An open access mandate for the NIH

"The Director of the National Institutes of Health shall require that all investigators funded by the NIH submit or have submitted for them to the National Library of Medicine's PubMed Central an electronic version of their final, peer-reviewed manuscripts upon acceptance for publication, to be made publicly available no later than 12 months after the official date of publication: Provided, That the NIH shall implement the public access policy in a manner consistent with copyright law." (1)

The day after Christmas, President Bush signed an omnibus spending bill containing a provision requiring the US National Institutes of Health (NIH) to mandate open access (OA) for NIH-funded research from April 7, 2008 (1). This is a momentous victory. Measured by the ferocity of opposition overcome and the volume of literature liberated, it's the largest victory in the history of the open access movement.

The new NIH policy is groundbreaking for a handful of reasons. First, it's the first OA mandate for a major public funding agency in the US, and the first for any public funding agency worldwide demanded by the national legislature rather than adopted directly by the agency.

The mandate comes after a long struggle. Congress asked for an OA mandate at the NIH in 2004, but in 2005 the agency decided to request rather than require OA. OA proponents have worked tirelessly ever since to persuade Congress to strengthen the policy. OA opponents have worked just as hard on their side, first to keep the policy weak and then to help the weak policy succeed in order to head off pressure for a mandate. (For a more complete summary see http://www.earlham.edu/~peters/fos/newsletter/11-02-07.htm#nih)

Despite its frustrations, the process sets an important precedent. Other US agencies no longer have to worry that a strong OA policy will antagonize Congress or the White House. Some agencies will use this as a green light to adopt similar policies; others will wait to see how the NIH policy fares in court.

The sheer size of the NIH makes the new policy important. The NIH is the world's largest funder of scientific research, if we don't count classified military research. Its budget last year, \$28 billion, was larger than the gross domestic product of 142 nations and more than five times larger than all seven of the Research Councils UK combined. NIH-funded research results in 80,000 peer-reviewed articles every year or 219 every

day (2). The NIH OA mandate not only frees up an unprecedented quantity of high-quality medical research, it also takes a giant step toward cultivating new expectations among researchers, funders, governments, and voters that publicly-funded research should be OA.

Finally, the policy is strong. The mandatory deposit policy will drive compliance toward 100% (up from a dismal 4% after its first year of operation)(3). The bill requires deposit of manuscripts immediately upon acceptance in a peer-reviewed journal. This is much better than requiring deposit during or after the 12-month embargo period. Immediate deposit allows immediate release of metadata, enhancing the article's visibility, and allows the NIH to switch the article from closed to open access, automatically, as soon as the embargo runs. Agency staffers won't have to hunt down the author and beg for a copy of an old manuscript. (4).

There are some drawbacks such as the permissible 12-month embargo. Any embargo is a compromise with the public interest, and longer embargoes are more harmful in medicine than in other fields. But a mandate is better than a shortened embargo, if we have to choose. The reason? Simply that a short embargo without a mandate isn't really short, since there is no enforceable deadline for ending the embargo and providing OA. Moreover, we don't have to choose and can make a shorter embargo our next goal.

A publisher lawsuit may delay the implementation of the new OA policy. However, the only legal objection that publishers have raised to date is that policy will violate copyright, and the policy decisively answers this objection. NIH grantees who follow the new rules will retain the right to comply with the policy, even if they transfer all their other rights to a publisher. Publishers cannot complain that compliance violates a right they possess, only that it would violate a right they might wish to possess. Moreover, of course, in any lawsuit the NIH will benefit from the fact that Congress and the President ordered it to adopt an OA mandate.

How will the NIH deal with conflicts between its OA mandate and the policies of publishers where NIH grantees submit work? The policy does not depend on publisher consent or cooperation, and simply requires grantee compliance. If a publisher will not accommodate the NIH policy, then authors must look for another publisher (1). The NIH will insure compliance by requiring grantees to use the "submission reference number" for previous papers covered by the policy when writing progress reports or applying for new grants. Non-compliance may "delay or

prevent" the awarding of funds (2).

The new policy, like the old, allows grantees to use grant funds to pay publication fees at fee-based OA journals.

The policy applies to "all graphics and supplemental materials that are associated with the article." Data files are exempt but continue to fall under the NIH's 2003 data-sharing policy (5).

In the short time since President Bush signed the omnibus spending bill, there have been make a range of mistakes in understanding what has taken place (see Box 1). These misunderstandings no longer function as impediments to legislation, but they could well function as impediments to implementation. It is incumbent upon all of us to correct them to ensure that the author support and compliance aren't undermined by misinformation.

In Canada the open access policy to CIHR funded research (6) is stronger than the NIH policy in two respects: it allows only a six month embargo, and it also applies to datasets. But in another respect it is considerably weaker than the NIH policy: it only applies "where allowable and in accordance with publisher policies".

The road to the new NIH policy has been long and difficult, but now that we're reached its end, we're entering a new era. We're moving from a world in which most funded research is disseminated exclusively by expensive journals, where only lucky researchers at affluent institutions can see it, to a world in which most publicly-funded research is freely available to everyone who can make use of it. We're not there yet, I realize. But before 2008, 30+ other funding agencies worldwide already mandated OA for the research they fund (7), and now they have now been joined by the world's largest funder of unclassified research.

*This commentary was based on Peter Suber's commentary, The Mandates of January, SPARC Open Access Newsletter, February 2, 2008.

http://www.earlham.edu/~peters/fos/newsletter/02-02-08.htm#mandates

References

(1) Consolidated Appropriations Act, 2008, http://thomas.loc.gov/cgi-bin/bdquery/z?d110:h.r.02764: For the policy that the NIH adopted to conform to the Act, see Resulting from NIH-Funded Research,

- National Institutes of Health, January 11, 2008. http://publicaccess.nih.gov/
- (2) NIH FAQ on the new policy, http://publicaccess.nih.gov/FAQ.htm
- (3) The NIH report to Congress, January 2006, http://publicaccess.nih.gov/Final_Report_20060201.pdf
- (4) See Peter Suber on the dual deposit release strategy, http://www.earlham.edu/~peters/fos/newsletter/08-02-06.htm#dual, and Stevan Harnad on the immediate deposit/optional access strategy, http://www.eprints.org/community/blog/index.php?/archives/12 3-IDOA-not-DOA.html.
- (5) NIH data sharing policy, http://grants.nih.gov/grants/policy/data_sharing/
- (6) CIHR Research Output Action Plan, http://www.cihr-irsc.gc.ca/e/34846.html
- (7) Registry of Open Access Repository Material Archiving Policies, http://www.eprints.org/openaccess/policysignup/

Box 1: Common mistakes about the NIH policy

Published Misunderstandings	Actual NIH policy
Fiction: The mandate is to publish in OA journals	Fact: The mandate is to deposit in an OA repository (PubMed Central)
Fiction: The mandate is to bypass journals and peer review	Fact: The mandate is to provide OA to articles already published in peer-reviewed journals
Fiction: The mandate applies to the published versions of articles	Fact: The mandate applies to the final versions of the authors' peer-reviewed manuscripts
Fiction: The mandate directs deposits to PubMed	Fact: The mandate directs deposits to PubMed Central
Fiction: The mandate requires a 12 month embargo on the copy in PMC	Fact: The mandate permits an embargo of any length up to 12 months
Fiction: The new NIH budget is \$29 million	Fact: The new NIH budget is \$29 billion
Fiction: The new mandate will only last for one year	Fact: The new mandate lasts indefinitely
Fiction: The OA mandate requires violation of copyright law	Fact: The OA mandate requires compliance with copyright law