

## As of yet, not all doors are Open Access

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**Is Open Access (OA) a reality? Do successful models of OA journals exist? What are the potential benefits and repercussions of a move toward OA journal establishment?**

Invited speakers sought to answer these questions in an event hosted by the Knowledge Media Design Institute (KMDI) at the University of Toronto in early March. The seminar was organized by Charles Finley, Executive Director of KMDI's Project Open Source|Open Access, <http://open.utoronto.ca>. Supported by a grant through the UofT Provost's Academic Initiatives Fund (AIF), Project OS|OA seeks to "develop a networked community of scholars, students and members of the broader community interested in the phenomenon of open source and open access."

Leslie Chan, Director of New Media Studies at the U of T Scarborough campus, and Associate Director of Bioline International, provided a short course on open access: an online system where peer-reviewed scholarly material and publications are available without restraint. The articles or monographs can be easily downloaded, without copyright restrictions, but reproduction or use requires an acknowledgement of credit to the original publishers.

Chan outlined some of the potential benefits of Open Access:

- Expanded research programs and manuscript publication by researchers in developing countries with access to a current knowledge base.
- Strengthened institutional profiles or prestige resulting from the development of OA institutional repositories.
- Increased exchange of material between disciplines.

- Improved policy development, news reporting, and teaching with up-to-date public access to research results.

So how does one release their article via Open Access? There are two systems currently available: (1) the Gold route, and (2) the Green route. The Gold route, the most popular Open Access method, involves publishing in either a freely available online journal, or one of the traditional print journals that has transformed into an inexpensive online equivalent. The Green route describes self-archiving of scientific literature by individual researchers or their host institutions. Self-archiving faces many technical hurdles (such as interface design, accessibility, indexing and security issues) and is considered to be in its infancy. Institutional repositories for self-archiving do exist, including one at the University of Toronto, T-Space (<http://tspace.library.utoronto.ca>). T-Space receives priority hits on Google and is available to people in poorer countries—all that is needed is an Internet connection. Further information on publisher copyright policies and self-archiving can be found within the SHERPA/RoMEO list, <http://www.sherpa.ac.uk/romeo.php>.

The development of Canadian OA journals was highlighted in this event. Gunther Eysenbach, Publisher/Editor-in-Chief, introduced the Journal of Medical Internet Research (*JMIR*), [www.jmir.org](http://www.jmir.org). The journal, conceived in 1998, markets itself as the "leading peer-reviewed E-health journal." The quarterly is printed in issue format, although articles are published on-line when ready. Their acceptance rate equals ~25%, with 50-60 published articles per year; roughly 500 printed pages. Articles are freely available in *HTML* format, but membership (individual, \$59/annum) provides the *PDF* file as a value-added feature. An "author-pays" system supplements the subscription income. Articles are processed for a \$900US fee, payable only

upon acceptance of the article, and waived if one holds an institutional membership (\$790 annually). Their most novel fundraising venture includes the installation of the *Fast Track Fee*. With payment of \$250US, authors are guaranteed a turn-around review time of 2 weeks, and if accepted for publication, release within 4 weeks. *JMIR* has also created a dynamic book series, in which they have re-bundled articles on certain topics into *eCollections*.

Another Canadian OA journal, *Theoretical Economics (TE)*, <http://econtheory.org>, published its inaugural issue this past month. The Managing Editor, Martin J. Osborne, explained how *TE* also utilizes an “author-pays” system. Costs are covered by a non-refundable \$75 submission fee (with reduced prices for authors from low-income countries), and a \$5-\$10 per page publication fee. In support of OA, *Theoretical Economics* does not withhold the copyright license, but instead maintains author protection and distribution freedom under an Attribution-NonCommercial license from the nonprofit Creative Commons organization (<http://creativecommons.org/>).

The author-pays system detailed by Eysenbach and Osborne covers web server, copyediting and formatting charges. Although not employed by many OA journals, income can also be acquired from external agencies (i.e., corporate sponsorship) or through government grants provided to journals or individual investigators. (See *Box 1*.)

David Moorman, Senior Policy Advisor for the Social Sciences and Humanities Research Council (SSHRC) described the complexity of grant evaluation for OA journals. While SSHRC embraces the OA concept, they lack current policies to distribute funds to these journals. Under the umbrella of Research Communication Grants, 161 Canadian research and transfer journals currently hold funding from SSHRC, covering 20-50% of their operating expenses. The proxy for funding is based on the number of “mail-outs” (subscriptions). As OA journals do not require “subscriptions”, the granting guidelines need an overhaul.

In the development of new policies, SSHRC is considering three different options to promote OA: (1) make OA publication by authors mandatory, i.e., a condition of granting, (2)

promote OA publishing as a good research practice, or (3) do little and allow market dynamics to sway the move. Hopefully the 2007 Research Communications Grants will include provisions for OA journals.

**Box 1. *Hypothesis* is an OA journal.**

*Hypothesis – A Journal for the Discussion of Science*, continues to increase its readership and contribution, with expansion to three issues per year. Authors hail from around the world, and from multiple fields. While the acceptance rate nears 100%, articles must go through rigorous peer-review and copyediting before print. *Hypothesis*, unlike the other two journals described, does not subscribe to an author-pays system, due to the fact that the majority of our contributors are students that do not have outside funding. Instead, funds solicited from university departments, external corporations and personal subscriptions, support domain-name, promotional, banking and hard-copy print charges. *Hypothesis* would like to continue printing paper copies provided sponsorship increases to accommodate the expanding readership base. Nevertheless, OA publication of *Hypothesis* exists on the Internet.

**Box 2. How do NSERC and CIHR compare?**

The Canadian Institutes of Health Research (CIHR) is in a consultation and analysis phase with regard to support for open access publishing. The report from the Second Meeting of the CIHR President's International Advisory Committee stated a support for open access publishing in principle: "...open access publishing is consistent with the goal of CIHR to promulgate knowledge and the expectation that funded research be disseminated to maximize the impact and utility of the work." However, the same report urged a full assessment of the impact of open access publishing on CIHR researchers before CIHR fully supports this type of publishing.

We could not find any evidence of support or even an analysis of open access publishing by the National Sciences and Engineering Research Council (NSERC).

In contrast, the American National Institutes of Health (NIH) now requests funded researchers submit their papers to PubMed Central, which provides freely accessible scientific content.

The day ended with a lecture from Richard Wellen, Associate Professor of Business and Society at York University. Commercial scholarly journals are known for their proliferation and the unwelcome “bundling” of all journals from one publisher into a single subscription. With limited budgets, libraries can no longer afford all relevant journals and are facing a “serials crisis”. However, Wellen played devil’s advocate, with emphasis on the fact that there are some major advantages to the commercial marketing of large for-profit journals. He suggested a potential loss of editorial vision, credibility, and effective indexing in an entirely OA system.

The existing bibliographic resources (see *Box 3*) can retrieve some of the scattered information. However, the inability of these search engines to communicate with each other represents an unfortunate disadvantage. Wellen stressed the necessity for secondary filters over self-filtering to navigate the expanding wealth of data.

**Box 3. How will one search Open Access literature in the future?**

Like the World Wide Web itself, as more open access journals and articles are published, the need for indexing and filters will grow. Currently, open access journals that are part of major open access providers, such as BioMed Central, rely on peer review to ensure the quality of works. As well, these journals are indexed via Pubmed. However, there are many more open access journals that do not have an established peer review process and/or are not indexed at all. Google Scholar hopes to index all scientific literature and link them together via references. As well, the Faculty of 1000 initiative aims to identify the most important papers in Biology or Medicine, based on the paper’s merits and not on the journal of publication.

In all, the speakers of this event reiterated the fact that OA publishing is still in the developmental phase. For Open Access publishing to become a reality, it will require abstract ideas and a philosophical and financial commitment from multiple parties, including researchers, government and publishers.