

OPEN ACCESS OVERVIEW

What is open access?

“The free, immediate, permanent, full-text, online access, for any user, web-wide, to digital scientific and scholarly material, primarily research articles published in peer-reviewed journals. Any user may link, read, download, store, print-off, use, and data-mine the digital content of that article. An OA article usually has limited copyright and licensing restrictions.”

APC – Article Processing Charge

Source: Suber, Peter. “Open Access Overview”

(<http://www.earlham.edu/~peters/fos/overview.htm>)

Open access does not mean content is not peer-reviewed. Credible open access journals conduct the same peer review that subscription-based journals do.

Types of open access

- Self-archiving (“Green”): Funder requisition for open access to accepted manuscripts 6-12 months after final publication. Deposition is required by various funders to government repositories (PubMed Central, required by NIH), institutional/university repositories (Harvard, MIT, for instance), and subject/discipline repositories (ArXiv). Most publishers deposit accepted manuscripts for papers that require green open access to PMC for authors.
- Open access journals (“Gold”): Articles are open access immediately upon publication, with limited restrictions on reuse and republication, on the journal website and any other platform where the article is published. Authors retain copyright of their content published as gold open access and often provide a license to publish the content using the [Creative Commons licenses](#). Gold open access journals can be fully open access or hybrid open access. Most subscription based journals currently offer hybrid open access to allow authors mandated to publish open access by their funder or institution to do so. Most of these journals charge an Article Processing Charge (or APC) to cover the costs of publication, including but not limited to peer review, copyediting, typesetting, digital conversion, publication, promotion, and perpetual hosting.

The Start of the Open Access Movement

Open access was officially defined by scholarly representatives at a meeting in Budapest in December 2001 (known as the “[Budapest Open Access Initiative](#)”). With the World Wide Web growing in its ability to disseminate information to the large masses, the idea of research being open access was born. The base concept has always been that open research will allow faster and more collaborative research development.

In 2003, two further definitions for open access were documented: the [Bethesda Statement on Open Access Publishing](#) (by the Howard Hughes Medical Institute, April 2003) and the [Berlin Declaration on Open Access Knowledge in the Sciences and Humanities](#) (by the Conference on Open access to

Knowledge in the Sciences and Humanities, a meeting organized by the Max Planck Society and the European Cultural Heritage Online Project, October 2003). These three definitions are known as the basis for open access, though since then, many organizations and funders have released their own open access statements and policies in support of these.

Funder Mandates and the Growth of the Open Access Movement

The open access movement has grown at a clipped pace, with many funders and institutions quickly requiring open access of their research. Table 1 shows the growth of open access mandates from 2005 to 2016. By Q1 2017, 83 funders, 638 research organizations, 74 sub-units of research organizations, 55 funder and research organizations, and 10 multiple research organizations mandate open access (<http://roarmap.eprints.org/>).

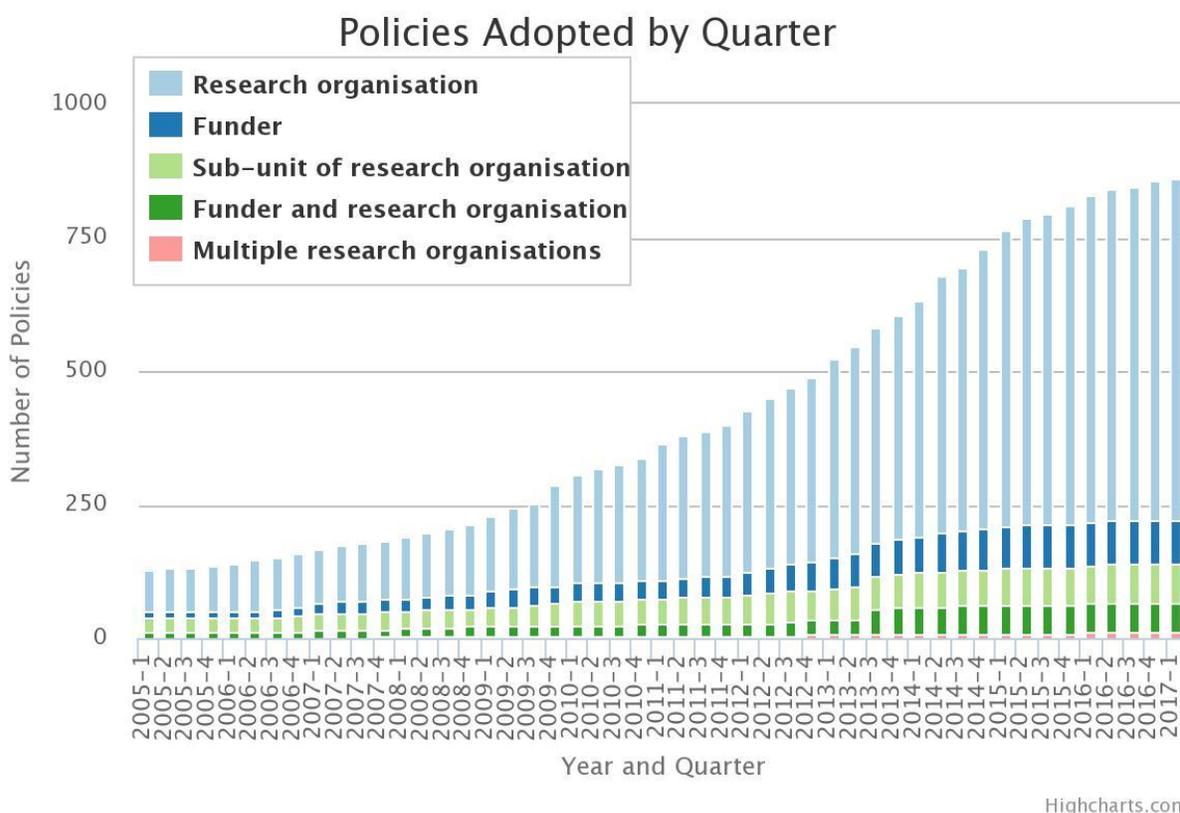


Table 1: Data from ROARMAP: Registry of Open Access Repositories Mandatory Archiving Policies (<http://roarmap.eprints.org/>)

Mandates to publish research open access exist in every corner of the world and within the next few years it is expected that most research funded by European governments will require open access. Examples of a few of the more prominent funder mandates include the following. For a full list visit the [Registry of Open Access Repository Mandates and Policies](#).

- [Austrian Science Fund \(FWF\)](#): Mandates green self-archiving and recommends gold open access. Requires that the content be published under the CCBY license. The FWF provides funding for APCs.
- [Bill and Melinda Gates Foundation](#): Mandates gold open access and requires a CCBY license for publication. BMGF provides additional funding for APCs.
- [Department of Health \(DoH\)](#) (U.K.): Mandates green open access with a 6 month embargo and requires the publication be under the CCBY license. Gold open access is recommended as an alternative to green self-archiving. DoH allows APCs to be paid from the research grant.
- [Horizon 2020](#): This is a funding program created by the European Union and European commission to foster research throughout Europe (currently 16 countries participate). Requires green open access within 6 months of publication and strongly encourages gold open access. Horizon 2020 provides additional funding for APCs.
- [International Development Research Centre \(IDRC\)](#): Requires green open access and mandates that the publication be under the CCBY license. Gold open access is recommended as an alternative to green self-archiving. IDRC allows the APCs to be paid from research grants.
- [National Institute for Health Research \(NIH\)](#): Requires green open access for posting 12 months after final publication. Gold open access is permitted as an alternative to green self-archiving. NIH allows APCs to be paid from research grants.
- [Research Councils UK](#): Requires green open access 6 months after publication and mandates that the publication be under the CCBY license. Gold open access is recommended as an alternative to green self-archiving. RCUK provides additional funding for APCs.
- [Wellcome Trust](#): Mandates gold open access and requires that authors publish their work under the CCBY license and will not cover the cost of any APCs for articles that are not compliant with their mandate.
- [World Bank](#): Requires green open access and mandates that the self-archived version be published under the CCBY license. Mandates that content published within a journal be published under the gold open access CCBY-NC-ND license unless the publisher allows the more liberal CCBY license.
- [World Health Organization \(WHO\)](#): Requires gold open access and that articles be made available under the terms of the CCBY IGO license for authors who are employees of the WHO.

Many institutions also have open access policies, including but not limited to:

- [Harvard University Medical School](#): Requires green open access and permits gold open access as an alternative to green self-archiving. Harvard University Medical School provides funding for APCs. Most of Harvard University's departments have the same policy.
- [Duke University](#): Requires green open access and permits gold open access as an alternative to green self-archiving. The Institution provides funding for APCs.
- [Massachusetts Institute of Technology](#): Requires green open access and permits gold open access as an alternative to green self-archiving. The Institution provides funding for APCs.
- [Penn State](#): Requires green open access.
- [University of California](#): Requires green open access 12 months after final publication.

Where should I submit my paper? Some things to consider

As open access funding increases so does the number of new open access journal launches. Authors should submit to credible open access journals that conduct complete peer reviews on the content that is being published, in similar manners to peer reviews conducted on subscription-based journals. The only difference is the business model that is financially supporting the journal. All authors should consider the following details when considering an open access journal.

- The journal publisher should be a member of the Committee on Publications Ethics
- The journal should contain statements detailing the peer-review process, that the journal charges an Article Processing Charge and what the APC is, and clear editorial and ethical policies
- The journal should have a reputable Editor in Chief and Editorial Board that are unique to the journal and not the same across multiple journals published by the same publisher
- Red flags to look for include grammatical errors on the journal's website and emails, a home office located in a small, old storefront or listed as a post office number, or Editorial Board members or institutions that may be fictitious or members of the Board who may be there without their permission
- If the publishing opportunity sounds too good to be true, i.e. immediate publication promised along with a very high acceptance rate, then it probably is