

## Open access does more harm than good when based on a 'pay to publish' business model

The traditional business model adopted by publishers of scholarly journals, that we may call 'publish for free and pay to read', leads to an inevitable disparity in access to scholarly literature. The rising costs of journals and the shrinking budgets of libraries have only served to exacerbate this disparity. Admittedly, the open access movement has done a great deal to create a near level playing field for readers of scholarly literature. But I would argue that the segment of open access publishing, that depends on a business model that we might dub 'pay to publish and read for free', does more harm than good.

Authors by no means have a level playing field even in the traditional publishing model. The complex dynamics of peer review makes it difficult, if not impossible, to ensure that publication of an article is merely a function of its quality and is not influenced by such extraneous factors as the modishness of the topic, the name of the author or even the address of the author. The 'pay to publish and read for free' model adds a significant new dimension to the unevenness of the playing field for authors. It is often pointed out that page charges are waived for authors who cannot afford to pay. But it is hard to believe that a business model which depends on payment by authors can afford more than a marginal number of such waivers. Besides, why should anyone want to live on charity? One has also heard the argument that it is not really the author but the granting agency that funds the research that actually pays. This argument does not wash well either; if anything the playing field is even more uneven for getting grants. More importantly, this will undermine rather than encourage the whole genre of grant-free research.

The new exacerbated uneven playing field for authors (the old problems associated with the peer

review have by no means gone away) will be disastrous for the underdeveloped world. It is often said that we are increasingly living in a knowledge economy and that while we may never have equality among the world's nations in military or economic power, knowledge is one area in which we can hope for true equality. If there is any truth in all of this, a 'read for free and pay to publish' model would indeed be disastrous for the underdeveloped world as it would encourage its citizens to remain consumers (readers) of knowledge rather than become producers (authors) of knowledge – a form of knowledge slavery.

If I have to choose between the two evils, I will certainly prefer the 'publish for free and pay to read' model over the 'pay to publish and read for free' model. If I am really forced to choose between publish or read, I would surely choose to publish. Who would not? Fortunately, there is growing evidence that a 'publish for free and read for free' model can indeed be made viable. Journals published by the Indian Academy of Sciences ([www.ias.ac.in](http://www.ias.ac.in)) and Medknow Publication and Media Pvt. ([www.medknow.com](http://www.medknow.com)), are just two of many examples. I believe that we just need to keep up the pressure on those who continue to adopt the 'read for free' model only at the cost of 'pay to publish'. At the very least we must prevent publishing in such journals from becoming too fashionable and/or mandatory for career advancement.

A previous abridged version of this piece published in *Nature* (Gadagkar, 2008) was misunderstood by some, probably because of the somewhat misleading title used by *Nature*<sup>1</sup> (Sandal, 2008) but thankfully not everyone appears to have misunderstood me<sup>2</sup> (Brimblecombe & Sturges, 2009). I certainly have no quarrel with the large segment of open access publishing – those journals and other open archive efforts that are attempting to enhance the 'read for free' content without making the authors pay – indeed I welcome them all. My

quarrel is only with that segment of open access publishing which makes 'read for free' possible only at the expense of 'publish for free'.

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### References

Brimblecombe P & Sturges K (2009). History of atmospheric environment. *Atmos Environ* **43**, 2–8.

Gadagkar R (2008). Open-access more harm than good in the developing world. *Nature* **453**, 450.

Sandal M (2008). Future of open access could be online and peer-reviewed. *Nature* **454**, 158.

<sup>1</sup> American Scientist Open Access Forum Archives 2008. <http://listserver.sigmaxi.org/sc/wa.exe?A2=ind08&L=american-scientist-open-access-forum&F=I&P=51516>

<sup>2</sup> American Scientist Open Access Forum Archives 2008. <http://listserver.sigmaxi.org/sc/wa.exe?A2=ind08&L=american-scientist-open-access-forum&F=I&P=42617>

### Physiology curriculum for medical training

The joint Physiological Society/BPS Medical Training Working Group has been working with Richard Dyball to produce a core Physiology Curriculum for Medical Training. A draft is now available for comment (<http://www.physoc.org/site/cms/contentChapterView.asp?chapter=139>) and will be presented for discussion at the forthcoming Teaching SIG Workshop at our Main Meeting in Dublin. For more information please contact Liz Bell ([ebell@physoc.org](mailto:ebell@physoc.org))