

Open-Access Publishing

Scenario (part 1)

A lead author on a clinical trial would like to see the primary manuscript published in *Breast Cancer Research*, an open-access journal. Some authors express concern about whether or not this journal is prestigious enough. Other authors see an advantage if the research results were to be freely available worldwide via the Internet.

Do open-access journals use peer review? What about impact factors? Is *Breast Cancer Research* a good choice for an open-access journal? Are there fees involved in submitting manuscripts to these journals? What else do we need to consider if we publish in an open-access journal?

Discussion

Open access (OA) is an emerging publishing access model that makes scientific research freely available via the Internet. OA seeks to remove all pricing barriers from a subscriber's perspective (eg, provide the ability to download and share material without having to pay copyright or reprint fees) and, in most models, permissions barriers, to allow for maximum timely dissemination of scientific information at minimum production cost. Within pure OA models, users are entitled to read, download, copy, distribute, print, transmit, or link to the full texts of these articles (including the ability to create derivative works such as reports and summaries). Authors have the benefit of retaining copyright. Similar to traditional (print) journals, articles in some OA journals undergo some level of peer review and/or a formal editorial process, which tends to be quicker than those offered by traditional journals. Unfortunately, these practices vary widely from journal to journal and it is important to gain some understanding of the processes before considering submission.

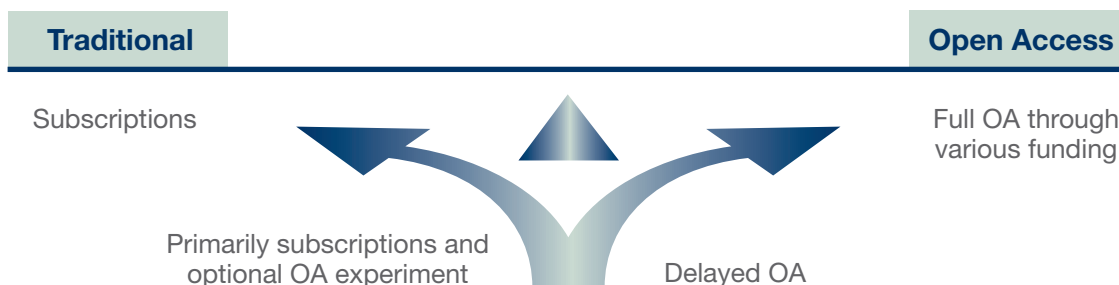
OA Journals. The Directory of Open Access Journals (www.doaj.org) currently contains more than 2800 OA journals, which is approximately 10% of the total number of journals published. Among these are almost 400 OA medical journals, a number that continues to grow. Most of these journals are based in the United States or the United Kingdom (~60%), but there exists a heavy non-US/UK-based journal presence in Japan, Brazil, and India. About 40% of OA journals are listed on PubMed and approximately 15% have official ISI journal impact factors (many are too new or have too few citations to meet the criteria).

Stakeholders. The development and evolution of OA publishing have been divisive, as OA differently affects authors, traditional publishers, academic societies, and other groups such as academic institutions and libraries. Although librarians tend to favor OA as a way to keep costs down and sponsoring institutions and legislation support the movement, traditional publishers and academic societies are struggling with how to thrive in an evolving market, which facilitates and encourages free exchange of content when their traditional business models focus on print-based pricing, subscription, advertising, and distribution. Meanwhile, most authors continue to focus on publishing in high-impact traditional journals, as they seek prestige more than holding copyright of their work.

Access Models. OA journals do not have a traditional subscription charge; rather, they cover the costs of electronic publication and peer review through subsidies and sponsorships and/or via an author-pay model in which authors, their funding bodies, or employers are charged the fee for publication. Because OA is likely to remain in the marketplace, many traditional journal publishers, including scholarly societies and nonprofit groups, have developed hybrid models as alternatives to pure OA in which they offer a form of OA that fits within their business model. The hybrid models usually require that authors pay relatively high fees and embargo periods are applicable; these journals typically house both OA and subscription-based articles.

Legislation. Recently enacted legislation has resulted in US Public Law 110-161, which includes provisions for the public posting of any publications resulting from research funded by the public (ie, taxpayers) through the National Institutes of Health. Manuscripts must be made available by authors via institutional repositories or via PubMed Central (www.ncbi.nlm.nih.gov/sites/entrez?db=pmc). With the growing need to provide OA alternatives for publicly funded research and the recent enactment of FDAAA that requires posting of trial results within 12 months of last patient last visit, quicker publication methods such as OA could very well continue to grow in prominence. Staying informed on the OA movement is important for anyone involved in publications planning.

Publishing models: traditional versus open access



When OA is desired, it is important to consider journals that offer the following:

Scenario (part 2)

Is *Breast Cancer Research* a reasonable OA journal option?

- PubMed indexing
- a significant impact factor
- a clearly defined external peer review process
- publication by a reputable organization.

Since *Breast Cancer Research* meets all of the above criteria including a listing on PubMed, an established significant impact factor of 4.16, and publication by BioMed Central, where a rigorous external review process is clearly defined, it appears to be a suitable choice for publication.

Key Learnings

- OA journals are a potential option for publishing manuscripts and reviews. These journals are attractive because their content is freely available via the Internet, thus increasing exposure and access to anyone seeking information.
- The number of OA journals is growing and many have formal peer-review processes. Not all OA journals have impact factors because they are still new or need more citations to be evaluated.
- A growing number of traditional/print-based publishers offer various OA models that involve author fees or time limits, after which older articles may become publicly available online.
- It is important to research a journal to understand what type(s) of access it offers, any fees involved, the level of access or type of readership, and any potential advantages or disadvantages of submitting there. A publications plan may benefit from a diversity of journal targets, including OA journals published with PubMed indexing, significant impact factors, and clearly defined external review processes.
- With recent legislation and as authors get more familiar with OA and its benefits, it could very well become a more prominent publication option in the future.

Additional Resources

Open Society Institute Resources. Budapest Open Access Initiative Web site. <http://www.soros.org/openaccess/read.shtml>. Accessed January 30, 2008.

Bethesda Statement on Open Access Publishing. Earlham College Web site. <http://www.earlham.edu/~peters/fos/bethesda.htm>. Accessed January 30, 2008.

Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities. Max Planck Society Web site. <http://oa.mpg.de/openaccess-berlin/berlindeclaration.html>. Updated December 20, 2006. Accessed January 30, 2008.

The Alliance for Taxpayer Access Web site. <http://www.taxpayeraccess.org>. Accessed January 30, 2008.

United States Public Law H.R.2764. The Library of Congress Web site. <http://thomas.loc.gov/cgi-bin/bdquery/z?d110:h.r.02764>. Accessed January 30, 2008.

Breast Cancer Research Web site. <http://breast-cancer-research.com/home/>. Accessed January 20, 2008.