

Dear Colleagues:

I write in my capacity of Editor-in-Chief of Protein Science, the journal of the Protein Society, and as a scientist in a University faculty position. While there are a number of points in the proposed policies for open access to which I object, I will confine my remarks to three which I believe to be the most important. At the outset I wish to make it clear that the officers of the Protein Society and the Editors of the journal are not opposed to public access to scientific research in the shortest possible time frame, but we are concerned that it be sound science and that the interpretations meet the highest of scientific standards. We also are concerned about financial aspects of the proposed policies.

First, it is essential that the peer review system of assessing the quality of scientific publications not be compromised in any way. The proposed policies are vague on when NIH-funded investigators will be expected to deposit their papers with the PLoS and which version will be deposited. The peer review process involves successive rounds of submission and review, sometimes several such iterations, before a manuscript is judged scientifically sound and ready for publication. Earlier versions often contain serious flaws due to omissions requiring additional evidence, conclusions or claims which are not adequately supported by the data, or errors in the analyses of many types. The peer review system, while certainly not perfect, is the best way of detecting such flaws and getting them corrected before the public is misled. Thus, it is essential that only the final version of the paper having gone through the peer review process be the one that is publically-available.

Second, the policies are being proposed without serious analyses of the real costs of publishing scientific journals or the effect that the policies would have on the fiscal stability of existing outlets for scientific work. Further, the effects on the grant budgets of investigators and on the budgets of the granting agencies seem to be only cursorily considered. Protein Science, a not-for-profit journal of a scientific society and published by a not-for-profit publisher, is typical of many journals with a biomedical focus. The costs per paper published from the journal editorial offices to the publisher to the printer are at least \$3000, probably a bit more. We recover those costs in subscriptions to Society members and institutions, page charges and partial support for color figures from the authors (currently running \$1000-1500 per paper), and a modest amount from advertising. The Society invested well over \$1,000,000 in the journal in the initial decade of its existence (the 1990's). The journal in its present model returns some income to the Society which invests it in the Society educational programs and Symposia, focusing the proceeds on the scientific communication mission of the journal and the Society. The figures for the cost of publication which have been circulated in the debate over Open Access policies seem in many cases to be gross underestimates (such as the \$1500 figure often quoted). Further, "one-size-fits all" is simply not appropriate in this endeavor. Small specialty journals undoubtedly have higher costs per manuscript than large general journals. If the "author pays" model is adopted, the effects on individual grant budgets and the NIH budget as a whole are only speculations at this time, and the costs of maintaining the PLoS is also a very large unknown (and grossly underestimated,

in my opinion). In any case, it will result in large shifts of costs from institutions to the NIH and its grantees, reducing the amount of money available for actually doing the science.

Third, there seems to have been little or no appreciation for the fact that science is funded by a host of agencies, foundations, and private sources and that the enterprise is world-wide. Instituting NIH-specific policies that dictate the cost structures of journals that publish papers funded by a variety of sources will cause chaos in publishing. For instance, Protein Science receives half its manuscripts from places other than the USA. We can't institute alternative policies for "NIH-funded" papers than those from other sources. I have a major concern related to papers from overseas where the funding sources to the authors are inadequate to even pay the page and color charges. Science is a world-wide endeavor, and it is not in the interests of the United States to make scientific publications from elsewhere in the world less accessible to our citizens; that would be the likely result of making publication in US-located journals too expensive for foreign authors (they would turn to their country-specific journals, balkanizing the reporting of science).

The proposed policies simply haven't been adequately considered, and their effects on journals, scientific societies, and the scientists themselves are unknown. The potential for serious injury to a system that has served us well and continues to do so are great. The proposed policies should NOT be implemented.

Sincerely,

Mark Hermodson
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