



A BIMONTHLY REPORT ON RESEARCH LIBRARY ISSUES AND ACTIONS FROM ARL, CNI, AND SPARC

MANAGING COPYRIGHT FOR NIH PUBLIC ACCESS: STRATEGIES TO ENSURE COMPLIANCE

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In 2005, the National Institutes of Health (NIH), at the direction of the US Congress, began asking authors of articles arising from NIH-funded research to voluntarily submit those articles to the public access database maintained by the National Library of Medicine, PubMed Central (PMC). The goal of this policy was, and still is, to increase the accountability of the NIH for the way it spends taxpayer money, to ensure availability of a long-term archive of NIH funded research, and to make the published results of taxpayer funded research freely available to health care providers, educators, and the general public. Unfortunately, voluntary submission rates were quite low, presumably due to concerns about copyright issues as well as the heavy workload on most university researchers. The low submission rate meant that the NIH was not initially able to accomplish the Congressionally set policy objectives and needed to find a new way to pursue those important goals.

At the end of 2007, therefore, the NIH's voluntary submission request was made a requirement of funding by language inserted by Congress in the Consolidated Appropriations Act of 2008. The new law directs the NIH to require that all investigators funded by NIH submit an electronic copy of their final peer-reviewed manuscripts of articles that have been accepted for publication. Submission is to take place "upon acceptance," and the article must be made available in the PubMed Central database within one year of publication.

This new requirement took effect on April 7, 2008; all articles accepted for publication on or after that date are required to be deposited for release within 12 months of publication. Also, beginning May 25 all grant applications, progress reports, or

renewals submitted to the NIH need to include reference numbers from PubMed Central for all publications that fall under the new policy.

Requirements of the NIH Public Access Policy

Compliance with the NIH Public Access Policy involves three distinct elements:

- First, authors must retain sufficient rights in their articles, even when (or if) they sign copyright transfer agreements with publishers, to give NIH a license to make their work available in a publicly accessible database.
- Second, either the author or some entity acting on the author's behalf must actually submit the article to PubMed Central. The principal investigator usually will need to verify that the final version of the article as "marked up" by PMC for digital release is correct.
- Finally, the author(s) will need to obtain PMC reference numbers for their articles to include in subsequent documents submitted to NIH, as described above.

Retention of sufficient rights in an article to allow PMC deposit is probably the most unfamiliar and challenging of these necessary parts of compliance. This analysis will focus, therefore, on this first element of compliance, and will outline three broad options that institutions and authors can pursue to ensure that copyright is managed in a way that will permit PMC deposit. By way of background, however, several preliminary issues related to the stakeholders in the NIH grants process and the obligations created by the new policy merit discussion.

Responsibility for Compliance

Because article deposit is now required under the NIH Public Access Policy, the issue of enforcement and liability for non-compliance inevitably arises. Both the institution and the faculty author(s) are potential grantees of a funding award, so it is necessary to ask how the obligations of compliance, and the risk of failure, are distributed. The short answer is that, insofar as both institutions and authors function as grantees, the issue of rights retention will necessarily concern both. As is generally true for all sponsored research regulations, the risk associated with failure to comply will have a negative impact on all the parties that rely on the funding.

It seems likely that, as time goes on, the NIH will become increasingly insistent that documentation filed for renewals of funding or new funding contain reference numbers to verify that earlier publications have been made available to the public. The most probable enforcement scenario is that funding will be delayed until such reference numbers can be supplied. It is simply not clear whether funding will be delayed only when the same investigator is applying for renewal or new monies, or if an institution might be obligated to ensure that earlier publications by its employees have been deposited with PubMed Central before new funding for other investigators at that institution will be approved. But in either case, a delay in funding can cause significant problems for an institution in terms of resource planning and allocation. Also, some institutions have acknowledged that demonstrated compliance with the public access mandate could offer a competitive advantage in the race to obtain increasingly limited research dollars.

Since both institutions and individual researchers have a significant stake in complying with the NIH Public Access Policy in order to assure the efficient processing of grant applications and receipt of funding, it is unwise for an institution to leave compliance entirely up to the investigators/authors. Large universities often have offices of research support precisely because they recognize the need to free investigators from the bureaucratic tasks involved in meeting the terms of grant awards so that they can focus on their important research. The public access requirement needs to be addressed in the same way; although investigators will have to play a significant role, both as copyright holders and as the final authorities as to the text of their articles, universities will need to create structures that support compliance and make it as easy as possible for authors to complete the necessary steps for public access. In regard to copyright and rights retention, this will mean, at least, significant educational efforts to help authors retain the rights they

need, and it may well mean that institutions will want to take an even more active role in copyright management.

Author's Copyrights

Copyright is fundamentally an author's right; US copyright law designates the author as the owner of copyright from the moment an original work is created in fixed form until and unless the owner transfers that copyright, or some portion of it, to another. The twist here, however, is that in some situations the author of a work is considered to be the employer, when an employee creates the work while acting within the scope of his or her employment. Because this situation might seem to apply to scholarly articles written by full-time faculty, most universities have policies that govern the ownership of copyright and other intellectual property assets. Many, but not all, of these policies state that faculty authors are the owners of copyright in their own scholarly writings. The strategies for copyright management outlined here presume that individual authors retain the copyright in the articles they write and therefore are the parties who will normally sign any copyright transfer agreements or other publication contracts, but it is important to be aware of the role university policies may play in any negotiations required to retain rights for NIH deposit.

In many academic circles, the phrase "copyright management" will sound odd; it is a practice that has been largely ignored for a long time. It is most common for faculty authors to simply give away the copyright in their work to publishers without compensation. Thus one of the major assets of an academic community is passed to companies or other entities whose primary mission is not necessarily to serve scholarship, and authors and universities must ask permission to make subsequent uses of their own work; frequently, they must pay subscription or licensing fees for that permission. Many publishers, however, recognize that authors and institutions need to continue to use their work and include rights retention in many publication contracts. Under these clauses, authors retain the rights to do specified things with the work after it is published, even though they have transferred the copyright to the publisher. Rights retention is becoming increasingly important as authors and universities seek to maximize the value of intellectual assets and take advantage of the many new opportunities offered by the digital environment.

Three Strategies for Rights Management

The NIH Public Access Policy has created an urgent need for authors and institutions to focus on copyright management and rights retention as part of their core mission of creating and disseminating new knowledge. A rights retention policy or other copyright management strategy has become necessary to fulfill the NIH

requirements, but we need also realize that other funders are likely to implement public access policies in the future.¹ Institutions may also seek other ways to maximize the value of faculty research, such as creating their own digital archive or repository of the university's scholarship, which will themselves require careful management of copyrights. The following three options describe general strategies for appropriate copyright management; although each is focused on the need to meet the NIH's article deposit requirement, these options could also be employed to accomplish a more comprehensive strategy for public dissemination of research, as will be noted as each is discussed in turn.

The first broad option that could ensure the needed copyright management is for authors to publish their articles in journals that offer to deposit those articles in PubMed Central for the author. This is obviously the easiest option for authors, although even here there are significant issues to be considered and educational efforts that will be necessary. This strategy, of course, restricts the choices available to researchers of journals in which to publish their work, and its viability will ultimately rest on the degree to which publishers choose, or are persuaded, to voluntarily deposit with PMC.

The NIH maintains a list of over 300 journals that submit articles directly to PMC on behalf of the authors.² When an author publishes in one of these journals, according to the NIH, no further action will be necessary to comply with the Public Access Policy.³ There are also other journals that will deposit articles for the author when they are informed of the need to do so because the research was supported by NIH funding. In these cases, it is not always clear if the author will need to take further steps to ensure compliance. It may be necessary, for example, for the principal investigator to verify the final version of the article that is being placed in PMC⁴, unless the journal is willing to submit their final published version.⁵ Because these differences exist, it is extremely important for authors to have clear communication with their publishers about exactly what the publishers will or will not do on their behalf. A letter sent to a potential publisher as soon as the manuscript is submitted for publication (see accompanying Sample Submission Letter) could be very useful in opening a necessary conversation even with those publishers that offer submission as part of their service to authors.

The primary risk of noncompliance, when relying on publisher deposit, comes at the point where a faculty member needs to take some action—approve a final version or supply needed metadata⁶—and fails to do so due to inadequate communication with the publisher.

Because this option probably requires the least effort for the author and relatively low risk for the institution, it would seem sensible for institutions to do what they can to encourage journals to cooperate with the NIH in

this approach. When institutions or departments have a particularly close relationship with a journal, perhaps because of frequent publication in that venue, heavy investment in the publisher's online and print products, or faculty involvement on editorial boards, there is an excellent opportunity to ask the publisher to undertake submission to PMC for authors and to do so in the most comprehensive way possible in order to reduce the bureaucratic burden on researchers. The NIH is actively seeking such partnerships with publishers and, by encouraging the creation of these relationships, universities can reduce the risk of non-compliance and the subsequent possibility of funding delays.

The second broad option for managing copyright to permit implementation of the public access requirement is for the institution itself to take from its faculty authors a non-exclusive license in any work that arises out of funded research that would give the institution the right to authorize deposit. Institutional policies that govern the relationship between researchers and their employers could be amended to create such a license automatically when any articles were written. Many of the copyright ownership policies discussed earlier already allow for some kind of license to the institution in certain kinds of faculty work, and the recent decision by the Faculty of Arts and Sciences at Harvard to grant a license for deposit of faculty work in the university's own open access repository is an important model.⁷

Creating such a license allowing the institution to authorize deposit in PMC would usually be a significant policy change for an institution and would require careful negotiation with faculty. Once accomplished, however, the license would come into force prior to any copyright transfer agreement with a publisher, and those agreements would have to be formed subject to the license. There is a risk here that faculty members would sign publication agreements that would be inconsistent with the prior license; as with all of the options, careful education of faculty and clear communication with publishers would be required. Once again, a letter that authors would be asked to include when they submitted their articles for publication would help avoid these conflicts by informing the publisher up front that the article is subject to an automatic license giving the institution the right to authorize public access deposit. (See accompanying Sample Submission Letter.)

This option does not offer a short-term compliance strategy, since it would require a good deal of planning and negotiation to implement, but it might be the most effective long-term solution. In addition to giving the institution a higher level of security that deposit can be accomplished in accordance with copyright law, it would create an important opportunity to plan for other digital uses of faculty work beyond NIH deposit. Other funder mandates are likely to arise, as has already been observed,

and a sufficiently broad license to the institution could avoid the need to change policies or hurry to create new compliance strategies when those future requirements are imposed. Also, institutions can use these licenses to support their own interests in more broadly disseminating the scholarly work of their faculty, as Harvard has decided to do, in order to obtain significant benefits for both the institution and the researchers.

Finally, the last broad option for copyright management is for the institution to provide comprehensive assistance to authors as they negotiate retention of the right to deposit their work in PMC (as well as in other digital repositories). This is not a suggestion that institutions simply leave the matter of copyright management up to individual authors, since that would fail to address the institutional need to achieve compliance and reduce risk. Just as institutions support other aspects of compliance with the terms of sponsored research, so they must now offer assistance regarding copyright management, even when the final responsibility remains with the author.

A two-step approach seems warranted when this option is adopted. First, the institution can provide authors with a letter to include when they submit any article arising from federally funded research to a publisher. Regardless of the compliance option chosen, a submission letter will serve to give the publisher early notice that the article is subject to the NIH requirement and to outline the approach to rights management that the author and her institution are pursuing. When that strategy specifically leaves negotiation up to the individual author, a standard submission letter can be provided that will ask the publisher to be as explicit and clear as possible about what it will do on the author's behalf. It can request that specific language be included in the publication contract that will clearly allow the author to deposit her work in PMC. And finally, it can inform the publisher of what further steps the author will take if any doubt remains in her mind about whether she will maintain the rights she needs. (See accompanying Sample Submission Letter.)

The second step in this approach is to supply the author with an addendum she can use as part of the publication contract she signs whenever any doubt remains as to whether all the rights issues have been addressed. Such an addendum would include, as an added term to the contract, a clause that specifically retains for the author the right to deposit the work in PMC and to authorize its release to the public within 12 months of publication. The author would also need to be instructed to indicate over her signature that her agreement to the contract is subject to the added term.

Using both a submission letter and an addendum to the publication agreement may seem like an unnecessary "belt and suspenders" approach, but the two steps

together are necessary to reduce the risk of non-compliance when this option is adopted. Without a submission letter, publishers are likely to be unfairly surprised by the addendum to the publication contract and to balk at accepting it. At this point in the negotiations, such conflict can seriously undermine the process of releasing research results to the scientific community and the general public. Prior notice that the public access requirement must be met should prevent such last-minute disagreements. Also, a submission letter may eliminate the need for the later addendum, if the publisher includes a sufficiently broad rights retention statement in their copyright transfer agreement or accepts a license for first publication and allows the author to retain her copyright. On the other hand, a submission letter without the addendum might not be enough to ensure that authors retain rights sufficient to authorize PMC deposit. The institution (as well as the investigator) would be at risk of non-compliance if an author unwittingly signed a contract that, in spite of the previous letter, makes their subsequent deposit in PMC an infringement of the publisher's copyright. And authors would be plagued with doubts whenever they were confronted with a contract that did not clearly address the issue of PMC deposit.

An advantage of an addendum to publication contracts is that, like a prior license taken by the institution, it can be crafted to address whatever needs and goals are important to the institution. The NIH has suggested language that is designed to retain for the author the specific right to deposit in PubMed Central for public access,⁸ and use of that language as an addendum may be all that an institution is concerned about at this point. But other addenda have been written to allow retention of a broad array of rights that can help researchers and their institutions best exploit all of the opportunities for digital distribution to students, colleagues, and the public. An institution or an individual author interested in retaining this broader panoply of rights can use the "Scholar's Copyright Addendum Engine,"⁹ from Science Commons, to create a customized addendum that will ensure retention of rights that are appropriate to a particular situation or a specific use.

The Opportunities Created by Compliance

The NIH Public Access Policy offers significant benefits both to scholars and to the general public. Scholars and their institutions gain in reputation as more people become aware of the exciting research and important scholarship done on campuses around the country. The public, of course, benefits from greater access to cutting-edge science and to an archive of biomedical information, as well as better awareness of how tax money is being spent.

Another effect of the new NIH public access requirement is to make it clear that the time is past when scholars can ignore the issue of copyright management,

unquestioningly giving away full rights in their vitally important intellectual assets. Institutions must give more attention to the publication agreements that their faculty authors sign, and they must help those authors negotiate agreements that meet the requirements of funder policies. There are significant obligations here, which institutions can address by adopting one of these suggested options, or a variation thereon. There are also great opportunities available, as we decide how to comply with the NIH policy, to become more aware of the benefits of retaining copyrights in order to facilitate new ways of disseminating research and maximizing the value of our scholarly assets.

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¹ Indeed, several private funders of research, including the Wellcome Trust in the UK and the Howard Hughes Medical Institute in the US, already have similar requirements.

² "Journals That Submit Articles to PubMed Central," National Institutes of Health Public Access, http://publicaccess.nih.gov/submit_process_journals.htm.

³ Ibid.

⁴ It does appear that this verification step will always be the responsibility of the principal investigator named on the grant, whether or not that person is the author of the particular article.

⁵ Journals published by Elsevier offer an example here. The publisher tells authors that they will deposit on the author's behalf, but it appears that the author will have to be involved in the deposit process at several points.

⁶ "Metadata" refers to the structured, encoded data that describe an article or other information source. For a scholarly article, metadata include subject-specific information like search headings and topical descriptors.

⁷ Robert Mitchell, "Harvard to Collect, Disseminate Scholarly Articles for Faculty," *Harvard University Gazette Online*, February 13, 2008, <http://www.news.harvard.edu/gazette/2008/02.14/99-fasvote.html>.

⁸ "Journal acknowledges that Author retains the right to provide a copy of the final manuscript to the NIH upon acceptance for Journal publication, for public archiving in PubMed Central as soon as possible but no later than 12 months after publication by Journal." See "Public Access Frequently Asked Questions," National Institutes of Health Public Access, posted January 11, 2008, question C3, <http://publicaccess.nih.gov/FAQ.htm#c3>.

⁹ "Scholar's Copyright Addendum Engine," Science Commons, <http://scholars.sciencecommons.org/>.

SAMPLE SUBMISSION LETTER

This sample letter notifies a publisher that an article being submitted for consideration is based on NIH-funded research and therefore must be made accessible to the public under the NIH's new policy.

Although such a letter is highly recommended for any of the compliance options discussed in the accompanying article, the wording will naturally differ depending on the option(s) being pursued and the specific needs of the grantee institution. This letter addresses a combination of options one and three.

Dear publisher,

Thank you for your attention to the enclosed submission. This article is based on research at (Institution name) that is funded in whole or in part by grants from the National Institutes of Health (NIH) and is therefore subject to the mandatory NIH Public Access Policy (see <http://publicaccess.nih.gov/policy.htm>). As a matter of US federal law, the final, peer-reviewed manuscript must be deposited with the PubMed Central (PMC) database upon acceptance for publication and be made publicly accessible no later than 12 months after publication.

In order to ensure compliance with this mandate and to be sure that copyrights are addressed appropriately, we ask that *either*:

- You, as the publisher, have signed a PubMed Central participation agreement and will submit the final published article directly to PubMed Central for release within 12 months. In this case, we need only ask to be informed when submission is complete so that the required reference number(s) that must be used in subsequent NIH applications can be obtained. *Or*
- Where the author must take responsibility for deposit, or where you, as publisher, submit only the final author's version of the article to PMC on their behalf, we ask that the publication contract sent to the author upon acceptance include language that allows he or she to retain the right to grant a license to the NIH for PubMed Central deposit.

Please indicate clearly if you have any requirements about when, within the allowable 12-month period, the article can be made public through PMC. The author will deposit the article in PMC, if necessary, and the principle investigator will verify the final PMC text. *Or*

- If the necessary language is not part of your standard publication agreement or copyright transfer, please include this additional wording, which is suggested by the NIH: *The Journal acknowledges that Author retains the right to provide a copy of the final manuscript to the NIH upon acceptance for Journal publication, for public archiving in PubMed Central as soon as possible but no later than 12 months after publication by Journal.*

Again, please inform us of any applicable embargo up to the allowed 12-month delay. We will deposit the article in PMC.

It is our hope that one of these options will be employed to ensure that we can cooperate to comply with this mandate. However, since this is a requirement of the current and future NIH funding which supports a great deal of research at (Institution name), we must ensure that our authors comply with the Public Access Policy. If you accept this article for publication and none of the above options have been implemented, we will ask our authors to include the italicized passage above from the NIH as an additional term of any contract they sign and will proceed with depositing the article in PMC.

Thank you for your consideration and cooperation.