

# **Society for General Microbiology**

## **Response to the House of Commons Science and Technology Committee Inquiry into Scientific Publication**

### **1. Introduction**

1.1. The Society for General Microbiology (SGM) is the largest microbiological learned society in Europe, with over 5,000 members. It owns and publishes four prestigious international journals: *Microbiology*, *Journal of General Virology*, *Journal of Medical Microbiology* and *International Journal of Systematic and Evolutionary Microbiology*, totalling 42 issues and some 11,000 pages a year. All four journals are also published online, the earliest since 1997. The online journals are hosted at HighWire Press, at Stanford University (<http://www.sgmjournals.org>).

1.2. The Society is committed to high standards of service to authors, editors, referees and readers, and to high technical quality of production of both print and online versions.

### **2. What impact do publishers' current policies on pricing and provision of scientific journals, particularly 'big deal schemes', have on libraries and the teaching and research communities they serve?**

2.1 The Society covers the costs of producing and distributing its journals mainly by subscription sales to institutions. The objective in setting prices has always been to balance two factors: to offer value for money so that the journals have the widest possible dissemination and readership, and to make a modest surplus for re-investment in advances in publishing technology and as one means of funding the Society's charitable objectives. These include:

- vacation studentships to help undergraduates gain research experience
- grants to students for attendance at scientific meetings
- support for scientific meetings
- grants for support of microbiological teaching and research in developing countries
- support of microbiological education in schools
- conducting public education in the subject

2.2 Generally, the Society's journals are priced very competitively compared with those sold by commercial publishers in the same scientific discipline. On average, the cost per page of an SGM journal is one-half to one quarter of the cost per page of a comparable journal from a commercial publisher. Online access is provided for no additional charge to institutional subscribers to the print editions.

2.3 Like other learned society publishers, SGM has been concerned that the 'big deals' offered by some very large commercial publishers, by demanding large proportions of shrinking library budgets, could force out smaller competitors and

create near-monopoly conditions. It is difficult to evaluate how detrimental to the sales of smaller publishers this may have been. There was concern that the Office of Fair Trading, in its 2002 report *The Market for Scientific, Technical and Medical Journals*, concluded that the market was not working well and that there was concern about ‘bundling’ (big deals), but decided it was not appropriate to intervene ‘for now’. What does seem clear is that any reduction in the ability of libraries to satisfy the demands of their readers by focusing too much on a small number of suppliers would be detrimental to research and scholarship.

2.4 SGM’s response to the perceived threat of ‘big deals’ has been to continue to offer first class science, well presented, with excellent support for librarian customers, especially regarding access to the online journals. We have evaluated participation in mini ‘big deals’ from consortia of small publishers, but have only done so where the business case for doing so was clear.

2.5 The fact that SGM’s online journals are hosted at HighWire is in some way a counter to the ‘big deals’. In all, HighWire contains 353 journals, overwhelmingly in the biomedical sciences, and including many of the most prestigious international titles. With advanced features such as cross-journal searching and toll-free reference linking between journals, the sites offer many of the features of the ‘big deals’. SGM has recently joined a new sales initiative at HighWire, whereby librarians can purchase and maintain subscriptions to journals *of their choice*, from a number of publishers, from a single point of contact on the site.

2.6 There is growing evidence that librarians – especially in the USA – are rebelling against the ‘big deals’ of the commercial publishers for reasons of price, lack of choice and lock-in licensing terms.

### **3. What action should Government, academic institutions and publishers be taking to promote a competitive market in scientific publications?**

3.1 The dual support system for research funding in UK universities may bear some responsibility for current problems in journals provision and unbalanced competition. While in many areas funding of *research* from the Research Councils and charities (many of which do not pay overheads) has remained healthy, provision of general funds to universities to provide the *well-found laboratories (including libraries)* required to conduct the research has dwindled.

3.2 Please see comments on the possible anti-competitive consequences of ‘big deals’ in section 2.2.

3.3 Publishers should be ready to negotiate mechanisms ensuring maximum access to their online material, such as national licences. It should be recognized however that in the subscription income model, they can do so only if a sufficient level of income is maintained. The introduction of online journals has already caused some erosion of subscription numbers, as institutions have reduced multiple print subscriptions.

3.4 Electronic publications are subject to VAT at 17.5% in the UK, while print is zero-rated. This militates against the development of online only sales and access packages, to the financial disadvantage of UK universities and institutions. Government should support extension of zero-rating to electronic provision of primary research material.

#### **4. What are the consequences of increasing numbers of open access journals, for example for the operation of the Research Assessment Exercise and other selection processes. Should the Government support such a trend, and how?**

4.1 Generally, the subscription model has served science well, with quality control by peer review and the editorial process. The stratification of perceived journal quality has aided evaluation processes such as the Research Assessment Exercise. Open access journals have yet to prove they are economically sustainable, and that they will deliver the same benefits, but some stratification by quality will undoubtedly emerge. There is no reason why this should not be used in assessment exercises.

4.2 Most open access journals will require authors, or their institutions, to pay some form of submission or publication charge. This will focus authors' minds on differences in costs between different journals. This may promote efficiency and constrain profit margins, but it would be regrettable if it led to significant reduction in editorial and production standards.

4.3 Most of the existing open access journals and experiments are considered to be recovering less than their true costs of production while they build market share. These experiments should be allowed to prove their scientific and economic viability, or otherwise, on a level playing field. Government should not distort the competition between different types of journals by supporting any one type. It would be regrettable if traditional journals with their established benefits were undermined by support for a competing model which subsequently failed to establish the required standards of quality, stability and longevity.

4.4 It is worth mentioning that many not-for-profit publishers, including SGM, already have substantial amounts of their content on open access, where this is possible without damaging subscription income. The publishers on HighWire currently allow open access to a total of 690,000 full text articles.

#### **5. How effectively are the legal deposit libraries making available non-print scientific publications to the research community, and what steps should they be taking in this respect?**

5.1 This is largely a development for the future. Publishers may seek agreements with the legal deposit libraries to encourage access by a wide readership, while protecting income. The libraries could serve as an important backup archive, if the publisher's own archiving arrangements failed for technical or financial reasons, but would need funding to do so.

## **6. What impact will trends in academic journal publishing have on the risks of scientific fraud and malpractice?**

6.1 Publishers have an important role in detecting malpractice, in preventing contaminated work from being published, and in taking steps against anything which does nevertheless get published but is subsequently found out. The ease of access to published work on the Internet and the ability to cut and paste has no doubt made life technically easier for the determined plagiarist, but has probably increased the likelihood of detection. The risks of fraud and malpractice may be greater when preprints are put online before peer review.

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