

# THE NATIONAL INSTITUTES OF HEALTH PROPOSAL FOR ENHANCED PUBLIC ACCESS TO NIH RESEARCH INFORMATION

Background Information for the UC Systemwide Library and Scholarly Information Advisory Committee and Standing Committee on Copyright  
October 29, 2004

## 1. Background

In September, 2004, the National Institutes of Health (NIH) issued Notice NOT-OD-04-064 (<[NOT-OD-04-064: Notice: Enhanced Public Access to NIH Research Information](#)>) “to announce and to seek public comments regarding NIH’s plans to facilitate enhanced public access to NIH health related research information. NIH intends to request that its grantees and supported Principal Investigators provide the NIH with electronic copies of all final version manuscripts upon acceptance for publication if the research was supported in whole or in part by NIH funding. This would include all research grants, cooperative agreements, contracts, as well as National Research Service Award (NRSA) fellowships.” To effect this goal, NIH “will archive these manuscripts and any appropriate supplementary information in PubMed Central (PMC), NIH’s digital repository for biomedical research. Six months after an NIH supported research study’s publication—or sooner if the publisher agrees—the manuscript will be made available freely to the public through PMC. If the publisher requests, the author’s final version of the publication will be replaced in the PMC archive by the final publisher’s copy with an appropriate link to the publisher’s electronic database.” Public comments are due to NIH on November 16, 2004

The NIH proposal is responsive to a declaration of Congressional intent contained in the report of the House Appropriations Committee on the 2005 Labor-HHS-Education Appropriation Bill ([http://thomas.loc.gov/cgi-bin/cpquery/?&db\\_id=cp108&r\\_n=hr636.108&sel=TOC\\_338641&](http://thomas.loc.gov/cgi-bin/cpquery/?&db_id=cp108&r_n=hr636.108&sel=TOC_338641&)), which was also the subject of a colloquy on the House floor ([http://frwebgate.access.gpo.gov/cgi-bin/getpage.cgi?position=all&page=H6833&dbname=2004\\_record](http://frwebgate.access.gpo.gov/cgi-bin/getpage.cgi?position=all&page=H6833&dbname=2004_record), Columns 1-2).

The NIH proposal has been the subject of vigorous and sometimes acrimonious debate. Supporters believe that the proposal promises to benefit both the biomedical research community and the general public by surmounting the growing barrier of escalating subscription costs in order to provide broad public access to publicly funded research results, and may serve as a counterforce to moderate those cost increases. Opponents (chiefly publishers, including some scholarly societies) allege that the proposal will cause cancellation of subscriptions and decimate publishing revenue, force a new and untested business model on publishers, and give government a larger role in, and more control over, the conduct and dissemination of research. Two Frequently-Asked-Questions Web pages, one by Earlham College faculty member Peter Suber (<http://www.earlham.edu/~peters/fof/nihfaq.htm>), and the other by the Association of Research Libraries (<http://www.arl.org/info/publicaccess/ARLFAQ.html>), provide reasonably balanced analyses of these competing claims.

Several statements have been issued in support of the NIH proposal, including:

- An open letter from 25 Nobel laureates (<http://www.fas.org/sgp/news/2004/08/nobel082604.pdf>)

- A statement from the Association of American Universities (<http://www.aau.edu/issues/NIHPubAccProp.pdf>)
- A statement from the Council of the National Academy of Sciences (<http://www4.nationalacademies.org/news.nsf/isbn/s09162004?OpenDocument>)
- An editorial in the *New England Journal of Medicine* (<http://content.nejm.org/cgi/content/short/351/13/1343>)
- A letter from four national library associations (<http://www.arl.org/info/openaccess/arlzerhouni.pdf>)

A number of statements have also been produced in opposition. Examples include:

- Several letters from the Association of American Publishers and its Professional Scholarly Publishing division ([http://www.pspcentral.org/committees/executive/Open Letter to Dr. Zerhouni.doc](http://www.pspcentral.org/committees/executive/Open%20Letter%20to%20Dr.%20Zerhouni.doc), [http://www.pspcentral.org/committees/executive/Cover Letter to Journalist.doc](http://www.pspcentral.org/committees/executive/Cover%20Letter%20to%20Journalist.doc), [http://www.pspcentral.org/committees/executive/08-24 Arlen Specter NIH.doc](http://www.pspcentral.org/committees/executive/08-24%20Arlen%20Specter%20NIH.doc))
- A letter from Martin Frank, Executive Director of the American Physiological Society (<http://www.dcprinciples.org/senateletter.pdf>)

## 2. Academic Issues

Setting aside the numerous unproven assertions and concerns expressed by the parties to the debate over the NIH proposal, there are clearly some issues of fundamental interest to the academic community that have emerged from the discussion.

### ***Maintaining the quality of scientific information***

Regardless of the financial effects of the NIH proposal, it is critical that mechanisms for assuring the quality of scientific publication, including peer review, be maintained. NIH has acknowledged the importance of this factor in its proposal, and its primacy has been reinforced in the NAS and AAU statements.

### ***Maintaining the integrity of the research record***

The possibility that implementation of the NIH proposal could result in the persistent availability of multiple versions of a research report (at minimum, the author's final manuscript deposited in PubMed Central and the publisher's version) has raised concerns. While there are technical means to address the problem, it is critically important that it be given consideration; the NAS statement in particular emphasizes this issue.

### ***Ensuring the financial sustainability of biomedical scholarly publishing***

While the available evidence suggests that the practice proposed by NIH (including the embargo on public access to the author's manuscript until six months after publication) is unlikely to have a significant effect on publishers' subscription revenue (see the Suber and ARL FAQ's for more on this topic), it must be admitted that the financial consequences for biomedical publishing in general, or for any particular publisher, are uncertain. This is a particular concern for non-profit society publishers, who depend on publishing revenue to support the operations of their societies and may not have adequate financial reserves to cushion any short-run effects from the NIH proposal. NIH

acknowledges and pledges to address this issue in its proposal, and it is further emphasized in both the AAU and NAS statements.

### **3. Institutional Issues**

With the caveats set out in section 2 above, the NIH proposal is fully consistent with UC's current scholarly communication strategy (see <http://osc.universityofcalifornia.edu/>). Notwithstanding the close alignment of UC's goals and the NIH proposal, there are a number of implementation issues that should be of concern to UC and to higher education institutions generally. Because in most cases the University, not the faculty member or student, is the party contracting with NIH for "research grants, cooperative agreements, contracts, as well as National Research Service Award (NRSA) fellowships," these concerns merit the attention of both the University and its faculty. These include:

#### ***Communication***

It will be critically important for NIH to communicate with current and prospective grantees and PI's, and their institutions, about the nature of the request and means available for compliance. This is necessary not only to overcome potential faculty resistance and promote compliance, but to inform institutions and individuals about the role and importance of this policy in "the annual grant progress review and close-out process."

#### ***Effect on NIH award decisions***

It will be critically important for NIH to fully articulate the role that compliance with this request will play in the grant progress review and close-out process and otherwise in determining or influencing the awarding of NIH funds, and to ensure effective consultation with the affected academic and institutional communities in developing any related policies and procedures.

#### ***Procedures for deposit of author manuscripts***

Current specifications for deposit of articles to PubMed Central (<<http://www.pubmedcentral.nih.gov/about/pubinfo.html>>), which requires that submitted articles be formatted in SGML or XML in conformance with an established Document Type Definition (DTD), were developed for publishers submitting their content to PMC, and will likely not be appropriate for institutions or, especially, individual grantees preparing their manuscripts for submission. NIH will need to develop simple technical and administrative procedures and supporting technologies that allow grantees to submit their manuscripts in their native formats, or can automatically convert common native formats to those required for PMC.

#### ***Institutional burden***

Institutions will incur a burden in supporting this policy, including a) communication with current and prospective PIs and with NIH, b) administrative procedure to monitor compliance, and c) operational capabilities to assist with formatting and submitting manuscripts. It is desirable that NIH, in its planning, take steps to i) minimize the costs imposed on institutions, ii) consult with institutions in the development of procedures, and iii) consider means to compensate institutions for additional costs.

### ***Research publications other than journal articles***

PubMed Central is "the U.S. National Library of Medicine's free digital archive of biomedical and life sciences journal literature" (<<http://www.pubmedcentral.nih.gov/>>). While the vast majority of research findings resulting from NIH funding make their way to publication by way of journal articles, the proposed policy applies to "all final version manuscripts upon acceptance for publication..." It is not clear how this provision might apply if the resulting publication were something other than a journal article.

### ***Relationships to institutional repositories***

Many institutions currently operate or are planning to establish institutional repositories to store and provide access to their faculties' research output. The University of California, for example, operates the eScholarship Repository (<<http://repositories.cdlib.org/escholarship/>>), which hosts working papers and pre-prints, peer-reviewed journals and monographic series', and seminar series', and will shortly announce services to host journal article post-prints as well. It would be desirable if UC's NIH grantees could satisfy the submission request by depositing their manuscript to the eScholarship Repository. UC, in turn, could for each article either a) provide PMC with DTD-compliant XML metadata for the article, with a link to the copy hosted at UC, or b) reformat the article to comply with PMC requirements, and submit to PMC on behalf of the grantee. This would i) leverage the organizational infrastructure within UC that already exists to assist faculty to format and post their materials to the Repository, ii) supports the goal of the Repository as a home for the latest research findings of UC scholars and scientists at all campuses and from all disciplines, and iii) help deflect charges of "government control of biomedical literature."