Office of Science and Technology Policy
725 17th Street
Washington, DC 20502

Re: Public Access to Peer-Reviewed Scholarly Publications Resulting from Federally Funded Research

Submitted by email to: publicaccess@ostp.gov

The Institute of Food Technologists (IFT) appreciates the opportunity to submit comments to the Office of Science and Technology Policy (OSTP) to offer its perspective and practical insights on public access to federally-funded research appearing in peer-reviewed journals. IFT exists to advance the science of food and we are committed to the free flow of scientific information. Furthermore, our peer-reviewed publishing efforts are critical to our nonprofit organization’s success in fostering innovations in the food science and technology field.

IFT serves more than 17,000 members, affiliated with academia, industry, and government, and all those interested in food science and technology by publishing three internationally renowned peer-reviewed journals and a technical magazine. As a publisher, IFT assembles more than 1,000 preeminent food scientists, technologists, and engineers among our comprehensive pool of peer reviewers. Such an extensive resource of peer reviewers ensures that the research made available to the scientific community is important, comprehensive, and of high quality and integrity.

Two of IFT’s peer-reviewed e-publications (Journal of Food Science Education and Comprehensive Reviews in Food Science and Food Safety) are currently freely available online. In addition, the Journal of Food Science is available to IFT members at a discounted subscription rate and to others on a per article download charge or through subscription. Food Technology magazine, published monthly, is available to IFT members in print and online. The online version of Food Technology is initially available free to the public for about one month, and then becomes accessible only to IFT members. To ensure that the public is informed of research findings, IFT, along with publishing partner Wiley-Blackwell, has a well-organized system to promote particularly newsworthy research through popular media and news releases.

Based on our 70-plus year history of scientific publishing, IFT strongly believes that the current system for handling and releasing peer-reviewed research—federally-funded or otherwise—is not broken and does not need a federally-mandated open access policy.
Much of the discussion around the issue of public access was fueled by an NIH decision in February, 2005. In its “Policy on Enhancing Public Access to Archived Publications Resulting from NIH-funded Research,” NIH-funded researchers were requested to submit electronic versions of the author’s final manuscript upon acceptance for publication to PubMed Central to be released to the public as soon as possible and within 12 months of the publisher’s official date of final publication. IFT is not aware of any studies on the effectiveness of this voluntary open access model.

Perhaps the most important quality that can be attributed to a research publication is whether or not it has been subjected to peer review. Through the peer-review system, there is an opportunity for scholars to collectively make a very good scientific manuscript become a very great work through a thoughtful editorial process. The important exchange of ideas between editor and author ultimately benefits the public with a more comprehensive scientific work.

Peer review is carried out through the auspices of the publisher, and its associated costs are borne primarily through subscriptions. If the publisher is a professional scientific society, as IFT is, however, some expenses may be borne through member dues as a member service. In either case the costs associated with handling the manuscript including peer review and copy editing are real costs. Without some grace period prior to free access, the publisher will be forced to charge the authors page charges (which some publishers now do). Such a move is likely to delay publication of research results, an unintended consequence of a public access policy.

In addition, IFT offers the responses to these points below for OSTP consideration.

(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 publicly 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?
Most if not all publishers are moving to digital access, which reflects a concerted response to meet the information demands from the scientific community. Given the rapid evolution of digital communications, there have been dramatic improvements in access to scientific information, reprints and authors due to the ongoing improvements in search engine technology. Therefore, from a publishing and a scientific perspective, it is important that there are not mandates establishing a single approach to public access since it has the potential to stifle innovation in what is now a rapidly changing environment. Not only does an open access system have the potential to decrease the amount that publishers are able to invest, it also may inadvertently reduce incentives to develop new tools, delivery vehicles and functionality—all of which are critical to the free flow of scientific information.

The assumption that there are scientists who are restricted in their access to research may be erroneous. To date, IFT is not aware of any definitive studies that validate this hypothesis. Surely implementation of a policy that would have the unintended consequence of irreparable harm to the peer review system would not be undertaken without sound scientific data to justify the action. The peer review system functions through scientific journals, many of which are supported through scientific societies by subscriptions from individuals, libraries, and corporate entities. Mandatory release of research at the time a manuscript is accepted for publication would undermine subscriptions and result in loss of revenue for carrying out the peer review activity.

(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?

There is a valuable opportunity to forge a more cohesive public-private partnership between the government, publishers and scientific organizations. For example, new opportunities could be created to enhance access to published articles. In this regard, the government could make additional funding available for authors to publish open access articles. Content licensing arrangements with publishers and scientific societies could make more information 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. Work with private sector publishers to make that content findable and link it to the journal literature. While new public access approaches offer interesting opportunities for the future, these must be weighed with the current realities of patent law and the history of a very effective process that authors and publishers have forged to unveil the first public announcement of a scientific work. From a patent law standpoint, public access could generate considerable legal challenges. For example, there are a host of intellectual property issues associated with making progress reports for government funded research available to the public and even more confusion could reign over turning government-funded science into intellectual property. All these issues must be viewed through the lens of our current patent system.

(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 advent of the internet has made it possible to deliver journal content in new ways, and many publishers have made considerable investment in new publishing technologies, methods to archive and backup articles, and the creation of new technologies to deliver published material. In regard to the government’s role to serve as the steward, it may be costly to maintain and manage a centralized government system since it may be cost prohibitive to keep pace and maintain compatibility with rapidly evolving technologies. In this regard, new investments by publishers and societies may allow for increased access through new media.

Based on question #3 above, there needs to be greater clarity and definition on government’s role in “stewardship” and in maintaining “custody.” This implies the potential for government’s role to potentially override copyrighted material that has been developed by publishers and scientific societies. A contrary view is that government’s role is not to be steward and manager of a centralized system. Instead, it is in the public’s best interest if the government plays a role as a contributor to the scientific dialogue—to complement the research article contributions of industry and academia—by encouraging broad distribution of federally-funded research through publishers and societies that develop peer reviewed journals. This increases
the reach of federally-funded research, and it also generates opportunities for broader interpretation of research through the peer-review process. Instead of mandating that manuscripts are freely available within an archive, it may benefit the scientific community and the public to provide public access to research reports and other information that it already controls.

(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?

IFT is working with our publishing partner to better standardize and track funding agency information and support initiatives such as ORCID and semantic content mining for increased clarity, discoverability, and efficiency in scientific publishing. If it is a high priority for the government to raise awareness of federally-funded research, it would be valuable for government agencies to make more funds available to research authors to publish their articles open access in the journal of their choice. For example, the Journal of Food Science has a program for authors who choose to pay for open access for their articles within the journal (OnlineOpen). Many journals currently offer this “hybrid model” option, and it also supports the comprehensive peer-review processes that are already in place.

(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 the model that is described in Section #4 above.

(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?
Publishers and learned societies, like IFT, are committed to dissemination of research, which is precisely why we publish journals. In that regard, the current model has proven highly effective since it provides broad, comprehensive access to peer-reviewed journal literature. Therefore, utilization of the research by taxpayers already occurs in the current model. Broadly, the key issue is how to make a system that is economically sustainable, maintains a permanent record, and is totally accessible. Previously, IFT used a model whereby the author, usually through the funding agency, would pay a page charge for having their research published. After careful consideration, this system was considered unsustainable and so IFT adopted the "no page charge" model for IFT members. Included in this model is the option for the author and the funding agency to immediately subscribe to open access through a charge system. IFT is committed to the proposition that authors are free to have their research peer-reviewed in the journal of their choice so as to maximize the impact of their research. To make the funded open access model viable, funding agencies—both federal and non-federal—would require funding to cover publishing fees. Under this model, there is likely to be less funding available to actually do the research.

(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?**

This notion undercuts efforts by nonprofits, such as IFT, and thwarts efforts designed to produce new content in new media. It would be cost prohibitive for nonprofits to continue publishing or conducting conferences with an added Federal mandate to include book proceedings, scientific sessions, proceedings—especially when considering the rapid development of new communications technologies that currently are successful in making this information available to foster a scientific discussion.

(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?**

To the best of our knowledge, there has not been extensive review of the effectiveness of embargo systems and whether there is a single monthly timeframe that would be appropriate across a multitude of research disciplines. In other words, what may be an appropriate embargo time frame for the physics field may not be suitable for food science field.

However, if the government deems it necessary to establish such embargo parameters, it may be feasible that a 12-month embargo time frame could be implemented so that publishers and scientific societies, such as IFT, do not experience financial hardship as content is made available freely. A key issue for the government to consider is that accepted-but-unedited content may contain mistakes and cause confusion since it is not the official version of record. Scientific societies and publishers, with their expert peer reviewers, provide a valuable service to their fields by editing, polishing, publishing, and maintaining the version of record, and the government must consider the impact of embargo periods and the resulting impact on scientific accuracy of articles.

Food scientists and technologists have been leading innovations for generations and the peer-review system has served the profession and the public very well. In regard to public access policies, it is important that we do not impose federal mandates on publishers and scientific societies since our current system is not broken.

We appreciate the opportunity to share our insights and we look forward to continuing to contribute to this important dialogue.

Daryl Lund  
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