

For the Sake of Science

Lila M. Gierasch, Editor-in-Chief, *Journal of Biological Chemistry*,
Nicholas O. Davidson and Kerry-Anne Rye, Editors-in-Chief, *Journal of Lipid Research*,
and Alma L. Burlingame, Editor-in-Chief, *Molecular & Cellular Proteomics*

The world of scientific publishing has been invigorated and challenged by a variety of new proposals and initiatives over the past few years. With each new model for the publishing process, there have been opportunities to reimagine the future of research articles and journals. However, without a deadline for when the future begins, systematic change has been slow in coming.

Enter the Plan S coalition, which has presented the scientific publishing community with just that deadline. Without a doubt, this group has shaken up the world of science publishing. And that is exactly the intention. Plan S (<https://www.coalition-s.org>) is an initiative put forth by a consortium of funding agencies, mostly in Europe, to require that all research results that were supported by these agencies be published with full and immediate open access, among other aspects. Full open access would mean that no fees or subscriptions would be required to read final published articles. Plan S is proposed to start on January 1, 2020.

We as editors of the three journals published by the American Society for Biochemistry and Molecular Biology (ASBMB)—*Journal of Biological Chemistry* (JBC), *Journal of Lipid Research* (JLR), and *Molecular & Cellular Proteomics* (MCP)—would like to communicate to our scientific communities that we support any and all efforts to make scientific advances readily and rapidly available to scientists. Indeed, JBC, JLR, and MCP have acted according to this fundamental creed for the past 20 years, making accepted manuscripts in our journals immediately available at no cost via our “Papers in Press” (as we call them, PiPs) mechanism. We vow to continue disseminating accepted manuscripts as PiPs for the foreseeable future.

Nonetheless, PiPs have not been through the full stages of preparation of a final manuscript. PiPs are scientifically vetted through a rigorous review process, quality control of the data and images, and editorial enhancements for clarity of messaging, which distinguishes them from preprints. But, before a paper is deemed publication-ready, in the state that will become part of the indexed, searchable journal content, there are several more steps: checking all references and scientific nomenclature, introducing hyperlinks and metadata to enhance the usefulness of a paper, and presenting the paper in a well-formatted state helpful to readers. These enhancements represent key parts of the current system of preparing papers for final publication, and they add value to the final paper.

The question that arises in the future envisioned by the Plan S coalition is: Who pays the bill for the various stages of preparing a paper for publication? To date, subscription revenue has covered the majority of costs for many journals like JBC, JLR, and MCP. A subscription provides immediate access to the final published papers; at JBC, JLR, and MCP, our papers become fully open access after 1 year, in keeping with the NIH guidelines. In many cases, libraries at academic or industrial institutions hold subscriptions to provide immediate access for their research communities and thus are carrying much of the publication cost.

Immediate open access of the final version, as proposed by Plan S, abolishes the revenue generation possible from subscriptions. Article processing charges (APCs) can be used to offset the loss of subscription revenue. Indeed, some journals (including ours) already do employ author fees to offset a small fraction of costs incurred from review, image analysis, and redaction. However, putting all charges into an APC would lead to a prohibitively high per-article cost for most authors running their research labs on typical grants. Furthermore, the Plan S coalition has proposed a limitation on how large an APC can be paid from funds provided by the funding agencies that signed on, although this cap has not been determined yet. Suffice it to say that the jury is out on the new financial models that could sustain publishing if and when Plan S-like policies take effect. The Plan S coalition does understand that these issues have a profound impact on society publishers. Currently, ASBMB is working with the Plan S coalition to develop transformative plans.

Where does this put ASBMB publications? We have written this editorial to assure our authors and readers that we agree with the goals of immediate open access. Our only caveat is that the methods to accomplish it must not undermine the quality control that is the guardian of rigorous, reproducible, reliable published papers. Presently, PiPs is the mechanism employed by JBC, MCP, and JLR to distribute scientific results openly and with immediacy. However, we are also weighing the benefits of all steps in our publication workflow to ensure that we can maintain quality while not overburdening authors and readers financially. As society journals (1), we are not required to make a profit and are not answerable to stockholders or boards of directors. However, we realize that technological advances in web-based publishing and a shifting cultural expectation from readers may lead to a sea

change in scientific publication. We have been looking toward new approaches to scientific publishing for some time (2, 3), and, as always, we seek to be early adopters of any innovations that will help our readers and authors and the global community of biological chemists to further their science.

Time will tell how this all shakes out! But, trust in your ASBMB journals and join us in seeking desirable outcomes for science to thrive!

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