Dr. Jochen Bihn Lib4RI – Library for the Research Institutes within the ETH Domain: Eawag, Empa, PSI & WSL <u>openaccess@lib4ri.ch</u>





Perspective on publishing and Open Access

The What & Why of Open Access

How to make your publication Open Access

- Solden Road
- Sreen Road

Open Access & Research Funders (with a special focus on Horizon 2020) Summary



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The What & Why of Open Access





What is Open Access?

- Open Access is the practice of providing online access to scientific information that is free of charge to the reader and free of most copyright and licensing restrictions. ^{1&2}
- Open Access is a kind of access, not a kind of business model, license, or content.²

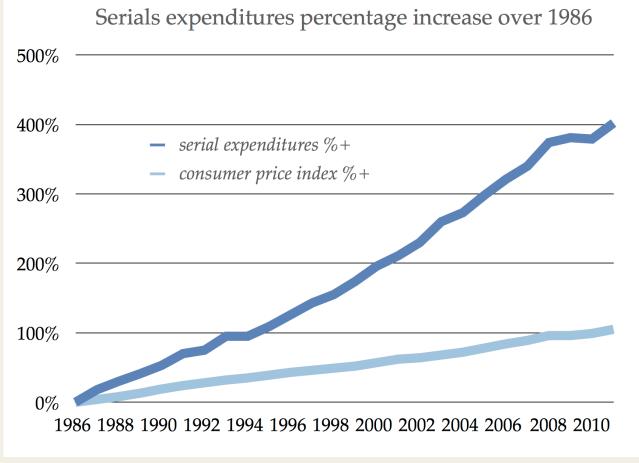
(1) <u>https://openaccess.mpg.de/2076881/2014_05-h2020-factsheet-open-access-faq.pdf</u>

(2) <u>http://legacy.earlham.edu/~peters/fos/overview.htm</u>





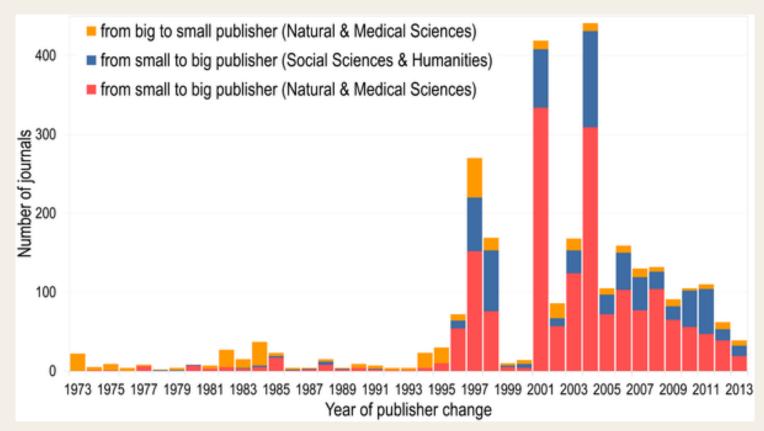
Origins of Open Access: The Serials Crisis



Adapted from Stuart Shieber: <u>Why open access is better for scholarly societies</u>, licensed under a <u>Creative Commons Attribution 3.0</u> <u>Unported License</u>



Big publishers eating small publishers



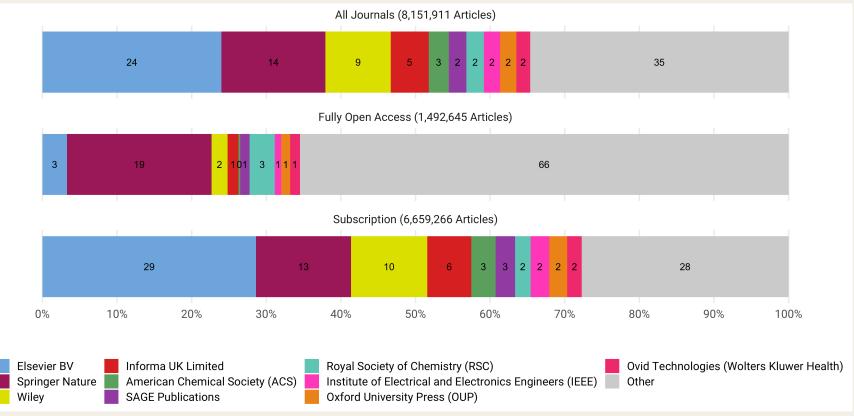
Number of journals changing from small to big publishers, and big to small publishers per year of change in the Natural and Medical Sciences and Social Sciences & Humanities.

Adapted from: Larivière V, Haustein S, Mongeon P (2015) The Oligopoly of Academic Publishers in the Digital Era. PLOS ONE 10(6): e0127502. https://doi.org/10.1371/journal.pone.0127502; licensed under a <u>Creative Commons Attribution License</u>



Publisher Market Share 2014-2018

as measured by articles and reviews indexed in the Web of Science



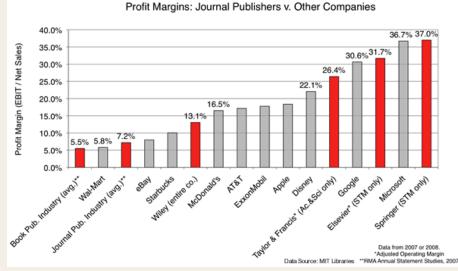
Najko Jahn (2019) Research compendium for a dataset about corresponding author country affiliations indexed in the Web of Science 2014 – 2018. Licensed under CC-BY 4.0.

The global publishing landscape is dominated by a few large publishers.

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The Academic Publishing Market



Source: Right to Research Coalition. (n.d.). Retrieved March 30, 2017, from http://www.righttoresearch.org/learn/problem/index~print.shtml

- oligopolistic conditions
- dysfunctional market
- huge profit margins

"Publishing obscure academic journals is that rare thing in the media industry: a license to print money." (The Economist, 14 April 2012)





The Access Problem

The price of innovation:

Joseph A DiMasi^{a,} 🎍 🦳 Ronald W Ha

^a Tufts Center for the Study of Drug Developme ^b William E. Simon Graduate School of Business ^c Department of Economics, Duke University, D

http://dx.doi.org/10.1016/S0167-6296(02)00126-

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| Export citation 🔂 Purc | hase More options | Search ScienceDirect | 🔍 Search 🔻 |
| ELSEVIER | Journal of Healt Volume 22, Issue 2, March | | ECONOMICS |

- Articles are only accessible to a fraction of potential users.
- Research is having only a fraction of its potential use and impact.
- Research is achieving only a fraction of its potential productivity and progress.



Benefits of Open Access



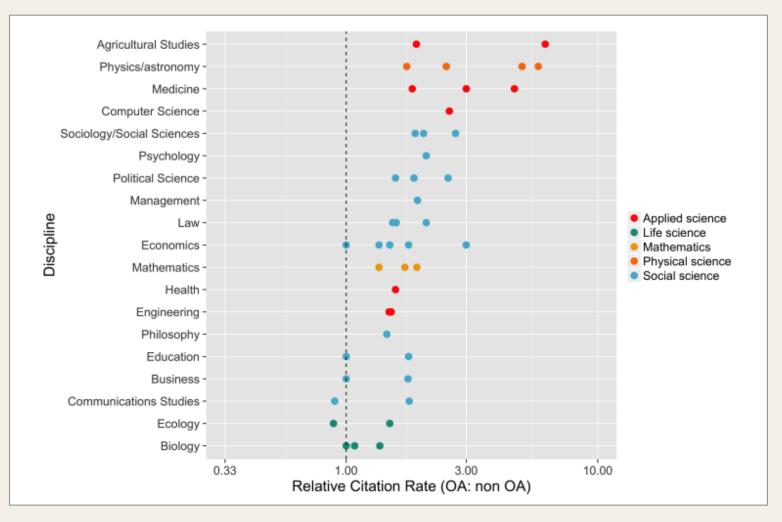
Source: Karolinska Institutet, University Library: <u>Open Access</u>, adapted from <u>Benefits of Open Access</u>, Danny Kingsley & Sarah Brown, <u>CC-BY</u>.



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Open Access articles get more citations



Source: McKiernan et al. 2016: How open science helps researchers succeed. eLife 5, e16800, http://dx.doi.org/10.7554/eLife.16800, CC-BY.

How to publish Open Access





How to publish Open Access

Gold Road

1. Publish in an OA Journal

- Final published version is Open Access on the publishers website
- Often the payment of fee (Article Processing Charge = APC) is required
- Hybrid OA Journals: Subscription journals with paid option for OA

Green Road

- 1. Publish in a subcription journal
- 2. Deposit a peer-reviewed version of the article in a repository to allow for free access
- Final published version is behind a paywall on the publishers website
- Free version in a repository
- No additonal costs for authors





Golden Road to Open Access





Open Access Journals

- No difference to traditional journals apart from access model.
- Quality assurance (peer review).
- Publisher may be commercial, nonprofit, or societies.
- Author retains copyright and article are published under <u>Creative Commons</u> <u>Attribution License</u>.
- Open Access journals often relatively new, less established







Directory of Open Access Journals www.doaj.org

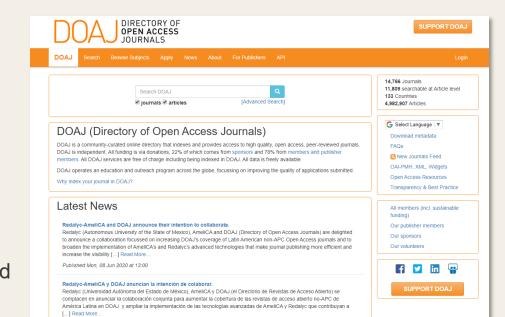
- > 17000 OA-Journals
- Whitelist for OA journals
- Not in DOAJ?
 - "Hybrid OA journal"
 - Very new journal
 - Low quality OA journals
- Look out for a Tick or Seal:



DOAJ Tick: Journals with good level of compliance to best practices and publishing standards



DOAJ Seal: Certification for journals that adhere to best practices and high publishing standards







OA Journals in Scopus and Web of Science

De

Scopus

- > 5000 OA Journals indexed
- Scopus > Sources:

| https://v | WWW.SCO | pus.com/ | sources.uri |
|-----------|---------|----------|-------------|
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| Scopus | | | Search Sources Lists | SciVal ≉ | 0 | ٦ | Create acc | ount Sig | gn i |
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| Display options | ^ | | Source title ψ | CiteScore 🗸 | Highest percentile ψ | Citations 2018 ↓ | Documents 2015-17 ↓ | % Cited ↓ | > |
| Display only Open Access journals Sounts for previous 3 sec No minimum selected |) | 1 | MMWR. Recommendations and reports : Morbidity and mortality weekly report. Recommendations and reports / Centers for Disease Control <i>Open Access</i> | 87.75 | 99% 1/89 Epidemiology | 1,053 | 12 | 100 | Ī |
|) Minimum citations) Minimum documents Citescore highest quartile] Show only titles in top 10 | | 2 | MMWR. Surveillance summaries : Morbidity and mortality weekly report. Surveillance summaries / CDC <i>Open Access</i> | 26.12 | 99% 2/247 Health (social science) | 1,463 | 56 | 88 | |
|] show only titles in top 10 percent] 1st quartile] 2nd quartile] 3rd quartile | | 3 | Journal of Statistical Software Open Access | 25.02 | 99% 1/123 Statistics, Probability and Uncertainty | 6,631 | 265 | 70 | |
| 4th quartile Source type Journals | ^ | 4 | Living Reviews in Relativity Open Access | 19.77 | 98% 1/46 Physics and Astronomy (miscellaneous) | 257 | 13 | 85 | |
| Book Series Conference Proceedings Trade Publications | | 5 | Living Reviews in Solar Physics Open Access | 15.57 | 98% 2/76 Astronomy and Astrophysics | 218 | 14 | 100 | |

Web of Science

- > 4500 OA Journals indexed
- Journal Citation Reports: <u>https://jcr.clarivate.com/</u>

| Clarivate | | | | | ## Products |
|------------------------------|-----------------|--|------------|----------------------------------|-------------------|
| Journal Citation Reports | Browse journals | Browse categories | | | Sign In Register |
| 4,679 journals [®] |) | Type journal name, ISSN, eISSN, category or a keyword | | ۹ | €xport |
| | | | | Indicators: Default 🔹 | 🎲 Customize |
| Filter | | × | itations - | 2020 JIF 👻 | JIF Quartile |
| | | Open Access (OA) | ,407 | 40.429 | Q1 |
| Journals (26,696) | | Filter on OA status at the Journal or publication level. To show the relationship between OA status of publications and citations in the JCR Journal data, the | 4,931 | 27.401 | Q1 |
| Publishers (8,113) | | publications and citations in the JCK Journal data, the two gold OA types (DOAJ and Other Gold in the Web of Science Core Collection) are grouped together. | 5,663 | 26.763 | Q1 |
| Country / region (118) | ` | O Journal Level Filters | ,485 | 25.841 | Q1 |
| - | | DOAJ Gold Open Access | ,460 | 25.405 | Q1 |
| Citation Indexes JCR Year | | () No Filters Applied | ,260 | 24.519 | Q1 |
| Open Access | , | Article Level Filters | ,793 | 21.648 | Q1 |
| | | | ,540 | 19.173 | Q1 |
| JIF Quartile | | | ,848 | 18.187 | Q1 |
| JCI Range JIF Range | | | 1,228 | 17.782 | Q1 |
| JCI Range | > | | 4-4961 .4 | 17 ASTRONOMY & ASTR - SCIE | OPHYSICS 100.00 % |
| JIF Percentile | | | 5-8722 .3 | 38 Multiple ~ | 99.50 % |
| | | | 8-714X .2 | 75 MULTIDISCIPLINARY : - SCIE | CIENCES 97.46 % |
| Reset | Apply | | 2-4962 .9 | 1 BIOCHEMISTRY & MO | ECULAR 99.87% |

How to assess the quality of OA Journals

- «predatory journals» = publish articles for a fee with no or inadequate peer review
- Included in DOAJ?
- Read an article in the journal!
- Have a look at the journal's website!
- Have a look at the editorial board!
- Is the publisher a member of <u>OASPA</u> (Open Access Scholarly Publishers Association) or <u>COPE</u> (Committee on Publication Ethics)?
- Do not trust «blacklists» of predatory journals. Use your critical thinking skills.
- More tips: <u>Think. Check. Submit.</u> <u>Open Access Journal Quality Indicators</u>



Are you submitting your research to a trusted journal?

Publishing your research results is key to **advancing your discipline** – and your **career** – but with so many journals in your field, how can you be sure that you're choosing a **reputable**, **trustworthy** journal?



Tips to **confirm** a journal's credentials and decide if it will help you **reach** the right audience with your research, and make an **impact** on your career.

Take control of your career at thinkchecksubmit.org





Hybrid Open Access Journals



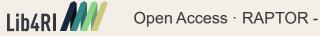




Closed Access

- Subscription journals with an Open Access option for individual articles
- Authors decide if they want to make their articles OA (for a fee)
- Most subscription journals offer an OA option (Springer Open Choice, Wiley Online Open ...)
- Mixed Content: Closed Access and OA articles in one journal

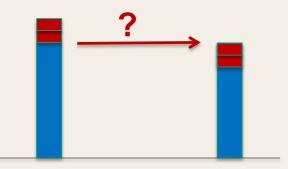






Hybrid Open Access – The Problem

Revenues for a journal
 "Author pays" APC
 +
 "Library pays" subscription



- Solution States The Problem: double dipping
- All major publishers have issued statements that measures were put in place to prevent double dipping, and that list prices are reduced proportionally. But..
 - » List prices of journals ≠ Subscription prices (journal bundles etc.)
 - » Subscription prices are hidden behind non-disclosure agreements
- Benefit for authors: publish OA in prestigious, well-known journal
- Premium prices: Nature 9500 Euro, Cell 10000 Euro



Business Models for Open Access Journals

- Subsidies from institutions, societies, governments, foundations
 - · Palaeontologia Electronica, sponsored by several scientific societies
 - <u>Environmental Health Perspectives</u>, published and sponsored by the U.S. National Institute of Environmental Health Sciences
- Advertising
 - e.g. Oxford University Press offers a full range of <u>advertising</u> media for the scholarly journals it publishes
- Membership Fees
 - e.g. "Lifetime memberships" for <u>PeerJ journals</u>
- <u>SCOAP³</u>
 - Initiative based at CERN to convert core high energy physics journals to Open Access
 - redirecting subscription money from more than 3000 libraries worldwide
- Article Processing Charges (APC)
 - Author pays a publication fee after acceptance of the article
 - The cost of APCs varies considerably depending on the publisher and the journal
 - Average: 2000 €
 - Examples: 450 € Ubiquity Press; 4380 € Nature Communications





How to pay the APC

Is the publication an outcome of a funded project?

Many research funders offer the option to cover the Open Access costs for publications that result from funded projects. Check with your supervisor or the PI of the project.

Has your library/institution an agreement with the publisher for free Open Access?

Check with your local library!

Does your library/insitution offer an Open Access Fund?

- Examples:
 - » Paul Scherrer Institute: Lib4RI Open Access Publication Fund
 - » GSI Helmholtzzentrum für Schwerionenforschung: GSI publication fund (needs login)





But what can you do

... if there is no suitable pure Open Access journal for your paper?... if there is no Read & Publish deal for the journal you selected?... if you are not the corresponding author of the paper?





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Green Road to Open Access





Green Open Access

- aka "author self-archiving"
- Open Access without additional costs for the authors or the library

How does it work?

- 1. Publish in a «conventional» subscription journal
- 2. Deposit an Open Access version of your paper in a repository
- -> article is Open Access in the repository

But some conditions apply...





Green Open Access: Example

Publisher Website: Closed Access



Institutional Repository: Open Access





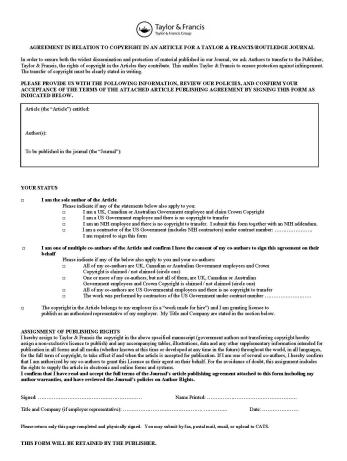
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Green Open Access - Copyright

- Subscription publishers usually require authors to transfer copyright or grant them an exclusive license to publish their work.
- But: They also usually allow some sort of self-archiving:
- After a certain period of time after publication (embargo)
- Most publishers allow self-archiving for the accepted manuscript version but not for the final published version







Types of Repositories

Institutional Repository

- Online collection of papers stored by a university or research institution; managed by library staff.
- Examples: DORA PSI, RE.PUBLIC@POLIMI



- not-for-profit
- usually all uploads checked against publishers' copyright regulations by library staff

primarily for publishing preprints, not accepted

copyright and version often not explicitly stated

- Subject Repository
- Online collection relates to specific subject area.
- Examples: <u>arXiv</u>, <u>engrXiv</u>, <u>bioRiv</u>

General Repository

- Online collection that includes papers from a variety of subject areas.
- Example: <u>Zenodo</u>

Academic Networking Site

Examples: <u>Research Gate</u>, <u>Academia</u>

- originally developed as an «orphan repository»
- hosted by CERN, funded by EC
- not considered respositories

versions of articles

- for-profit
- upload often not permitted by publisher
- often not compliant with funder policies on OA

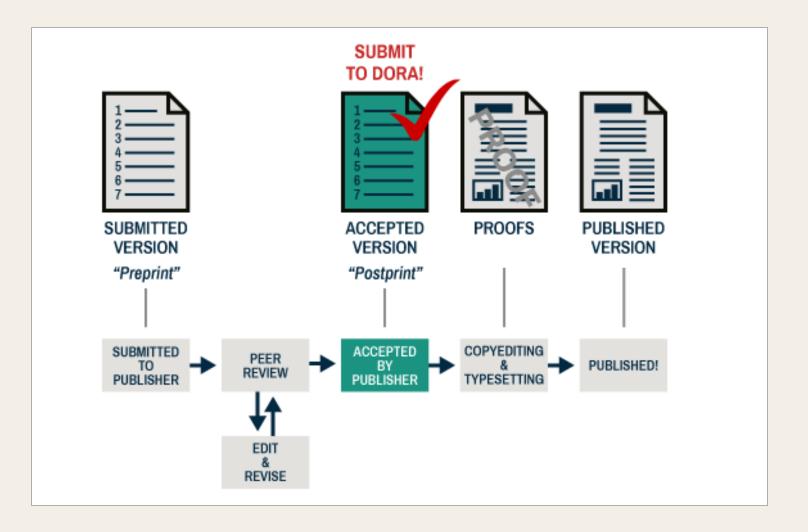
Directory of Open Access Repositories: OpenDOAR



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Versions matter!







Green Open Access - Conditions

Where to look up the regulations for self-archiving?

- Copyright transfer agreement / publishing contract / license to publish
- Publisher/journal website
- SHERPA/RoMEO Database: <u>http://www.sherpa.ac.uk/romeo</u>





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| Neuro-Oncology | | |
| | | |
| Publication Information | | |
| Title Neuro-Oncology (Eng | glish] | |
| ISSNs Print: 1522-8517 Electronic: 1523-5866 | 6 | |
| URL http://neuro-oncology. | v.oxfordjournals.org/ | |
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Conditions for different versions of the article

Where you can self-archive

Embargo period

Detailed information on publisher website

http://www.sherpa.ac.uk/romeo



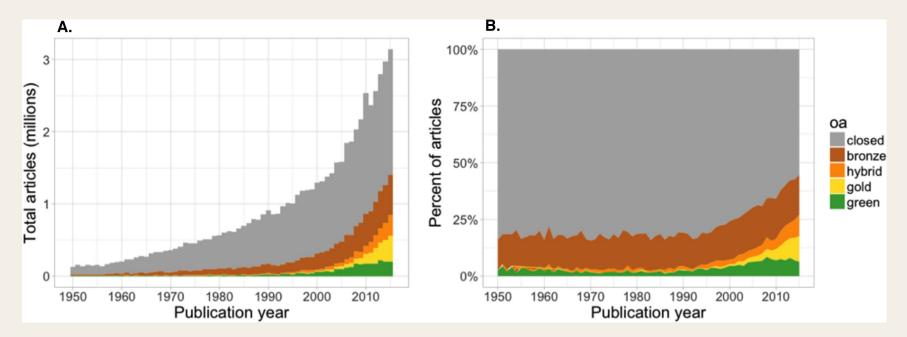
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Open Access & Research Funders





The Rise of Open Access



Number of articles (A) and proportion of articles (B) with OA copies

Source: Piwowar H, Priem J, Larivière V, Alperin JP, Matthias L, Norlander B, Farley A, West J, Haustein S. 2018. The state of OA: a large-scale analysis of the prevalence and impact of Open Access articles. PeerJ 6:e4375 https://doi.org/10.7717/peerj.4375; licensed under CC BY 4.0



Evolution of the EC's Open Science policy across FP

| 2008 | 2014 | 2017 | 2020 |
|---|---|---|---|
| FP 7 | H2020 | H2020 | Horizon Europe |
| OA Pilot Deposit and open access | OA Mandatory Deposit and open access | OA Mandatory Deposit and open access | OA Mandatory Deposit and open access |
| | & ORD/DMP Pilot | & ORD/DMP by default (opt-out) | DMP + FAIR data Mandatory |
| | | | OD by default (opt-out) & Open Science embeded |

Adapted from Open Access to Publications in Horizon 2020 by Antónia Correia & Pedro Príncipe licensed under CC BY 4.0.



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Horizon 2020, MSCA-COFOUND-FP

29.2 Open access to scientific publications

Each beneficiary must ensure open access (free of charge, online access for any user) **to all peer-reviewed scientific publications** relating to its results.

In particular, it must:

- as soon as possible and at the latest on publication, deposit a machinereadable electronic copy of the **published version or final peer**reviewed manuscript accepted for publication in a repository for scientific publications; (...)
- b) ensure open access to the deposited publication via the **repository** at the latest:

(i) on publication, if an electronic version is available for free via the publisher, or

(ii) **within six months of publication** (twelve months for publications in the social sciences and humanities) in any other case.

c) ensure open access — via the repository — to the bibliographic metadata that identify the deposited publication.
 The bibliographic metadata must be in a standard format (...)

https://ec.europa.eu/research/participants/data/ref/h2020/mga/gga/h2020-mga-gga-multi_en.p





H2020 Programme

Multi-Beneficiary General Model Grant Agreement

(H2020 General MGA — Multi)

Version 5.0 18 October 2017

| Disclaimer | |
|---|-----------------|
| This document is aimed at assisting applicants for Horizon 2020 funding. It shows the full range of | provisions that |
| may be applied to this type of grant agreement, and is provided for information purposes only. The | legally binding |
| orant agreement will be that which is signed by the parties for each action. | |
| | |

Motivations

WHY OPEN ACCESS TO SCIENTIFIC PEER-REVIEWED PUBLICATIONS?



GOOD FOR SCIENCE

allows scientists to build on previous research results and avoids unnecessary duplication of effort improved quality and greater efficiency

GOOD FOR THE ECONOMY

speeds up innovation faster progress to market



makes research available to individual citizens and to non-profit organisations greater transparency



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Closed Access Journal + Embargo period > 6m

What are your options to comply with OA requirements of funders?

? Avoid these journals

• Check embargo periods of journals in <u>Sherpa Romeo</u> before submission.

? Pay for Hybrid Open Access

- Does the journal offer hybrid OA?
- Who pays the hybrid OA fees? Horizon2020 project budget? Department budget?

? Make a «best effort» for Open Access within 6 months after publication:

- Submit the accepted version of the article to a repository.
- Negotiate a reduction of the embargo period to 6 months for self-archiving of the accepted version with the publisher (and document this).
- Use a <u>Template letter (.pdf)</u> provided by the European Commission when writing to the publisher asking for an amendment to your publishing agreement.



Open Research Europe

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| How to Publish 🌱 About 🌱 | | My Account 🗡 Sign In |
| Rapid & Transparent | Publishing | |
| Fast publication and open pe stemming from Horizon 2020 subject areas. | | |
| SUBMIT YOUR RESEARCH | | Powered by F1000 Research |
| | olished at the formal launch of this platform in Ma | rch 2021 |
| Natural Sciences | Medical and Health Sciences | Social Sciences |
| Engineering and Technology | Agricultural and Veterinary Sciences | Humanities and the Arts |
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| | Ouses an open research publishir publication within days of submis followed by open invited peer rev | ssion, |
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- Open Research Europe is an
 Open Access publishing
 platform for the publication of
 research stemming from
 Horizon 2020 funding across
 all subject areas.
- No costs for authors.
- All submission are peerreviewed
- <u>https://open-research-</u> <u>europe.ec.europa.eu/</u>



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Let's Recap





Summary

- Open Access has benefits for you, the research community and society.
- Get to know the pure OA journals in your field and funding opportunities at your institution.
- Not all forms of Open Access cost \$\$\$. Green Open Access is free and takes just 5 minutes of your time.
- Publishing the results of a funded project?
 Check the OA requirements of the funder & think about a strategy how to comply before you submit your manuscript to a journal.



Questions?

Source: aitoff, https://pixabay.com/images/id-1343877/

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