Invited contribution by the Marie Curie Alumni Association on the European Commission's Expert Group report (doi: 10.2777/836532)

Stakeholder consultation on the future of scholarly publishing and scholarly communication

About the Marie Curie Alumni Association

The Marie Curie Alumni Association (MCAA) is a global network with over 13,500+ members open to any past or present researchers supported by the Marie Skłodowska-Curie Actions (MSCA). MSCA is one of the European Union's flagship training initiatives and provides research grants supporting researcher's international and intersectoral mobility at all stages of their careers, across all disciplines. MSCA fellowships are among Europe's most prestigious awards, aimed to support the best and most promising researchers.

Contact

Marie Curie Alumni Association, % INOVA+
Avenue des Arts 24, B-1000 Brussels, Belgium
Web: https://www.mariecuriealumni.eu
E-mail address to the MCAA Policy Working Group: WG-PSR@mariecuriealumni.eu

This document was prepared by the MCAA Policy Working Group has been approved for release by the Board of the MCAA. It was submitted to the European Commission on May 10, 2019.
Permanent link to this document: http://doi.org/10.5281/zenodo.3246729

RECOMMENDATIONS FROM THE MARIE CURIE ALUMNI ASSOCIATION

The Marie Curie Alumni Association (MCAA) supports the advancement of knowledge and is a strong advocate for changing the current system of scholarly publishing. In this context, we encourage the initiative of the European Commission to actively engage the community to develop their view on the future of scholarly publishing, and research(er) evaluation in relation to this.

Summary

Overall, the MCAA position aligns well with the European Commission Expert Group report *"Future of scholarly publishing and scholarly communication"* (DOI: 10.2777/836532) and we therefore welcome the report's main conclusions and recommendations. As the MCAA is an association based around researchers, we take a researcher-centric perspective and provide a set of recommendations to ensure that researchers are sufficiently consulted on proposed process changes, and that such changes are operationalized in a way that causes minimal additional workload and maximum benefit to researchers;

- The MCAA agrees that researchers should be at the center of any future scholarly publishing system and call on the European Commission to more actively involve researchers and researcher associations in discussions around the future of scholarly publishing.

- The MCAA agrees that the long-term vision of scholarly publishing should be based around a distributed, open infrastructure with the guiding principles of equity, diversity and inclusivity.
    - This can be operationalized using open access publishing models where there are no author-facing fees, nor reader-facing fees (i.e. open access without barriers).
    - Publishers not yet aligned with barrier-free open access should present their strategy and roadmap for how they will contribute to a distributed, open infrastructure with the guiding principles of equity, diversity and inclusivity. They can take inspiration from publishers and journals that already use such barrier-free open access models.
    - Research institutions and funders should explore how they can best support such infrastructure, and present a strategy and roadmap for how current publishing funds will be reallocated to support a distributed and open infrastructure.
    - All functions or processes should be made as seamless and integrated for researchers as possible, and should not add significantly to their workloads.

- Support should be given to open technologies promoting and facilitating machine readability of scholarly information (including data, metadata, text and images), to build automated and forward thinking knowledge sharing and communication services.

- The MCAA agrees that the future of scholarly publishing should be based around open licenses for research outputs to facilitate reuse and innovation both within and outside the research community. This can be facilitated by a European amendment to copyright law similarly to the Dutch example[1].

[1] Article 25fa of Dutch Copyright Act/law; https://www.openaccess.nl/en/events/amendment-to-copyright-act ; several additional copyright open access amendments also exist in other European nations: https://docs.google.com/spreadsheets/d/1T1ki63e37NEUETL4jF6xPLBucBUoqjgTCfXIyJBdsM0/edit#gid=0

- The MCAA agrees that the research evaluation system should be modernized. We strongly encourage all actors to modernize their procedures based on existing good practices, which have been deployed by several research institutions, funders, and scholarly societies already, and to engage their research communities to establish what works for them.

- The MCAA emphasises that substantial support and resources will be needed to drive culture change, to raise the skill level in the research community around open science, and to integrate open science as a standard part in existing workflows.

Background and additional information

Researchers at the centre

We note that the Expert Group consisted of a small number of selected members, and that no researcher associations, nor scientists who are working on developing new publishing infrastructure, were involved. Researchers are crucial to the development (conceptual, technical and procedural) and uptake of changes in the scholarly communication and reward system, and as such should be more actively involved in processes which will result in a changing research landscape. It is especially important to ensure early involvement of early-career researchers and associations representing early-career researchers in discussions around the future of research, as these researchers will be disproportionately affected compared to researchers at a later career stage. Therefore, **we call on the European Commission to more actively involve researcher associations and researchers in discussions around the future of scholarly communication.**

The Expert Group report correctly identifies many of the tensions that exist in the current system. This includes the duality researchers face between collaborative research (which much modern research inherently is) and competitive research evaluation (e.g. in the form of journal rankings). We agree with the report that **researchers should be at the center of any well-functioning scholarly publishing system** and that in the current system a small number of publishers and other entities have increased their dominance in the provision of content and services which has created lock-in effects and barriers which are detrimental to the research community as a whole.

A distributed, open infrastructure

The Expert Group report correctly identifies “a distributed, open infrastructure” using the guiding principles of “equity, diversity and inclusivity” as the desired path forward. We and others have repeatedly stated[2] the importance of **focusing the long-term future of scholarly communication around publishing models where there are no author-facing fees or reader-facing fees**. These models are sometimes called “green”, “diamond” and “platinum” open access publishing and are already being used today by a diverse range of journals and publishers (we largely refrain from these ‘color labels’ as different actors use different definitions for these terms which may cause confusion).

[2] E.g. https://zenodo.org/record/1465451 and https://zenodo.org/record/2551438 and https://medium.com/marie-curie-alumni/towards-open-science-514238927824

To operationalize an open infrastructure, in whichever form, resources to support this can be secured and negotiated by research institutions and funders directly from service providers (e.g. publishers). The research communities that are employed at those institutions, the researchers who are funded by those funders, and contributors and beneficiaries of research more generally, should be consulted during this process. In the long-term, neither 'pay-to-read', nor 'pay-to-publish' models are desirable and indeed one of the challenges ahead is to fully shift support to alternative models that fall in neither category. Accomplishing this would remove much of the inequality and exclusion created by current subscription-based models and so-called "article processing charge"-based models, and enable us to move towards a scholarly communication system based around equity, diversity and inclusivity.

MCAA strongly recommends further engagement with researcher communities and initiatives promoting and deploying digital information systems based around open and decentralized scholarly communication. Examples include initiatives like the Open Research Knowledge Graph[3], or the Open Knowledge Network[4] which are gaining momentum. One vital component of these approaches is that they facilitate machine understanding and processing of scientific outputs (e.g. text, data, metadata and images), and can use machine learning and artificial intelligence based methods to create knowledge networks/graphs in order to exploit semantically connected scholarly information. These developments have the potential to provide enormous value to the way we communicate research: e.g, services like facilitated and automated information gathering, search and literature review, data curation, real-time visualisation of academic concepts, and automatic notification of new research developments. This type of big data driven technology is also being developed by commercial actors, like Pure by Elsevier[5]. These emerging types of services could support the transparent communication of scholarly activities throughout the complete research process lifecycle. However, if closed initiatives get ahead of open initiatives and creates new barriers and lock-in effects then this would be detrimental to the whole research community. **All 'big data' efforts (including commercial ones) must embrace transparency and inclusivity and deploy solutions built around open source.**

We note that **a variety of publishing models, publishers and journals already exist based around open access without any barriers**. Examples include the (at least) over two dozen publishers with hundreds of journals that allow zero-embargo self-archived ("green") open access[6], the 45+ journals that are part of the Free Journal Network[7], and the Open Library of Humanities[8]. In addition, we also note the recent *São Paulo Statement on Open Access*[9] which showcases the increasing global alignment around open access, which we welcome. We encourage publishers who are not yet aligned with barrier-free open access to state their roadmap towards contributing to a distributed and open publishing system based on equity, diversity and inclusivity. This could include engaging with publishers who already practice barrier-free open access to learn existing good practices. We encourage research institutions and funders to explore how they can best support such infrastructure,

[3] http://orkg.org
[4] https://www.nitrd.gov/nitrdgroups/index.php?title=Open_Knowledge_Network
[5] https://www.elsevier.com/solutions/pure
[6] https://docs.google.com/spreadsheets/d/1n9NO5KZr3s7SXySq6y50_I-7X8Dax7mExSHQhMfvZEc/edit?usp=sharing ; note that not all of the journals listed here have clarified which open licenses they allow.
[7] https://freejournals.org/
[8] https://www.openlibhums.org/
[9] https://www.coalition-s.org/sao-paulo-statement-on-open-access/

and **develop a strategy and roadmap for how funds, used to support the current publishing system, can be reallocated to support a distributed, open infrastructure based around equity, diversity and inclusivity**.

Regarding the "four functions" of scholarly communication discussed in the Expert Group report: registration (attribution), certification (peer review), dissemination (distribution and access), and preservation (permanent archiving). From a researcher-perspective, active researchers should continue to be integral to the peer review process. **All functions or processes, including the peer review process, should be made as seamless and integrated for researchers as possible, and should not add significantly to their workloads.** Similarly, a well-functioning research dissemination infrastructure should also be seamless for contributors and beneficiaries of research, so that they can focus all their efforts on engaging with the research.

Open licenses to facilitate reuse and innovation

One example where process integration is discussed in the Expert Group report is in the area of copyright and licenses in relation to research. The MCAA is engaged with developing and distributing tools and information to raise the understanding around this topic (e.g., we have members engaged with projects and initiatives like FOSTER[10], New HoRRIzon[11] and the Open Science MOOC[12]). While a general literacy around copyright and licenses is important for the research community, researchers should not have to be experts on licensing to navigate scholarly publishing. We have recently advocated[13] that **the copyright of research should stay with the original copyright holder** and, for example, not be transferred to publishers. Additionally, **open licenses should be the default option for research outputs**. We are encouraged that this is in alignment with the positions expressed in the Expert Group report.

To operationalize copyright retention by researchers and facilitate the use of open licenses, we note the **successful amendment of the Dutch Copyright Act with the "Taverne amendment"**[14]. This law protects the rights of researches in the Netherlands so they no longer need to reserve their rights during negotiations with publishers to make their research results available worldwide through open access. Researchers instead automatically hold and retain an unwaivable right to their research following this amendment to the copyright law. We note that **if European copyright law was amended following this example, researchers' rights would be protected and much of the uncertainty surrounding copyright and licenses in research today would be removed**. This would greatly facilitate the participation of researchers towards the full implementation of open science as well as the reuse of research outputs. It therefore would also enable new innovations in how the research community and the broader community engages with research, and accelerate knowledge transfer to decision makers, charities and the broader public and private sector.

[10] https://www.fosteropenscience.eu/
[11] https://newhorrizon.eu/
[12] https://opensciencemooc.eu
[13] https://zenodo.org/record/1465451 and https://zenodo.org/record/2551438
[14] Article 25fa of Dutch Copyright Act/law; https://www.openaccess.nl/en/events/amendment-to-copyright-act

A modern evaluation system that rewards open science

Regarding the evaluation of researchers, **we strongly support modernizing the evaluation of research(ers)** in line with guidelines such as the Leiden Manifesto[15], the Declaration on Research Assessment (DORA)[16] and the OS-CAM matrix[17], as we have stated previously.[18] DORA maintains a collection of good practices for research funders[19], research institutes[20], and professional societies[21], and **we encourage all actors to start today to modernize their procedures to include existing good practices**. Moving forward, funders, institutes and societies should work closely together with their research communities to evolve best practices suitable for their mission.

Support and resources to drive research culture change

In the medium to long term, substantial efforts are needed to help drive and anchor research culture change. **To achieve lasting change, researchers need continuous support and resources to adopt and implement good practices in open science.** This includes raising the overall understanding around open science in the research community, as well as providing tools and resources. Service providers (such as publishers) can develop and provide open and cost-effective tools, while researcher communities (such as scholarly societies and researcher associations), research funders and research institutes can facilitate the development and dissemination of good practices and training. For example, the MCAA and MCAA members are actively engaging in this area on a wide front (e.g. events, webinars, tools, training resources).

Suggested further reading

Over the last few years the MCAA has participated in and organized several events and published several statements related to the future of scholarly publishing. These include (note that this is not an exhaustive list):

- MCAA statement: "*The Future of European Research Funding*", https://zenodo.org/record/1465457
- MCAA statement: "*The Marie Curie Alumni Association announces its support for Plan S*", https://zenodo.org/record/1465453
- MCAA statement: "*Joint Statement on Open Access for Researchers via Plan S*", https://zenodo.org/record/1465451
- MCAA statement: "*Joint Statement on Implementation Guidance for Plan S*", https://zenodo.org/record/2551438
- MCAA blog post: "*The future is Open Science!*" https://medium.com/marie-curie-alumni/the-future-is-open-science-dd9484463be6

[15] http://www.leidenmanifesto.org/
[16] https://sfdora.org
[17] https://ec.europa.eu/research/openscience/pdf/os_rewards_wgreport_final.pdf
[18] E.g. https://zenodo.org/record/1465457 and https://zenodo.org/record/1465451 and https://zenodo.org/record/2551438
[19] https://sfdora.org/good-practices/funders/
[20] https://sfdora.org/good-practices/research-institutes/
[21] https://sfdora.org/good-practices/professional-societies/

- MCAA session at ESOF 2018 (July 12, 2018): "*Open science: from concept to implementation*", https://medium.com/marie-curie-alumni/mcaa-esof2018-d01883128c06
- MCAA participation in panel debate with Elsevier, Eurodoc and Young Academy of Europe on "*How Researchers & Publishers Can Collaborate In The Move Towards Open Science*", https://medium.com/marie-curie-alumni/towards-open-science-514238927824
- Sessions at the MCAA General Assembly & Annual Conference: https://medium.com/marie-curie-alumni/live-from-the-mcaa-general-assembly-annual-conference-e756e7b9dfd0
- Articles in IRRADIUM magazine (MCAA member magazine), including "*The upcoming revolution of Open Science*", January 2019 issue.
- MCAA collaboration and MCAA member participation in the EU-project NewhoRRIzon: https://newhorrizon.eu/
- MCAA webinar: "*Open Science Clinique: Winning Marie Curie with Open Science*", https://www.youtube.com/watch?v=xZzUX9CajNk
- MCAA webinar: "What does Open Science really mean?", https://www.youtube.com/watch?v=u05E-sl_40A
- MCAA webinar YouTube channel: https://www.youtube.com/channel/UCN6xI3hOV3DRtfDS0P6FSLA