quirky "style". Thus, the publisher claims credit for the entire work having done next to nothing except a little copyediting.

In other words, the authors give the research results and carefully crafted text away for free, along with all the copyrights to the publisher. Why would authors do that? It seems insane, but authors were and are desperate to publish their studies, and they saw no alternative to giving away their works to a publisher who demanded all copyrights, despite doing nothing to improve the quality of the science.

Librarians were in a pickle too, with faculty (now the readers) clamoring for access and subscriptions to many expensive journals, and publishers escalating prices at several fold more than the rate of inflation. The publishers had everyone over a barrel, except their stockholders and management who demanded higher profits by increasing prices and reducing services. The librarians bought the high priced journal subscriptions up to the point that they lost most staff and their Deans and Provosts finally said no more dough. Nobody was happy, but the US taxpayer was taking it on the chin more than anybody by paying for the research and then paying again for access to it. This was the state of scientific publishing until the Open Access movement began. Open Access means that the US taxpayer directly, fully, and immediately benefits from publicly funded research as much as possible. Anything else is suboptimal and wrong.

Mechanisms to enable full use in perpetuity (i.e. distribution, reuse, text mining, computation, etc.) should be part of a government-wide public access policy.

The public also needs full use of these articles sooner than the current term of copyright allows. This can be accomplished by implementing appropriate

licenses--such as Creative Commons CC-BY licenses, which are enforceable under current copyright law.

A policy that results in a “read-only” database must be avoided.

Comment 3. What are the pros and cons of centralized

The federal government is the best entity to provide permanent stewardship of these articles, and is in a unique position to ensure that publicly funded articles are made permanently accessible and usable, and are permanently preserved.

Any public-access policies that are developed must give the federal government adequate rights to archive and distribute publicly funded articles.

A federal public-access policy could involve multiple repositories as long as repositories support access and use conditions that allow all interested parties to build on them.

Simply providing the government with a copy to put in a "dark archive" is silly; without regular access/use, archival veracity cannot be ensured.

Current market attempts at archives are not adequate. For the government to maintain an archive is not a duplication of effort, but a necessity to ensure that the public's investment in research is protected and leveraged.

Comment 4. Are there models or new ideas for public-private partnerships

The best examples are PubMed and PubMed Central. These are analogous to the relationships of NCBI with the entire scientific community who routinely upload DNA, RNA, amino acid sequence data, and 3D structural information to the GenBank database and the like. NCBI shares data worldwide with several databases and vice versa. These sharing protocols work extremely well, and each serves as a backup for the others.

A great example of the burst of utility was in the migration of Medline into PubMed. There was a huge surge of activity and utility once the end-users (the academic and scholarly faculties) were able to search PubMed directly on the web, unfettered by intermediaries or nickel and dime charges. We have seen bursts of increased utility and value now that full articles are available unfettered online.

The major research universities and their libraries have extensive experience and

existing archive infrastructure, and should be actively encouraged to partner with federal agencies.

Another example: the HathiTrust

Comment 5. What steps can be taken....to encourage interoperable

Metadata should be viewed as a means for enabling specific actions, rather than simply item description. It should facilitate use, reuse, and analysis of published works.

The NLM DTDs and Schemas are well developed and ought to form a basis for future standards. XML valid against these DTDs needs to be thought of as the original, definitive, archival, and permanent source of an article.

Each publication and its supporting data need to be linked in thoughtful ways so that analysis of published text as “data objects” can be correctly supported.

Comment 6. How can Federal agencies that fund science maximize

Public access policies should ensure consistency of requirements. Broadly adopt the NLM DTDs and Schemas. IE, to reduce the complexity and cost, and increase the rate of compliance, use the NLM journal publishing DTD model.

Policies can also create opportunities to create/enhance productivity management tools, such as:

The creation and enhancement of CV's, bibliographies, and Principal Investigator (PI) profiles. Advanced analytics might help a PI decide who they ought to work with more.

Opportunity for universities to better measure research output.

Comment 7. Besides scholarly journal articles.....

Research book chapters, monographs, reports, texts, and conference proceedings that result from publicly funded research should be made openly and immediately accessible to the public just like publication of research articles in journals.

However, if authors write about work other than taxpayer funded research, and

are written outside the scope of research duties (c.f., educational materials, textbooks, or book chapters for instruction or entertainment) and paid by a commercial press, these are different circumstances, and policies should reflect these differences.

Comment 8. What is the appropriate embargo period

Immediate access is the ideal time to maximize scientific and commercial utility of information contained in these articles. Anything that blocks or slows access means a loss of opportunities, reduced productivity, job losses, and so on.

No data have been provided by any publisher that a short embargo or immediate access has harmed them.

At least one biomedical journal has published completely open and immediate access online without charging subscription fees or any author fees AT ALL. This journal is fully peer reviewed and edited. It published 380 primary science articles in 2011. It is run and managed strictly by volunteers (academic scientists). It serves a substantial fraction of the publication needs for ophthalmology and vision sciences researchers. This journal has been running highly successfully for 17 years. It proves the principle that any journal can always be fully and immediately open access. This is an absolutely crystal clear case establishing that no author fees or subscriptions are necessary to be successful and respected long-term. See www.molvis.org.

Best regards,
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