

Opening up Open Access: Weaving the “Author Pays” Safety Net

Introduction

As of July 1, 2007, all authors who publish in the APS research journals (Table 1) will have the choice to pay a fee for immediate open access (OA) of their article. At their March Committee meetings, the Publications and Finance Committees supported a proposal to extend the OA choice to all APS research journals. Up until now, only the authors of *Physiological Genomics* articles have had such a choice.

The new policy will work as follows: Authors will be informed in their acceptance letters that they have the choice to pay a \$2,000 supplemental fee to make their article free to all immediately upon online publication, with a link to a payment form. Upon receipt of the fee, the APS staff will make the article free online. This fee is in addition to any page charges, color fees, or reprint costs that the author will be billed for at the end of the production process of the print issue. As always, the APS will continue to make all articles free to all 12 months after issue publication.

Authors may choose to pay for immediate open access for a number of reasons, including the desire to have their article be free to all online sooner than 12 months, or to meet the obligations of some funding agencies that require articles to be free in less than the APS-approved 12 months after publication. The proposal was made to the Committees by staff for a number of reasons, including a request to publications staff to look at another revenue model in case journal subscription revenue became severely threatened by such funding agency requirements and the general movement toward OA.

Background

At the APS’s Strategic Planning meeting in November 2005, the request was made to create a Task Force to look at

diversifying APS’s revenue streams, because the APS is so reliant on journal subscription revenue. (Publications revenue comprises 83% of all society revenue; subscription revenue is 58% of all society revenue.) As part of this exploration of other revenue streams, the Finance Task Force asked the Publications Office to put together a business plan for retaining journal revenue if subscription income was no longer viable as a source of revenue.

This revenue was seen to be at risk because of the activities of advocates of the OA movement. OA advocates believe that all scientific journal literature should be made free to all, benefiting scientists, who will no longer have any barriers to reading and using it; and the lay public, who will be able to read the results of the studies that they funded with their tax dollars. OA advocates, when pressed, will agree that publication of scientific journals costs something, so purport that publication costs could be paid by the researchers themselves as just another expense of doing research—in other words, out of the authors’ grants. This is widely known as the Author Pays Model of funding publication in an OA world. Perhaps because these advocates realize that not all authors or fields of study are funded to the same degree, there is also talk of, and some experimentation with, institutions and even libraries assisting with these author fees.

The APS has long been an advocate of widespread access to its journal content, for years sending print journals to developing countries, and was an early adopter of making all online journal content free 12 months after publication. It has, through its Executive Director, Marty Frank, developed and led the DC Principles Coalition, which promotes as much free access to scientific literature as publishers can afford. However, the APS does not see the Author Pays Model

as the best financial model for the community, putting too much of the burden on authors. As Peter Wagner, Chair of the Finance Committee, stated recently in an email following up on a Task Force conference call: “Raising the publishing cost to authors from about \$1,000 as currently estimated to about \$3,000 by converting to author pays will drive me away because I just don’t have that kind of money. Say 10 papers per year, this ups the cost by \$20,000, which is half of my total supplies budget and would simply be unsustainable. Unless we can find a way to make NIH up grant income to cope with this, very unlikely in the current climate let alone in good years.”

Be that as it may, publishers may not have a choice, and this article describes how APS can move to an Author Pays Model of funding the journals if subscription income becomes seriously endangered. But, as was stated in a recent roundtable discussion with librarians, the Open Access movement is a political and social movement that lacks a rational business model, though it has huge financial implications. Therefore, we find ourselves anticipating and reacting to a change that is not necessarily fiscally optimal for the players involved, including libraries and their institutions, authors, and publishers. So while an Author Pays financial model may be considered our “safety net” in case this political movement erodes or destroys subscription income, we believe it should remain a safety net: testing it to see if it will hold, but not using it unless we need to.

Testing the Safety Net

Since 2003, *Physiological Genomics* (PG) has given authors a choice of paying a fee for OA: \$1,500 when there were no other author fees imposed on that journal, and \$750 in 2006, when regular author fees (page and color charges) were implemented. In 2006, 18% of authors chose to pay the OA fee. We know, however, that this OA fee plus the author fees does not pay the full cost of publishing an article in PG. For a new journal with little subscription revenue to risk, it has been an interesting experiment to see how much uptake there could be when OA fees are very reasonable.

OA Choice for All Journals

In March 2007, staff proposed to the Publications and Finance Committees to expand our OA choice program to authors of all our research journals, but to charge a fee that is much closer to what would need to be charged if subscription revenue went away. We know that when we looked at 2005 costs, the cost to publish a single research article

Table 1. APS Research Journals included in OA Choice.

<i>AJP–Cell Physiology</i>
<i>AJP–Endocrinology and Metabolism</i>
<i>AJP–Gastrointestinal and Liver Physiology</i>
<i>AJP–Heart and Circulatory Physiology</i>
<i>AJP–Lung Cellular and Molecular Physiology</i>
<i>AJP–Regulatory, Integrative & Comparative Physiology</i>
<i>AJP–Renal Physiology</i>
<i>Journal of Applied Physiology</i>
<i>Journal of Neurophysiology</i>
<i>Physiological Genomics</i>

Advances in Physiology Education is already free to all online.

averaged across all the journals was approximately \$3,000. We also know that an author, on average across all the journals, pays \$1,000 in regular publication fees. Therefore, we set the OA choice fee at \$2,000.

Giving all authors a choice of OA allows us to accomplish the following:

Continue our mission of allowing access to be as free as is fiscally possible.

Use OA fees to keep subscription price increases to a minimum, or even lower subscription prices as early as 2009. (Subscription price increases will continue to be calculated to cover cost after other revenue is taken into account. The expected uptake of OA choice—based on previous uptake—will be budgeted into the revenue expected from other sources when subscription prices are set. This is illustrated in Table 2.)

Give authors of papers funded by agencies that are demanding OA a way to meet their requirements and pay a realistic fee—as some of these funding agencies have stated they are willing to do—based on actual costs.

Test the ability and willingness of authors to pay the full cost of publishing an article. As stated above, authors may have help from their funding agencies, institutions, or even their libraries, and they all need to know what they are get-

ting into in the move to an author pays model.

Make it easier to move to an author pays system if we need to, because authors, their funding agencies, and their institutions will already have become accustomed to the kinds of fees that will sustain the publications.

The converse result of this testing the safety net might be to make the safety net less necessary. If it turns out that authors are not willing to pay these fees, funding agencies are not willing to fund them, and institutions realize that they may end up paying more in OA fees than they ever did in subscription costs (as research institutions that cover these costs certainly will) (1, 2), there could be a cooling of the OA rhetoric, and a return to talk of a more balanced cost recovery of subscription sales plus author fees. Either way, the APS will be prepared to use the model that will ultimately come to the fore, because it will have experimented with the new one (author pays) without having thrown out the old one (subscriptions).

Needing the Safety Net

In the event that subscription revenue erodes to a point that remaining subscription revenue, author fees, advertising, and OA choice fees are no longer

able to cover the cost plus 10% margin that Council has mandated for Publications, the APS will implement a mandatory Author Pays Model at a cost equivalent to the real cost of an article (plus the 10% margin and less all other journal-related revenue streams), and make the online journals free to all. If at that point we are still selling print subscriptions, we will continue to do so at prices based on cost, and this will be considered another revenue stream to add to the mix.

It may occur that the OA choice is far more popular than anticipated, and so the trigger event to move to Author Pays

will happen when author and OA fees make up a larger percent of revenue than subscriptions. More than likely, however, as stated above, the decision to move to a complete Author Pays model will be as much a political as a financial one. For instance, in order not to lose authors, other competing journals would have to be moving to a similar financial model to make it feasible for APS to do so.

Institutional Membership and Discounts

As stated above, some libraries see it as their duty to help authors pay their OA fees, especially in anticipation of decreasing journal subscription costs. One model that some publishers are experimenting with is to give authors discounts on their OA fees if their institution pays a “membership” fee: in many cases, at the exact rate of an online subscription. This model maintains diversification of revenue, but does not allow libraries to realize real savings, which was part of the impetus for OA, so it is yet to be seen whether it will be attractive in the long run. It also could put libraries in the position of influencing where authors *publish* their articles, instead of what they *read* (and what a researcher reads is not entirely determined by the institution’s library), which may not be best for scientists or science. We will be monitoring the popularity, successes, and shortcomings of this model and can consider it an option at some future date. ❖

Conclusion

In its efforts to make journal content as free as possible while preserving the journal revenue that sustains the society’s activities, APS has decided to extend the OA choice option to all its research journals. By testing an author pays system of revenue, the APS publications program can more easily move to this system if and when the journals become completely open access, and subscription revenue is no longer available.

References

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Davis PM. Calculating the Cost per Article in the Current Subscription Model. Ithaca: Cornell University, 2004, p. 2. <http://hdl.handle.net/1813/236>.

Table 2. The Effect of OA Fees on Subscription Prices.

2009 Projected total revenue needed	150,000
2009 Projected subscription revenue	90,000
2009 Projected other revenue	50,000
2009 Projected OA revenue	0
Projected total actual revenue	140,000
<i>Subscription price increase / decrease needed</i>	7%
2009 Projected total revenue needed	150,000
2009 Projected subscription revenue	90,000
2009 Projected other revenue	50,000
2009 Projected OA revenue	10,000
Projected total actual revenue	150,000
<i>Subscription price increase / decrease needed</i>	0%
2009 Projected total revenue needed	150,000
2009 Projected subscription revenue	90,000
2009 Projected other revenue	50,000
2009 Projected OA revenue	20,000
Projected total actual revenue	160,000
<i>Subscription price increase / decrease needed</i>	-6%

This table shows that if enough authors choose to pay an OA fee, subscription prices might not need to be increased, or could be decreased in future years. The revenue amounts used are for illustrative purposes only.