

Open Access Publishing

A contribution from the Society of Biology to the
House of Lords Science and Technology Select Committee
18 January 2013

The Society of Biology is a single unified voice for Biology: offering advice to Government and influencing policy; advancing education and professional development; supporting our members, and engaging and encouraging public interest in the life sciences. The Society represents a diverse membership of over 80,000 - including practicing scientists, journal readers, authors, reviewers, editors and publishers - as individuals, or through the learned societies and other organisations listed below.

Summary

- The current policies on open access (OA) publishing have the potential for significant unintended consequences on the UK research base and economy – it is vital that these are addressed. Some of these potential impacts are indicated in the Finch Report, but there has been little concerted action to address them thus far and the lapse of time is adding to concern.
- Researchers will experience variation across disciplines and institutions in terms allocation of funds for OA publication charges, required embargo periods, and the impact of international collaborations.
- Many learned societies view OA developments from a broad perspective, assisting their charitable objectives to maximise access to research outputs, while at the same time making uncertain their financial capacity for future support of their discipline. The potential loss of income will impact major activities within their discipline; supporting the skills pipeline and career development, engaging with the public dissemination of science and offering expert advice to policy makers.
- We are therefore keen to enter into dialogue on the opportunities and challenges of OA with government, the higher education community, funding bodies and publishers, to determine appropriate solutions that will maximise both access to research outputs and the capacity to underpin growth and excellence in the research community.

The Society welcomes the interest of the Committee and is pleased to offer these comments, gathered in consultation with our members and advisors for your consideration.

Support for Universities in the form of funds to cover article processing charges, and the response of universities and other HEIs to these efforts

1. The RCUK initial funding and the subsequent block grants to aid implementation of its policy on OA are welcome. The RCUK initial funds have been an important catalyst for the establishment of University OA funds and the clarification of OA publishing policies, however there is concern that the RCUK has seriously underestimated the funds needed for OA publishing. As funding has only been provided for 45% of article processing charges (APC) for RCUK funded research in 2013/14, it is difficult to see how research institutions will pick up this shortfall, particularly over the transition period. Future funding levels are insufficient to cover APCs and sustain the level of publishing previously achieved. Some Universities are piloting internal funding mechanisms to address

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underfunding of (or indeed unfunded) authors, for example the University of Nottingham¹, but as the scale of demand is likely to increase so will the strain on these provisions.

2. A great deal of research is funded by small scale grants (e.g. PhD research and minor charity funding) or occurs as a 'spin off' from major research projects, and is not funded directly. Funds are not generally available within universities and other institutions to pay for OA publication of this type of research. Smaller organisations and specialist societies are likely to be hit especially hard, and retired scientists are unlikely to have access to these funds. It is also unclear how indirect grant moneys will be handled given the TRAC methodology for allocating overheads. As most research outputs are published after the end of the grant, they cannot be included in the direct grant funding. The TRAC methodology makes it difficult to introduce new funding strands to indirect grant funding.
3. It is unclear how funds will be accessed by researchers and how money will be ring-fenced and managed by universities. It seems to have fallen to universities to establish an effective mechanism for OA funding, but greater guidance from government and funders is needed. There is uncertainty about the methods of allocation of funds, as well as concern that funding may be inequitably distributed amongst authors. Prioritising access based on seniority of the researcher or research area, and the OA funding requirements of primary and secondary authors, particularly for international research, will be problematic; this may discourage UK authors from taking primary authorship. If APCs apply across the board, it may be that some researchers will feel unable to submit their work to the most appropriate (and possibly highest impact) journal as they are unable to access APCs.
4. The allocation of APCs is unclear for multi-authored papers that are funded by multiple grants, and similarly when a researcher moves institution mid-way through a project.
5. Funds will also be needed to sustain the costs of maintaining journal subscriptions in the transition period, as researchers require access to material in other publications and to material for which no APC has been paid.
6. Insufficient funding for APCs could lead to the loss of some high-impact journals, especially those published by societies, which are currently often very reasonably-priced. This would also create a loss of significant export revenue for the UK.
7. It is not clear that the full implications to universities of transfer of funding from the Funding Councils [Scottish Funding Council (SFC), Higher Education Funding Councils for England (HEFCE) and Wales (HEFCW) and Department for Employment and Learning, Northern Ireland (DELNI)] to research budgets have been considered.

Embargo periods for articles published under the green model

8. A six month embargo period will have a different effect on publication readership and subscription according to discipline. There is a wide range of readership patterns within the life sciences; articles from some disciplines (such as environmental science) will have a long half-life, and the journal will be valued by the community ten years after publication. In other disciplines, a six month wait for access to an article would be untenable and unthinkable; for instance in Pharmacology, the need for timely scientific exchange is vital. In contrast, for disciplines with a long half-life, an expected decline in journal subscriptions due to a short embargo period would make certain journals economically unsustainable. The embargo period will also impact differently on the range of article types (for

¹ <http://www.nottingham.ac.uk/is/finding/openaccess.aspx>

instance review articles or primary research papers) and according to the publishing business models.

9. The Association of Learned Society and Professional Publishers (ALPSP) and The Publishers Association produced a report on what the six month embargo period means for publishers, asking libraries if they would continue to subscribe to journals if they would be made publicly available after six months². Only just over half of the respondent libraries (56%) said they would continue with all their subscriptions and this figure was higher in the UK than in the major US market. North American subscriptions are hugely important in terms of journal income and authorship. This study therefore reinforces the view that a mandated maximum six month embargo across the board (without appropriate compensatory mechanisms) could have a disastrous effect on some journals.
10. It is unclear whether the short embargo periods mandated by RCUK apply to journals that offer gold OA in instances where the author has no funding to pay the APC. More clarity is needed on scenarios such as this.

Engagement with publishers, universities, learned societies and other stakeholders in the development of research council open access policies and guidance

11. The Research Councils should keep their OA policies under review as new market mechanisms develop. For example, institutional journal (or bundle) subscriptions have been developed that exempt or discount APCs for members of that institution.
12. Research institutions need more guidance from funders about how to allocate OA funding, and University administrators need training and support to understand the policy and inform researchers of their publishing options and requirements.
13. Currently there appears to be a lack of clarity among researchers about publishing in mixed model journals, and over the different license arrangements. Uptake of OA routes in mixed model journals has been slow, with many authors choosing instead to publish in fully open access journals. There are also concerns about the Creative Commons Attribution (CC-BY) licence and the commercial use of research. Clearer guidance is needed and leadership by the Research Councils would promote progress. Learned societies have an important role to play in informing their membership and are best placed to do this alongside the Research Councils; the Society of Biology and several of our member organisations have run meetings and workshops with publishers and researchers to address these issues.

Challenges and concerns raised by the scientific and publishing communities, and how these have been addressed

14. Publishing research is very much a global phenomenon, and so OA policy raises concerns about the capacity of UK publishers to remain internationally competitive. The UK is a relatively small market for publishers, so a major challenge will remain until international publishers universally adopt publishing approaches that are acceptable to UK authors, funders and the Government. As many of the highest-impact bioscience society publishers are based in the USA and may not offer optional open access or appropriate embargos, this may become a closed publication avenue for UK researchers, thus damaging the UK bioscience base.

² The potential effect of making journals free after a six month embargo. A report for the Association of Learned, Professional and Society Publishers [ALPSP] and The Publishers Association. May 2012.

http://www.publishers.org.uk/index.php?option=com_docman&task=doc_download&gid=758&Itemid=

15. The APC model may also discriminate against scientists from the developing world who may not have access to funding. Currently many learned societies provide journal access to developing countries at reduced rate or free of charge and there are voluntary schemes whereby publishers waive APC for disadvantaged authors.
16. A stringent peer review process must be maintained. There are concerns that an additional strain on expert reviewers may lead to the use of less expert referees, causing downstream impacts on the reliability of scientific data.
17. Learned societies play a critical role in the UK research community and yet a rapid transition period will undoubtedly lead to many learned society publishers losing out in the long term. Many of the Society of Biology's member organisations are learned societies for whom journal income provides a vital resource to the scientific communities they represent, with this income being used to support academic research and other activities of benefit to academia in the UK. This income therefore provides an important and essential role, alongside government and private-sector funding, in supporting key areas of UK science. In addition to directly supporting the career development of the next generation through research grants and specialist training, learned societies work to ensure the skills pipeline of scientific disciplines, host forums that bring together practitioners and scientists from government, NGOs, private sector and universities to formulate solutions to pressing problems, organising and support events that contribute to the public dissemination of science and advise parliamentarians and government agencies on issues of public concern. Losing journal income may jeopardise the ability of learned societies to support the community in this way. It is therefore vital that learned societies are formally invited to discuss OA policy with the main public funders of research in the UK.
18. Commercial publishers, with greater resources and revenue behind them, are likely to be more successful during this period than Society publishers as they can be quicker to adapt, invest more in change and experiment with a more diverse journal portfolio. The Finch Report highlighted well the challenges and risks in any rapid transition to a new publishing model, and stated that the Government should keep 'under review' the position of learned societies with significant dependence on publishing. It is not clear how this is being done.
19. The need for more technical investment, establishment of sustainable market rates and the renegotiation of existing publishing agreements are all areas that could cause difficulties to smaller learned society publishers if changes are required on a timescale faster than they are able to manage effectively. We are concerned that these challenges, particularly with regard to timing, do not appear to have been fully considered and addressed by government. More communication and greater clarity from funders and government would be welcome.

Member Organisations

Agriculture and Horticulture Development Board
Anatomical Society
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Biochemical Society
Biosciences KTN
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British Andrology Society
British Association for Lung Research
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British Crop Production Council
British Ecological Society
British Lichen Society
British Microcirculation Society
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British Neuroscience Association
British Pharmacological Society
British Phycological Society
British Society for Gene and Cell Therapy
British Society for Immunology
British Society for Matrix Biology
British Society for Medical Mycology
British Society for Nanomedicine
British Society for Neuroendocrinology
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British Society for Plant Pathology
British Society for Proteome Research
British Society for Research on Ageing
British Society for Soil Science
British Society of Animal Science
British Toxicology Society
The Ethical Medicines Industry Group
Experimental Psychology Society
The Field Studies Council
Fisheries Society of the British Isles
GARNet
Gatsby Plants
Genetics Society
Heads of University Centres of Biomedical Science
Institute of Animal Technology
International Biometric Society
Laboratory Animal Science Association
Linnean Society of London
Marine Biological Association
MONOGRAM – Cereal and Grasses Research
Community
Nutrition Society
The Rosaceae Network
Royal Entomological Society
Royal Microscopical Society
Science and Plants for Schools

Scottish Association for Marine Science
Society for Applied Microbiology
Society for Endocrinology
Society for Experimental Biology
Society for General Microbiology
Society for Reproduction and Fertility
Society for the Study of Human Biology
SCI Horticulture Group
The Physiological Society
Tropical Agriculture Association
UK Environmental Mutagen Society
UK-BRC – Brassica Research Community
UK-SOL – Solanacea Research Community
University Bioscience Managers' Association
VEGIN – Vegetable Genetic Improvement Network
Zoological Society of London

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