

David Prosser and Paul Ayris

ACRL/SPARC Forum explores open access models

The future of scholarly publishing

Over the past seven years, SPARC (the Scholarly Publishing and Academic Resources Coalition) and the ACRL Scholarly Communications Committee have hosted a forum exploring scholarly communication issues at the ALA meetings. This June in Washington, D.C., three open access publishers were invited to provide a “course check” and to discuss issues of sustainability.

Alma Swan of Key Perspectives set the scene and chaired the session. She reminded us that there are just over 2,500 open access journals currently published (approximately 10 percent of the total number of peer-reviewed scholarly titles) operating on a variety of business models—from sponsorship to article processing charges.

PLoS beginnings

The first of the publishers to speak was Mark Patterson, director of publishing for the Public Library of Science (PLOS). Patterson started by making the important point that *open* access is not the same as *free* access. Open access involves removing permission barriers as well as access barriers. PLOS journals publish material under a Creative Commons attribution license, which allows for unlimited reuse (for translating, data and text mining, copying, etc.), while ensuring that the authors receive acknowledgement for their research. This attitude is in marked contrast to “traditional” publishers who seek to control (and, in effect, limit) the dissemination of research through the use of copyright and exclusive licenses.

Patterson went on to describe the founding and development of PLOS. The organization was conceived by three leading biomedical re-

searchers (Nobelist Harold Varmus, Pat Brown, and Michael Eisen) with the aim of publishing journals that would rival the highest quality existing titles. *PLoS Biology* was launched in 2003, with *PLoS Medicine* following a year later. Both quickly established themselves among the best journals in their fields with extensive media coverage of their papers and high-impact factors. The two *PLoS* titles effectively put to rest the myth that open access was incompatible with high quality. However, quality comes at a price, and these journals, with their high rejection rates and extensive front matter, are not cheap to produce.

In 2005 PLOS launched a series of three “community” journals. Still high quality, these journals do not have the same level of editorial content as the two flag-ship titles. However, they have also quickly established their importance in the literature, with significant impact factors.

Finally, Patterson introduced us to *PLoS One*, a new approach to journal publishing that he would fit well with current Web 2.0 thinking. *PLoS One* is inclusive in scope (covering all subject areas) and has a peer-review process that focuses on the technical quality of the paper, streamline production, and an environment that encourages community discussion and annotation of papers.

Having introduced the publishing portfolio, Patterson addressed the issue of financial sustainability. This question has followed all new open access publishing ventures. Patterson,

David Prosser is director of SPARC Europe, e-mail: david.prosser@bodley.ox.ac.uk; Paul Ayris is director of University College London Library Services and UCL copyright officer, e-mail: p.ayris@ucl.ac.uk

© 2007 David Prosser and Paul Ayris

along with all the speakers, was very open about sustainability. He helpfully split the PLoS portfolio into three strands, to match the three types of publishing product offered by PLoS: *PLoS One* has been sustainable since birth with the \$1,250 per article publication charge covering costs; the community journals are approaching sustainability; the flagship journals are not able to support themselves on publication charges alone, but need additional support. Of course, having sponsorships and grants as part of the revenue stream is perfectly acceptable and does not mean a lack of sustainability. It will almost certainly be the case that open access journals will exist on mixed revenue streams (as "subscription" journals do at the moment) and sponsorship and grants may always be part of that mix.

The PLoS journals have seen a constant rise in the number of submissions, approximately doubling each year, and it appears that the publication payments are not a major deterrent in the biomedical fields, with a payment rate in the range 80 to 90 percent for all of the journals.

One question that always arises in discussions about open access is "With no subscription charges to pay, what is the role of the library?" PLoS has a membership program, which allows libraries to demonstrate support for open access and build collaborative relationships between the institutions and publisher. In return for membership, authors at the member institutes receive a 10 percent publishing discount. Interestingly, Patterson said that in his view membership was not a long-term solution, but a transition mechanism in the move towards open access.

He also highlighted the role libraries have in awareness, advocacy, and education: highlighting the value of open access journals; profiling scholars who are publishing in open access; helping faculty with copyright issues; and promoting copyright addenda, allowing scholars to retain the right to deposit their papers in institutional repositories.

BioMed Central

The second speaker was Bryan Vickery, deputy publisher for BioMed Central (BMC), a commercial venture, which launched its first open access journal in 2000 and is now the largest open access publisher. It has published more than 25,000 papers, with 10,000 of them appearing in 2007, showing, once again, tremendous growth, with all papers appearing under a Creative Commons license. Of the almost 200 journals BMC publishes, 60 are part of the BMC-series run by an in-house editorial team and 100 are independent, run by external groups of scientists. Following the success of BMC, new subject areas are being explored with the launch of *Chemistry Central* and *PhysMath Central*.

As with the PLoS journals, BMC titles are publishing high-quality papers, with many of the BMC journals in the top ten of their ISI categories, and some, like the *Malaria Journal*, are at the top of their category.

The main revenue stream for the BMC journals is article processing charges, which vary by journal but are typically \$1,500 per paper. BMC also operates two membership schemes: an institutional (prepay) membership, where the institution covers the cost of the article processes

PERIODICALS SERVICE COMPANY

are pleased to announce the agreement with

Palgrave Macmillan Ltd.

to manage backstock and supply originals or reprints of out-of-print journals older than the current and previous two years. For a list:

www.periodicals.com/palgravemac.html

To contact us:

11, Main Street, Germantown, NY 12526

Phone: 518 537 4700 Fax: 518 537 5899 E-mail: psc@periodicals.com

charges (at a reduced rate) and a supporter membership that gives authors a discount on the cost. For BMC the payment rate is about 80 percent and with current growth rates they hope to break even this year.

Vickery compared these costs to publish in a BMC journal with some evidence from Oxford University Press (OUP) that showed that for one of their subscription titles OUP was receiving \$3,000 to \$4,000 per article. (The title in question, *Nucleic Acids Research*, has since gone open access.) Vickery's contention is that the lack of a true market in scholarly communications under the subscription models results in the community overpaying. Lack of a functioning market may also mean that publishers have less pressure to keep costs down. BMC, like PLoS, is a new publisher with no legacy systems or procedures. Therefore, they have been able to look at the process of online publishing afresh and use technology to ensure that costs are low. As more publishers move to article processing charges, it may be that the costs per paper will become increasingly important, and a true market will develop. In that case, the publishers who can contain costs will have an advantage.

In describing the library's role in the open access future, Vickery suggested that there would be a move from acquisition to dissemination. The library would no longer act as a "filter" of information, based party on finances, but would manage the dissemination of an institution's research output, perhaps through the management of an institutional repository.

As open access and article processing charges become more widespread, a question for the library is whether it should become, or wants to become, involved in the management of central funds to pay for processing charges. Is this something that is only the concern of vice presidents of research? Should central funds be

created to pay for open access (out of grant overheads and specific publishing fees) and should the library play any part in the management of such funds? Vickery was sure that the funds should be created, but left the role of the library in their management open. He did, however, make the point that one advantage of such a central fund would be that it could be used to pay publication charges on behalf of authors.

One example presented where this has happened is Nottingham University in the United Kingdom. This year, a central fund of £20,000 (\$40,000) has been created from indirect grant costs to pay publication charges, with the fund being open to all potential authors, whether funded or not. Nottingham hopes that this will allow for better management of open access costs by the institution. Obviously £20,000 (\$40,000) is not a huge sum of money, but the intention is that it will grow as more authors move towards open access and future subscriptions may be cancelled to help the growth of the fund.

Vickery left us with a number of important take-home messages. The first was that open access is not small-scale anymore, proved by the sheer number of papers published by BMC and its imminent move to profitability. There will be an increasing demand for funding and the need to work with administrators and funders to ensure readiness. Vickery believes that the library community has an important role to play in the creation of central publishing funds and a level playing field for open access journals and a strategy is needed for the migration from subscriptions.

Hindawi Publishing Corporation

The last speaker was Paul Peters (head of business development at the Hindawi Publishing Corporation). Hindawi was launched in 1997 as a subscription publisher, but it quickly found that although it excelled at attracting authors, it was not attracting subscribers. In 2004 Hindawi decided to experiment with open access with a move to total open access in 2007. Its portfolio of journals receives approximately 500 submissions a month (a figure that is growing by about

Learn more . . .

Visit the SPARC/ACRL forum podcast, "Course check: A conversation with three open access publishers about the challenges of sustainability," at www.arl.org/sparc/meetings/ala07/.

60 percent per year) and reject, on average, 57 percent of papers. Hindawi charges \$700 to \$800 per article on average and has already broken even.

Peterson made clear that existing models, such as “the big deal,” favor the existing players. A new journal included by a large publisher in a big deal will immediately get a significant audience. In this environment, a new journal from a small publisher will find it much harder to gain that audience. He observed that this anti-competitive model does no service to the academic community. Peterson’s contention is that any new model must match the person who pays with the service provided (so that “he who pays the piper calls the tune”), must have visible costs (at the moment most researchers do not have any idea of the costs of the journals they submit their work to or read), and must allow smaller publishers to compete equally. He sees a role for libraries in developing new models that facilitate price-based competition and in providing funds for authors with limited resources. For a competitive and efficient market will give better services, lower prices, and greater sustainability.

The similarities between all three publishers were striking. There was a strong focus on quality and author services. There was a realization that technology must be used to reduce costs and to strip away legacy systems. One of the great challenges for traditional publishers, especially society publishers, will be to take a long, hard look at what they do and why they do it, and to see what the market really needs from them. Costs will become increasingly im-

portant as the market becomes more functional. All three publishers have also seen tremendous increases in the number of papers submitted – far above the 3 percent annual growth seen in the scholarly literature in general. And all three publishers are marching steadily and firmly towards sustainability.

The role of the library

The final, unanswered question remains the role of the library within an open access journal environment. It is unclear what role the library wants to take or will be able to take. Librarians can certainly promote open access journals to our faculty (for example, by including records from the Directory of Open Access Journals (www.doaj.org) in local catalogs) and help faculty to launch open access journals. Librarians can work with administrators, funding bodies, and politicians to put in place robust open access policies that help us to meet the information need of our researcher. They can host and manage institutional repositories to showcase the intellectual wealth of institutions to the world. However, the role in terms of article processing charge funding is up for grabs.

There is a danger that if the library community shuns this responsibility, then it will become sidelined in future debates regarding open access journals. If it accepts it (as with Nottingham University and others) the library could cement its position as a central and integral part of the scholarly communication process. The environment is evolving, as Alma Swan noted, and the role of the library must evolve with it to stay relevant. //

PERIODICALS SERVICE COMPANY & SPRINGER

We are pleased to announce our journal stock management agreement with Springer. For a list of Springer journals for which we now reprint all out-of-print volumes and back issues please visit:

www.periodicals.com/springer.html

11, Main Street, Germantown, NY 12526

Phone: 518 537 4700 Fax: 518 537 5899 E-mail: psc@periodicals.com