Open Access: Where will it take us? (Can we even get off the bus!)

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Disclosures
• Member, Editorial Board, Frontiers in Radiation Oncology
• Member, Governing Board, American Institute of Physics
• Member, Board of Directors, AAPM

Open Access
• What is “Open Access”
• Open Access Acceptance
• Open Access Institutional Policies
• http://www.doaj.org
• Open Access Article Processing Charges (APCs)
• Open Access Author Acceptance
Open Access

Open access (OA) is the practice of providing unrestricted access via the internet to peer-reviewed scholarly journal articles. OA is also increasingly being provided to theses, scholarly monographs and book chapters.

Open access comes in two degrees: Gratis OA is no-cost online access, while Libre OA is Gratis OA plus some additional usage rights.

Open content is similar to OA, but usually includes the right to modify the work, whereas in scholarly publishing it’s usual to keep an article’s content intact and to associate it with a fixed author or fixed group of authors. Creative Commons licenses can be used to specify usage rights; the open access idea can also be extended to the learning objects and resources provided in e-learning.

Open Access

OA can be provided in two ways:

- **Green OA Self Archiving** — authors publish in any journal and then deposit a version of the article for free public use in their institutional repository, in a central repository (such as PubMed Central) or on some other OA website. What is deposited is the peer-reviewed version, either the author’s refereed, revised final draft or the publisher’s version of record. Green OA is at the authors’ discretion and is not required by the journal. The choice of whether to self-archive by their authors, OA self-archiving was first formally proposed in 1991 by Stevan Harnad. However, self-archiving was already being done by computer scientists in their local FTP archives in the '80s, later harvested into Citeseer. High-energy physicists have been self-archiving centrally in arXiv since 1991.

- **Gold OA Publishing** — authors publish in an open access journal that provides immediate OA to all of its articles on the publisher’s website. Hybrid open access journals provide Gold OA only for those individual articles for which their authors (or their author’s institution or funder) pay an OA publishing fee. Examples of OA publishers are BioMed Central and the Public Library of Science.
Figure 2. The development of open access publishing 1993–2009.

http://www.plosone.org/article/info:doi/10.1371/journal.pone.0020961

Open Access Mandates

http://sites.tufts.edu/scholarlycommunication/?page_id=340

Tufts University
Harvard University

Open Access Policies

“The goal of university research is the creation, dissemination, and preservation of knowledge. At Harvard, where so much of our research is of global significance, we have an essential responsibility to distribute the fruits of our scholarship as widely as possible.”

Steven E. Hyman
President of Harvard University

Harvard University

Open Access Policy

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Open Access Info

What is Open Access?
- Open Access: Free for the Reader

Frontiers in Radiation Oncology

Article Type
- Original Research Article
- Clinical Trial Article
- Systematic Review
- Case Study
- Letter to the Editor
- Open Access Article

Article Processing Fees
- € 770 for corresponding author
- € 166 for all other users
- € 128 for corresponding author and € 32 for all other users
- € 1,270 for corresponding author and € 32 for all other users

Open Access in Medicine and Biology

What is IOP's policy on open access publication?
- IOP offers authors the option to publish their research papers in open access journals.
- http://iopscience.iop.org/info/page/openaccess
Publication Fees in Open Access Publishing: Sources of Funding and Factors Influencing Choice of Journal

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Salomon & Björk
Open access (OA) journals distribute their content at no charge and use other means of funding the publication process. Publication fees or article processing charges (APC) have become the predominant means for funding professional OA publishing. We surveyed 1,038 authors who recently published articles in 74 OA journals that charge APCs stratified into seven discipline categories. Authors were asked about the source of funding for the APC, factors influencing their choice of a journal and past history publishing in OA and subscription journals. Additional information about the journal and the authors’ country were obtained from the journal website. A total of 429 (41%) authors from 69 journals completed the survey.

Table 1: Article Processing Charges by Disciplinary Category

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<tr>
<td>Agriculture and Forestry</td>
<td>7%</td>
<td>26%</td>
<td>28%</td>
<td>30%</td>
<td>32%</td>
<td>34%</td>
<td>36%</td>
<td>38%</td>
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<tr>
<td>Business and Economics</td>
<td>7%</td>
<td>25%</td>
<td>27%</td>
<td>29%</td>
<td>31%</td>
<td>33%</td>
<td>35%</td>
<td>37%</td>
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<tr>
<td>Chemistry, Earth Sciences, Physics and Astronomy</td>
<td>10%</td>
<td>32%</td>
<td>43%</td>
<td>45%</td>
<td>47%</td>
<td>49%</td>
<td>51%</td>
<td>53%</td>
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<tr>
<td>Education, Social Sciences, Law and Political Science</td>
<td>13%</td>
<td>67%</td>
<td>22%</td>
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<tr>
<td>Health Sciences, Biology and Life Sciences</td>
<td>7%</td>
<td>14%</td>
<td>50%</td>
<td>20%</td>
<td>14%</td>
<td>16%</td>
<td>18%</td>
<td>20%</td>
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<tr>
<td>History and Anthropology, Arts and Architecture, Languages and Literatures</td>
<td>10%</td>
<td>5%</td>
<td>1%</td>
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<tr>
<td>Technology, Engineering, Mathematics and Statistics, Computer Science</td>
<td>27%</td>
<td>65%</td>
<td>19%</td>
<td>18%</td>
<td>17%</td>
<td>16%</td>
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APC categories are in US Dollars (USD).
Based on the number of journals in which the corresponding authors published.
Statistical significance (Fisher’s exact p<0.05).
The percentages in each cell are for the number (given in the last column) of authors who published articles in that discipline category.
Conclusions

• Open Access allows unrestricted access to information content.
• Content is generally considered to be
  - "Green" (via institutional or other archives)
  - "Gold" (via a fully Open Access Journal)
• Some intermediate Open Access content (limited article set) can be found:
  - Medical Physics
  - Physics in Medicine and Biology
• The movement to Open Access is growing at a rapid, accelerating rate.
• Article Processing Charges are commonly associated with Open Access Journals, but not necessarily widely accepted by authors where alternatives exist.

Thank you

Most scientists reported the new stream-thread peer-review process as “plato on improvement”

https://intechweb.wordpress.com/2010/10/14/open‐access‐peer‐review—which‐one‐any‐one/