

## **EDITORIAL**

In academic publishing, a preprint can be defined as a manuscript draft of a scientific work that has yet to be published in a journal. It may be a research article, an editorial, a review or another type of manuscript that is ready to be submitted to a journal for peer review, is under review, or that has even been rejected; but regardless of the end result, the authors are willing to make their content public. In short, the preprint is a research output for the dissemination of knowledge produced by researchers and that has not yet completed the typical publication pipeline to be published, but can be valuable to the community, easily discovered, accessed and cited [1]. One of the issues revealing the need to publish preprints is that the time between submission and acceptance of an article to be available to the community is a lengthy, drawn-out procedure that can take months or even years [2]. Authors can submit revised versions of their papers to the preprint server or services, generally thematic repositories. In this way, the author quickly begins the dissemination of a certain work, which may be a preview, an incomplete version or, most commonly, the final version. There may be several versions of the manuscript since the repository allows controlling them without removing previous versions. By using this service, the authors set a date prior to their research, they can request comments and add suggestions to the manuscript that is later sent to the formal editorial process of a journal [3].

Preprints have been getting attention recently after many years growing in the shadows. For instance, arXiv, an open-access platform offering preprints for scholary articles in the field of Physics and later including disciplines such as Mathematics, Computer Science, and Quantitative Biology, was launched in the early 90's and has become a common platform among physicists. bioRxiv, inspired by arXiv but in the field of biology, was launched in 2013 and, despite having a harder time being recognized, it currently has more than 1 million preprints downloaded per month. Then, other platforms including chemRxiv, socArxiv, or the most recent medRxiv were founded. As preprints have become increasingly popular, other platforms and tools have been created. One of them is Prelights, a community platform that highlights interesting preprints. A significant feature is that all these preprints are indexed in detail by Google Scholar, allowing them immediate visibility by the research community. The Open Science Framework website also indexes all the major preprint servers [4]. The availability of preprints in the area of Biomedicine has recently gained significant attention from the scientific community and has led to a

scientifically led effort, ASAPbio, to promote its use. As a result of the ASAPbio meeting, held in February 2016, some simple rules were highlighted to consider the use of the preprint as a communication mechanism, which are:

*Preprints speed up dissemination:* The average review time between submission and publication of an article is around 100 days; the preprint screening process takes less than 24 hours.

*Preprints should be licensed and formatted to facilitate reuse:* Authors are encouraged to use licenses and formats facilitating reuse, while retaining the copyright of their work. For each published version, a DOI is assigned and the document can be cited.

*Preprints provide a priority record:* All preprints include a date and time stamp, indicating when the item was submitted, which generally occurs up to 24 hours after submission, and anyone using the web search engines can determine the order of priority relative to other works. The ArXiv created a transparent public record of a scientist's work. Although journals provide an important validation service through peer review, priority setting can be significantly delayed because the work is not public during the peer review process and other editorial processes in most journals.

*Preprints do not lead to being scooped:* Preprint platforms provide scoop protection as can happen in non-public review processes, that is, the disclosure of a new discovery is privileged by its publication almost simultaneously.

Preprints provide access to academic content that would otherwise be lost: Academic results valuable for the scientific community are available, even if they are not innovative enough for publication in journals.

*Preprints do not imply low quality:* The peer review process can add significant value to the work, pointing out mistakes or areas of improvement. However, authors must stand behind their preprint, because it is a public disclosure and therefore a citable entity, although not peer-reviewed. Even without peer review, other researchers will be reading, evaluating, rating, and judging the work. The authors reputation is at stake.

Preprints support the rapid evaluation of controversial results: Using the example of the publication that indicated that radiation emitted by the cell phone increased cancer rates in animals and considering the controversy

surrounding such a claim, the National Institute of Health (NIH) was forced to release all data, including internal reviews, as quickly as possible, so that others could review the findings and assess their veracity.

*Preprints do not generally preclude publication:* just some journals consider preprints as a "pre-publication form" and reject such manuscripts on the grounds that they were sent to a preprint server, without prior evaluation. However, in recent years, preprints-friendly policies are being globally developed for publishers to appreciate their value as a contribution that can help the author improve a work, leading to a better publication [1, 3].

In addition to this information, preprints are still considered gray literature, that is, they are valuable material to be collected and preserved by libraries, but not controlled by publishers, due to their immediate publication and not being previously reviewed by peers [5]. These rules point to the positivity of the preprint and, in a sense, meet what Peter Demo advocates in terms of intersubjectivity in the production of knowledge, that is, placing himself at the criticism of his peers immediately and without the intermediation of others. It can be seen as an intersubjective, intense and freely communicated work, in which researchers control each other, within naturally debatable parameters. It is not possible to establish anything peremptory, the intersubjective relationship needs to be democratic, so that the authority of the argument can prevail [6].

Additionally, SciELO has implemented a basic plan for the development and operation of a preprint server; its main objective is to help accelerate the availability of research results and position academic communication in the countries participating in the SciELO Network in line with the advances and the increasing importance of the publication of preprints at the international level, covering all thematic areas [7].

Preprint servers are fully compatible with academic journals and, in fact, there is a large number of scientific societies as well as (commercial and open access) journals that have the use of preprint servers incorporated into their editorial policies. Likewise, Wikipedia has a specially dedicated article listing these institutions and their policies, including Nature Group, Elsevier, Springer, Cell, Science, and many others [8].

## Some concerns about publishing preprints

Can we trust to share our information before the peer review?

In fact, researchers are already sharing information from their work, for example, at conferences. Most importantly, the publication of the preprint gives a specific date that allows researchers to prioritize their contributions.

Some of the concerns are: "They will copy the ideas !!!! because the preprints are available to the public but they will not respect them" [4].

Paul Ginsparg, the founder of arXiv has commented in the Preliminary statement from ASAPbio. [9]: "It can't happen, since arXiv postings are accepted as date-stamped priority claims. As responsible citizens of the scientific community, we...will fairly cite original work presented as a preprint in our own scientific papers, just as we would cite a journal publication. We will acknowledge such work, as appropriate, in our presentations at scientific meetings".

When evaluating the inclusion of a journal in Open Access databases such as DOAJ and Redalyc, it is important that the journal has clear policies on the permissions that authors have regarding pre-prints and post-prints. In this regard, Sherpa-Romeo is a database that compiles the copyright policies of the main technical-scientific journals in the world. It is just necessary to introduce the name or ISSN of the journal in question The database uses a color-coding scheme to classify publishers according to their self-archiving policy, identifying the possibilities and limitations to self-archiving that each journal proposes [10, 11].

Green: it allows self-archiving of both the pre-print (pre-print or draft of a paper) and the post-print (the corrected and peer-reviewed version) and even the final version (layout as published in a journal).

Yellow: It only allows self-archiving of the pre-print (before being evaluated).

Blue: It allows self-archiving of the post-print (already evaluated) or the final version.

White: It does not allow any kind of self-archiving, although, of course, there may be some exceptions.

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