# Preprint Servers: CSE Editorial Policy Committee White Paper Update

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The world of editorial policy can be tricky to navigate. How do journals and publishers handle implementing based on controversial topics into policy? What about ethical issues that have yet to be identified or continue to emerge? The work of the Council of Science Editors (CSE) Editorial Policy Committee (EPC), in part, has been to speak to these and other questions. In 2006, the EPC published the White Paper on Promoting Integrity in Scientific Journal Publications. One of the goals of the white paper was to "encourage everyone involved in the scholarly publishing process to take responsibility for promoting integrity in scientific publishing."<sup>1</sup> Since that time, the EPC has tasked itself with publishing ongoing updates to the white paper as new topics emerge and the industry evolves. The hope is that more open dialog can take place in order for best practices to be widely established and maintained and that the white paper can continue to serve as a resource across journal and publisher platforms.

## **New Policies for Preprints**

Preprints and preprint servers have become more widely discussed in recent years within the scientific publishing community. A preprint server is as an online repository where research findings and data can be deposited before, during, or after the peer review process. A preprint refers to the individual postings of research findings and data that are available on preprint servers. Preprints are often assigned DOIs and can be cited by researchers. This year, I had the privilege of working with the EPC on a preprint section update to the white paper (see box).

As we began looking into the various issues surrounding preprints, it became evident that there was no universal policy across journals and publishers. Many editors fully embraced preprints and had for years. Others were completely opposed to preprints or considered submissions already posted on preprint servers as prior publication. In some cases, we found that editors did not really interact

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#### From the CSE White Paper on Publication Ethics:

#### 2.1.12 Preprint Servers

In scientific publishing, a preprint server is an online repository where research findings and data can be deposited before, during, or after the peer review process. Although preprint servers have been a part of the scientific community for many years, the use of preprint servers is becoming an increasingly common practice for authors, in a number of fields, and more journals are willing to consider papers posted on these servers. Editors have a responsibility to present clear guidelines to authors regarding their policy on preprint servers, including what content can be shared on preprint servers before, during, and after the review process. Even if editors are willing to consider content previously posted on preprint servers, journals often require authors to disclose this information at the time of submission. Any such requirements should be available for author reference at the time of submission.

Direct link: https://www.councilscienceeditors. org/resource-library/editorial-policies/whitepaper-on-publication-ethics/2-1-editor-roles-andresponsibilities/#2112

with preprints at all. More importantly, we began to see that several journals/publishers had not developed a clear policy. Even in cases where a policy had been agreed upon, there was often a lack of clear communication to authors and/or editors.

To inform our update, we examined the history of preprints across various fields. We knew that some preprint servers, such as arXiv, had been in existence since the early 1990s and primarily serve the physical sciences community. In some fields, the regular use of preprints was a familiar reality and the recent discussions were not changing anything. However, in other fields, the idea of posting a preprint was brand new, even for authors. BioRxiv began serving researchers within biological sciences fields in 2013. The Open Science Framework's (OSF) multiple platforms provide options for scientists in the fields of engineering, social sciences, and psychology. Recently, ChemRxiv launched within the chemistry community in 2017.

Our concern was that without a clear guideline or policy, authors were left to send inquiries to the editorial office for every paper they submitted, or in some cases, assume a policy based on a previous experience with another journal.

## Resources

As the EPC continued our discussion on preprints, we familiarized ourselves with Jocelyn Kaiser's article published in Science in 2017 explaining the history of preprints and thoughts on the future.<sup>2</sup> As preprints evolved, new issues were raised. Should journals consider preprints as prior publication? How should journals/publishers develop a policy on preprints? What factors should be taken into consideration? What issues were central to best practice? Who is responsible for best practice? As we discussed these and other factors, it was evident that the growth of preprints was astounding. For example, 37,648 preprints were accessible on bioRxiv alone by the end of November 2018. The founders of bioRxiv have watched submission numbers increase for the past five years and have even seen submission numbers double at times in less than a year.3

Journals and publishers are now tasked with responding to this increase in preprints and clearly communicating a developed policy to authors. That response might differ across journals and fields, but nevertheless a response is needed. Our conclusion, then, was twofold. First, it was the responsibility of editors to develop a policy regarding preprints. We put together a list of resources to assist with this. Second, because editors were responsible for developing a policy, the next best-practice step was to clearly communicate that policy to authors.

The public acknowledgement of preprints by the National Institutes of Health (NIH) in 2017,<sup>4</sup> and various articles written on the topic, not only helped us to navigate some of the issues involved with preprints but also confirmed that preprint servers were not going away. As we discussed the issues surrounding preprints, it became clear that adding a section devoted to preprints to the existing white paper was the best course of action. The ethical issues surrounding preprints were many, but our primary concern as a committee was providing a guideline for journals and publishers to develop a policy as well as a helpful resource as new policies were established and defined. We wanted to draft guidelines that not only communicated best practice

but also acknowledged the reality that journal, editor, and publisher policies may vary significantly.

Our list of resources was not intended to be exhaustive. Just as our statement did not seek to answer all of the challenges surrounding preprints, our list of resources provides a place for editors to begin to examine the ongoing conversation around preprints. A month before our statement was finalized within the committee, the Committee on Publication Ethics (COPE) released their statement on preprints.<sup>5</sup> This additional resource is listed as well as the article from *Science* discussing the future of preprints. We provided a few examples of preprint servers across different fields and acknowledgment of journals that provide direct depositing between journals and preprints. A link is provided to the 2017 NIH announcement allowing researchers to both cite and claim their interim projects, such as preprints for funding.

## **Further Discussions**

The EPC also took on the topic of preprints at the Ethics Clinic at CSE's 2018 Annual Meeting. Along with the help of an expert panel, we discussed many of the questions surrounding preprints. We examined some specific ethics cases dealing with preprints and heard from expert speakers about general ethical concerns and workflow operations within preprint servers. Our hope is that our work as a committee, both this year and in the future, provides both guidance and a framework for the ongoing preprint discussion. I am thankful to my colleagues on the EPC committee for their expert knowledge on preprints and other topics and their ongoing work as we continue updating the white paper and identifying policy topics for the future.

#### References

- Scott-Lichter D and the Editorial Policy Committee, Council of Science Editors. CSE's White Paper on Promoting Integrity in Scientific Journal Publications, 2012 Update. 3rd Revised Edition. Wheat Ridge, CO: 2012. http://www.councilscienceeditors.org/wpcontent/uploads/entire\_whitepaper.pdf.
- Kaiser J. Are preprints the future of biology? A survival guide for scientists. Science. September, 2017. http://www.sciencemag.org/ news/2017/09/are-preprints-future-biology-survival-guide-scientists.
- Abdill RJ, Blekhman R. Tracking the popularity and outcomes of all bioRxiv preprints.; https://doi.org/10.1101/515643.
- National Institutes of Health (NIH). Reporting preprints and other interim research products. Bethesda, MD: NIH, May 25, 2017. https:// grants.nih.gov/grants/guide/notice-files/NOT-OD-17-050.html.
- COPE Council. COPE Discussion document: Preprints. March 2018. https://publicationethics.org/files/COPE\_DD\_A4\_Preprints\_Mar18\_ AW.pdf.