The American Chemical Society

Response to the

Request For Information: NIH Public Access Policy[1]

General Observation& Overview Comments

In the *Federal Register* notice announcing the Request for Information (RFI) the National Institutes of Health (NIH) poses three questions regarding the new mandate. The American Chemical Society (ACS) is concerned that the questions posed are insufficient to garner the type of input necessary to lead to a comprehensive and meaningful evaluation of the mandate. Further, the format for submitting comments discourages the submission of comprehensive, cohesive and thoughtful input. An examination of input received at the NIH web-site as of the date of this submission seems to substantiate the fact that much of it is far from comprehensive and may be of limited use towards producing a meaningful analysis by NIH at the conclusion of the comment period on May 31, 2008.

The following ACS comments broadly cover all three questions posed by NIH but by extension also cover many issues attendant to a larger more expanded response to each of the questions.

In short, we believe that:

- NIH missed an opportunity to make its 2005 voluntary initiative a success – and has failed to address the underlying problems associated with the voluntary policy and those impediments to success will now become exacerbated under a mandatory policy.
- NIH has not implemented the mandate pursuant to Congressional intent to ensure consistency with copyright law, and instead is forcing the research community to divert time and effort away from advancing the frontiers of knowledge to perform this task in NIH's place.
- NIH should have followed the federal Administrative Procedures Act, not an RFI, to solicit public comment on the implementation of the mandate. The APA, the federal rule-making standard for over six decades provides a more structured and meaningful process and could have been accomplished within the same timeframe as the RFI.
- NIH must proactively address a number of copyright, intellectual property, and other concerns raised by ACS and other publishers to make the mandate a success (as outlined on pages 5-9)

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ACS and Scholarly Publishing – Why copyright is important

The ACS is the world's largest scientific society with more than 160,000 members. We care deeply about the advancement of scholars and scholarship and pursue these goals through advocacy, publishing, conferences, information resources and professional development efforts. We have been doing so ever since publishing our first journal – *The Journal of the American Chemical Society* – in 1879.

Our 36 peer-reviewed scientific journals are distributed globally in print and electronic media and showcase the world's finest research in chemistry and related sciences. Articles that appear in our journals are widely regarded having received recognition of excellence and the visibility that content in ACS journals receives not only helps scholars achieve new scientific breakthroughs but also leads to practical applications that directly benefit human health and welfare and the world's economy.

Collectively our peer-reviewed journals form an informal but widely recognized hierarchy used by funding bodies and the academic community itself to assess research quality, impact, and priority—key factors used to allocate funding resources, evaluate levels of personal achievement, and determine professional advancement.

We believe that it is in the public interest to foster this beneficial publishing activity and toward that end we invest heavily in staff and technology resources required to be successful in this endeavor. Copyright creates the opportunity for us to do this by sustaining our publishing enterprise. This is why, we trust, Congress directed NIH to implement its Public Access Policy in a manner consistent with copyright law and respect for its underlying principles and why the Senate Appropriations Committee, in Report 110-107, directed NIH to "*seek and carefully take into account the advice of journal publishers on the implementation of this policy*" and "*to ensure that publishers' copyright protections are maintained*". We also believe that Congress considers, as we do, that the integrity of intellectual property is an essential criterion for the advancement of science as well as for innovation and creative activity.

Impediments to the Success of the Voluntary Policy Still Exist Under the Mandate

The American Chemical Society supports public access to the results of federally funded research but asserts that the implementation plan for the NIH Public Access Policy mandate does not abide with the law creating the mandate or with the sentiment and direction of the U.S. Congress, particularly as outlined in the Senate Appropriations Committee report that directed NIH to work with scientific journal publishers in implementing the new policy mandate.

The NIH missed an opportunity to make its May 2005 voluntary public access policy a success by not proactively including scientific journal publishers as it developed its procedures and policies for the deposit of manuscripts reporting on NIH-funded research into *PubMed Central*. Consultation with publishers is critical in 2008 to prevent the

agency from embarking on a similar collision course as it proceeds to implement the new mandate. Key to success will be NIH taking an active role, one based on openness and inclusiveness, to resolve the outstanding copyright and intellectual property issues that cut across a very broad and deep swath of the scientific journal publishing community.

The ACS publishes annually approximately 4,000 articles that acknowledge NIH as a research funding source. ACS has tried to resolve outstanding copyright and intellectual property issues with NIH in connection with the Society's efforts to deposit manuscripts directly with NIH *PubMed Central* on behalf of ACS authors who have elected to "opt in" to have the Society do so on their behalf. Despite ACS' efforts, the NIH instructed ACS in December 2005 to suspend article deposition into *PubMed Central;* that prohibition has prevented the Society from depositing more than 3,000 manuscripts on behalf of ACS authors. During the 2005-2008 time period, NIH *PubMed Central* has accepted unauthorized postings of ACS copyrighted material, and repurposed and openly displayed such postings without adhering either to NIH's own policy guidelines, or terms and conditions as set forth to NIH by ACS as rights holder. Issues of concern to ACS remain unresolved and will continue to be problematic and exacerbated under the new mandatory policy as outlined in NIH's implementation plan issued on January 11, 2008.

ACS hastens to point out that the vast majority, if not all, the Society's copyright and intellectual property concerns could be resolved if NIH would abide the original intent of the Public Access policy and post without alteration or modification the unedited author versions of peer-reviewed manuscripts on *PubMed Central*—without any reformatting, repurposing or modification or any mirroring of content to third-party websites—and simply link back to the final published article as the authoritative version for readers on the Society's own website.

NIH has not implemented the mandate pursuant to Congressional intent

The American Chemical Society (ACS) expresses concern that NIH has not abided by the law in creating the new mandatory public access policy as stipulated in Division G, Title II, Section 218 of Public Law 110-161 (the Consolidated Appropriations Act of 2007)

In enacting Section 218, ACS believes that Congress was aware that flawed implementation of a mandatory public access policy could create serious problems for the scientific publishing community which is why it included the statutory proviso directing "*That NIH shall implement the public access policy in a manner consistent with copyright law*."

In its implementation plan published on the NIH website on January 11, 2008, NIH placed the burden of ensuring copyright compliance on the individual researcher or institution, a directive that ACS asserts does not comport with the Congressional intent or guidance.

Shortly after P.L. 110-161 was enacted, ACS submitted a letter to NIH Director Zerhouni wherein we proposed a constructive path forward for implementation of the new mandatory policy in consultation with publishers as rights holders. That letter, sent several hours before NIH posted its implementation plan, asked that NIH seek broad input into the formulation of its implementation plan, and recommended the appropriate method to do this is through the rulemaking procedures under the Administrative Procedures Act (APA), an Act that has guided federal regulatory activities for over 60 years. Following the APA would assure that all stakeholders have an opportunity to provide input into the implementation process and the oversight of NIH's administration of the policy.

ACS asserts that following the APA would be consistent with Senate Committee Report 110-107 which conveyed with P.L. 110-161. The report directed NIH to take the following course of action when implementing the new mandatory policy. The Report reads, in part:

> "…The Committee highly encourages collaborations with journal publishers that would enable them to deposit manuscripts on behalf of the funded investigator, if all parties agree. The committee directs the NIH to seek and carefully take into account the advice of journal publishers on the implementation of this policy.
>
> In particular, the Committee directs the NIH to ensure that publishers' copyright protections are maintained…"

Following an APA process would also have been consistent with the approach NIH followed when it published its proposed voluntary public access policy on September 17, 2004, in the *Federal Register* and the public was invited to offer comment. NIH noted in publishing its final voluntary policy in the February 9, 2005 *Federal Register* that it was not required to follow the APA because of the voluntary nature of the policy, but had done so in order to obtain public comment on the proposed policy. NIH noted that it received over 6,000 public comments at that time. The public comments received were quite thoughtful and provided value to the process, as NIH modified its original proposal and increased the timeframe for manuscript deposition into *PubMed Central* from 6 to 12 months, citing the need to "ensure that peer review of scientific articles is preserved."

It would only seem logical and fair that since the policy is now mandatory, and carries with it full enforceability of federal law that its implementation should now be subject to the APA process. That process would allow comment from all concerned parties to ensure the policy is implemented fairly and comports with the Congressional intent of complying fully with the protections that rights holders are afforded under copyright. It is hard to see how NIH's implementation announcement on January 11, 2008 – 16 days after enactment – followed either the statutory language or the above referenced Senate Committee report language. ACS is unaware of any scientific journal publishers that were consulted in this 16 day window.

By contrast, the RFI process initiated by NIH on March 31, 2008 is a much more informal process than the APA and has only attracted about 1% of the responders to the NIH notice seeking public comment on its voluntary policy as outlined above. ACS believes that the lack of response to the RFI is due primarily to the fact that NIH has already gone ahead and fully implemented the mandate on April 7, 2008 just seven days after announcing the RFI leaving scores of potential responders wondering what value their time and effort in offering thoughtful input might yield.

ACS is unaware of any other federal mandate being implemented in such a disjointed fashion. A policy as important as this should be initiated only after a period of public comment and those comments have been carefully weighed and considered and any amendments found necessary have been made. ACS believes that an APA process would best abide the Congressional intent in both that statute and committee report and does not feel that the RFI will yield the input that an APA process could generate. In fact, an examination of input received at the NIH web-site as of the date of the ACS submission seems to substantiate the fact that much of the input is far from comprehensive and may be of limited use towards producing a meaningful analysis by NIH at the conclusion of the comment period on May 31, 2008.

Comments and Concerns Relative to Copyright and Intellectual Property

Since 2005, ACS has made voluntary and good-faith efforts to facilitate the deposit of NIH-funded research into *PubMed Central* in a manner consistent with the Society's interests in copyright. We have been prevented from doing so by NIH-generated intellectual property and process-related roadblocks that remain unaddressed by the agency to this day.

We are concerned that such problems will remain unaddressed, and may even be exacerbated under the new mandatory policy. By way of example, ACS has in excess of 3,000 unedited peer-reviewed author manuscripts pending deposit with *PubMed Central*, as a consequence of NIH's having refused to accept such deposits from ACS. NIH has rejected ACS' right, as copyright holder, to establish reasonable safeguards on use of this material.

Instead, NIH has sought to appropriate copyright for itself - reformatting and altering submitted author manuscripts; "repurposing" deposited manuscripts in connection with their display in *PubMed Central;* and expatriating versions of that repository to countries elsewhere around the globe. In our view, implementing the Public Access Policy in a manner consistent with copyright law, and the intent of that aspect of its Congressional mandate, would mean that:

A. NIH would respect the integrity of the copyrighted content it receives and ensure that any revisions to copyrighted materials such as reformatting, enhancing, linking or otherwise changing the articles are undertaken only when consistent with copyright. Not only are there no mechanisms in place to do this, but also the range of uses outlined in NIH's terms and conditions for manuscript deposit take

substantial liberty with content to create unauthorized derivative works. ACS questions how NIH can proceed in this manner, as doing so would seem to disregard the intent of Congress.

B. NIH would respect ACS' right, as the copyright holder, to stipulate what it will or will not allow related to third-party use of its works. Instead, NIH has rejected ACS terms and conditions, designed to protect the integrity of the scientific record and, without permission or consultation, has linked content to a variety of online resources (or seeks the latitude to do so). For example, nothing in NIH's implementation guidelines explicitly prohibits the licensing, selling, or distributing of links or access to content deposited within the *PubMed Central* database.

C. NIH would acknowledge and support ACS as the copyright holder in the works deposited. Instead, the NIH website directs users to information which we assert undermines ACS' copyright. In some cases, ACS' copyright notice is not displayed or NIH's site links to its own copyright information rather than that of ACS as rights holder.

D. NIH would respect the trademarks and branding of the ACS. Not only has there been no affirmation of these markers of quality, but all too often branding information is missing − potentially misleading users to the erroneous conclusion that the NIH is claiming copyright, or that the content is in the public domain.

E. NIH would take steps to ensure copyright compliance for material deposited into *PubMed Central*. No mechanisms to do this are in place, even for content that that has been erroneously deposited by authors without authorization, or that does not fall within the scope of the NIH Policy, and thus should not have been made publicly available. This causes potential economic harm to ACS as publisher.

F. NIH would provide a mechanism to incorporate the concerns of publishers as the policy evolves over time. No mechanisms to do this are in place or have been proposed − indeed, the implementation guidelines in connection with the mandated Public Access Policy were announced almost immediately after enactment of P.L. 110-161, without consultation with publishers, even as the NIH proceeded to inform other stakeholders.

G. NIH would respect ACS' right, as copyright holder, to decide how its content will be disseminated. Instead, NIH, without permission or consultation, has made arrangements to mirror ACS content deposited on its site. A mirror site for *PubMed Central* has been established in the United Kingdom, and our understanding is that other mirror sites are planned or proposed to be located internationally. This raises important questions and concerns regarding copyright protections that would prevail in such circumstances for content located outside the borders of the U.S. We question also how such international mirror sites serve

the needs of the U.S. taxpayer and the intended purpose of the NIH Public Access Policy as directed by Congress.

H. NIH would support the integrity of the scientific record. Instead, NIH has declined to use a link to the final published article at a specified URL on the ACS' own website as an alternative to the deposit and display of the unedited author's version on *PubMed Central*. Furthermore, NIH has also chosen to use its own system of article identification (PubMed Identifiers) rather than adopt the widely-accepted Digital Object Identifier (DOI) as a means of identifying authoritative material and associating it with the rights holder of record. This adds to reader confusion as to the definitive version of the article, and by diverting web traffic from ACS' final published article, poses economic harm in the process. It is unclear to us how NIH will manage and maintain such an identifier system, or the value that this system adds on behalf of the taxpayer.

I. NIH would seek only the deposit of final, peer-reviewed manuscripts upon acceptance for publication. Instead, under the scope of the policy NIH allows, and even encourages, the deposit by authors of the final published version (article) − without any provision for distinguishing the two versions, or for compensation in recognition of this federal taking of the publisher's investment in the peer-reviewed version of the manuscript. In so doing, NIH is placing authors in potential conflict with publishers and their copyright or other publishing policies, or (at worst) steering authors to favor journals with policies consistent with a particular business model. ACS questions whether the intent of Congress was to enable NIH to engage in this interference with the private sector and authors' right to assign and transfer their copyrights in an unfettered manner.

In addition to the issues summarized above, we note that the NIH has not implemented its current voluntary Public Access Policy in a manner consistent with its own self-created guidelines.

For example, articles, including those from ACS, falling outside the NIH Public Access Policy implementation date of May, 2005 have been posted on the *PubMed Central* repository. Those and other posted articles are made openly available that should have been embargoed for 12 months. Final published articles in journal formal and with content copyrighted by ACS have been converted into NIH's XML format and posted regardless of publication date. One of our own journal editors has expressed surprise that *PubMed Central* includes open access to articles he published prior to the policy implementation date − articles that were posted by others without his knowledge. These experiences indicate that NIH lacks adequate control over the posting of manuscripts on its own website. This must be addressed.

Mindful of these unaddressed implementation problems that affect protections provided under copyright, ACS is concerned that the new mandatory NIH Public Access Policy leaves key policy and implementation questions unaddressed, such as:

1. By what process will NIH establish criteria to ensure that publishers' copyright protections are maintained? Why has NIH refused to engage in a notice and comment rulemaking that would help to assure publishers that such protections can be put in place?

2. By what process will NIH seek and take into account the advice of journal publishers in determining if it is implementing its Public Access Policy in a manner consistent with protections under copyright law, and the spirit of NIH's Congressional mandate?

3. If deposited content will be "mirrored" to other sites outside the U.S., what process will be entailed for the establishment of such sites, and how would national and international copyright considerations be addressed to protect rights holders?

4. What limitations, if any, would be imposed on *PubMed Central* as an "aggregator" of content from sources such as HHMI, Wellcome Trust, other U.S. government agencies, etc?

5. Will NIH negotiate terms and conditions with publishers for the use of NIH grant funds to enable the deposit of copyrighted works on behalf of authors? Will NIH make such payment directly to publishers on behalf of its grantee authors?

6. How will NIH identify grant funds allowable to be used for the payment of publication fees? Will supplemental funds be made available to support author compliance with the mandate?

7. What steps will NIH take if it is found that its Public Access Policy is harming publishers?

8. Why has NIH refused to work with publishers to gather and share *PubMed Central* usage statistics on copyrighted content? Should this information not be considered as in the public domain, as it is funded with taxpayer monies? Why should articles be freely available, but information about the usage of those same articles be hidden?

9. How will NIH ensure that articles on *PubMed Central* meet ACS requirements, such as the access-control period, and that the policy actually applies to the articles that it is posting?

10. How will NIH prevent piracy of the articles from *PubMed Central*? At present, publishers are not protected from systematic downloading that could occur from the NIH website; pirates also could disseminate paper copies of article content, and undermine publishers' economic interests. What will happen if piracy is discovered as a result of downloading of content from *PubMed Central*?

11. What provisions will be made to evaluate whether the policy is effective in achieving its intended purpose of promoting public access by US taxpayers to NIH-funded research? As announced, the policy makes no mention of mechanisms for oversight of NIH's implementation efforts, to ensure that the policy's scope and operational costs are contained. What "sunset" provisions will be made so that the policy mandate may be amended or phased out if it proves to be ineffective, too costly to maintain, or too disruptive to the peer-reviewed scientific publications on which ultimately it relies?

Regardless of the questions and serious nature of the issues raised above, we choose not to believe that NIH is willfully disregarding copyright law and Congressional intent in the implementation of its Public Access Policy.

However, ongoing consultation with publishers such as ACS is needed to ensure that NIH does not misapply its Congressional mandate and do irreparable harm to the very fabric of scholarly publishing that supports scientific research and our nation's competitiveness. ACS is willing and able to work with NIH and other key stakeholders to establish the kind of productive ongoing dialog that we feel will truly maximize the sustainable dissemination and discoverability of knowledge in chemistry and the allied sciences, and fulfill the intended purpose of the Congressional mandate in serving the public interest.

Thank you for this opportunity to share the views of the American Chemical Society with you.

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