

Proposed legislation supports an untested publishing model

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Free access to information is a powerful and alluring concept. Under the "Public Access to Science Act," recently introduced into the U.S. House of Representatives by Representative Martin O. Sabo (Democrat, Minnesota), papers describing scientific research substantially funded by the U.S. Government would be excluded from copyright protection. This is proposed as a means to guarantee free access to this information.

Representing the Rockefeller University Press (RUP), a nonprofit department of the Rockefeller University and publisher of *The Journal of Cell Biology*, I take issue with a number of the points made by the Sabo Act. It appears to me that this is a thinly veiled attempt by Harold Varmus and the other founders of the Public Library of Science (PLoS) to eventually force all publishers into their open access publishing model. As this publishing model is unproven and may well be unsustainable, this is an irresponsible act.

Science publishing: Models and costs
The mission of RUP includes the dissemination of scientific information to as broad an audience as possible as quickly as possible, so I am certainly not opposed to much of what the PLoS advocates. We at RUP welcome another player in the publishing field, and wish them well in their mission of providing free content by relying on upfront fees and charitable contributions. However, to attempt to legislate the demise of the time-honored subscription-based business model, prior to proving that another model works, does not seem wise. (The debut issue of *PLoS Biology*, the first

journal from PLoS, is not due out until October, and the long-term financial health of the enterprise remains to be seen.) It is true that there are commercial publishers that reap profit for their shareholders from the sale of their journals, but there are also many not-for-profit society and university publishers that operate at little if any profit. In the cases where profit is made by the latter group, it is used to provide more features, more content, or educational programs that benefit society as a whole.

Print journals aside, the costs of producing an online journal are not trivial, and involve those of peer review, copy-editing, production, and distribution (including costs in providing high speed access worldwide). New technologies are needed for the failsafe storage and secure maintenance of a large archive, and for the development of new features and search capabilities that make the material more readily available and of greater value to the researcher. In addition, many journals, including those at RUP, provide a valuable service in sifting through and interpreting (through news and commentary) a mountain of scientific data that is ever increasing. All this costs money. The RUP journals and many of the society journals exist by receiving revenue from a variety of sources: subscription and license fees, page and color charges to authors, advertising, and permissions for commercial use. In this manner, we are able to avoid charging any one participant in the process too much, and we keep our fees as low as possible. Ironically, an open access model may end up threatening the ability of some researchers to pub-

lish their research if all costs are lumped into a large upfront payment.

The various models for open access by groups such as PLoS, Scholarly Publishing and Academic Resources Coalition (SPARC), CreateChange, E-BioSci, and BioMed Central, among others, are honorable, noble experiments in dealing with the current publication dilemma. However, I see no reason at the present time to destroy the subscription model until we see that these new models can survive, any more than I see fit to kill off print immediately, solely because some want to, as opposed to waiting until the public says it is no longer needed. It is far better for all of us to work together cooperatively for the good of disseminating science, rather than to be in constant discord, thereby creating animosity among researchers, publishers, and librarians, and delaying progress.

Those of us in the nonprofit sector are the natural allies of "open access." This is especially true for the large cadre of scientists who have for years donated extraordinary amounts of their expertise, time, and dedication to advancing the essential cause of free and open scientific communication, and done so long before PLoS appeared on the scene. The current effort, instigated by a small group and funded privately, is already having the effect of splitting the community. Their actions, embodied by the Sabo legislation, would appear to have a self-interested purpose of increasing the success of their own philosophy and business model, to the possible detriment of all others. There are many other options to be explored, and indeed that already exist, to ensure "open access."

Existing free content

Many of the publishers (like RUP) that are in the middle of the publishing spectrum—the organizations situated between the open access advocates and the commercial publishing conglomerates—have already been instrumental in promoting free back content. These organizations publish a large percentage of the most important scientific findings, asking for the advice of the already over-committed top researchers to peer review the content prior to publication. Many of these publishers banded together with the assistance of HighWire Press, a division of Stanford University Library System. This allows publishers with far fewer resources than the large commercial publishers to compete in the online arena.

An important feature of HighWire is its free content. To date 556,915 articles in 335 journals at HighWire are available online for free, and this number grows daily. Currently, the RUP journals, and those of many HighWire and some commercial publishers, make all of their content freely available to countries that are defined by the World Health Organization as developing nations. For more advanced nations, the three RUP journals are also available free after 6 months (*The Journal of Cell Biology*) or 12 months (*The Journal of Experimental Medicine* and *The Journal of General Physiology*). HighWire publishers allow free full-text access to articles from the references of one another's journals. Finally, RUP provides for free a fully searchable archive of pdfs back to 1975, and within the year we expect to provide free pdfs all the way back to Volume 1, Issue 1 of each of our journals.

Open access and Sabo

The Sabo legislation would force scientific publishers into the PLoS open access model, because as soon as we publish anything funded by the U.S. Government it would be available for anyone else to republish or repurpose in any form once they gained access to

our online or print editions. Anyone could then post it to any open access site, or a commercial publisher could also post it, claiming huge amounts of data available at one location, clearly an advantage to the librarian. What would then be the incentive or value to publishers that need to rely on a proper business model rather than on charitable contributions as PLoS is currently doing?

Sabo's draft legislation is in effect overturning legislation that was put in place to protect an author's works, i.e., copyright law. RUP continues to hold copyright to prevent misuse of the materials by third parties or commercial organizations, and as part of this duty we handle permissions on the authors' behalf. However, we allow authors unrestricted use of their own materials for any purpose, and we encourage them to post the pdfs of their articles on their or their university's web sites.

The U.S. Government supports both research and the writing of that research, just as it contributes to research whose results are patented. As I understand it, the U.S. Government does not own that information by virtue of providing grant funding, except in those cases where the work is performed at a government agency, in which case the work is considered a work for hire and the government retains copyright, thereby allowing free dissemination of that work. I cannot imagine how a law such as the Sabo legislation would work, with some funds coming from the government, others from a university, and others from private resources. There are frequently collaborations involving many sources and foreign governments. What is the strategy for dealing with such cases?

Constructive thinking

The fact remains that a large swathe of papers are published by for-profit publishers. The more highly cited of these journals offer a valuable product but negligible free material. Based on expe-

rience at RUP and other nonprofit publishers, posting of older content for free holds no financial risks for the publisher and huge benefit for the consumer, and yet the for-profit publishers continue to resist such ideas. Can we be constructive in thinking of approaches to address this problem, so that we can influence these publishers in ways that are less destructive to all publishers than the Sabo bill?

The power to coerce lies with those who pay the bills: the librarians. If librarians can act together they can insist on solutions that are both financially viable for publishers and morally acceptable for consumers. Meanwhile, authors who have work that is valid but of lower impact can vote with their words by publishing in no-frills open access sites such as BioMed Central, rather than in obscure for-profit titles that are bundled in large, expensive packages that libraries feel pressured to buy.

Finally, this draft legislation is named the "Public Access to Science Act" yet it really is about copyright. Copyright and public access are two entirely different entities, with one not necessarily affecting the other. As shown above, a copyright holder can still provide free access, and in fact granting copyright back to authors (as has also been proposed by PLoS) could prevent any form of free access because permission to post material would have to be obtained from each individual author. Publishers such as RUP seek to hold secure copyright so that we can ensure that we have both the legal right and the resources to guarantee free access, albeit after a brief interval.

The Internet bubble of the late 1990s showed that the obvious attraction of free content can flounder when faced with economic reality. The Sabo bill threatens to destroy a system that has become extremely efficient at disseminating scientific information in its many forms, without carefully examining the consequences of copyright prohibition. As such it is a hasty and ill-timed measure.