What Happens When You Submit a Paper to JBC?

F. Peter Guengerich, Deputy Editor, and Lila M. Gierasch, Editor-in-Chief

A great deal rides on the outcome of a paper submission: The path of science may be significantly impacted by publication of a paper, the careers of scientists are influenced by publication records, and funding decisions can be affected by papers published. Yet authors, particularly new authors, may lack an understanding of the editorial process their papers enter upon submission. Our goal in this editorial is to demystify the editorial process at the Journal of Biological Chemistry (JBC).

What happens when you click that “submit” button? Manuscripts first come to the attention of the JBC staff in Rockville, Maryland, who check that all elements critical for review are present, including all sections of the paper, figures, supplemental data, etc. The task of preparing your paper to pass these checks has been greatly simplified this year in response to author feedback; we’re now offering more latitude on the style of your initial submission so that you can get feedback on your science without getting bogged down in formatting issues. The turnaround time in Rockville is less than a day, which is quite impressive, given that ∼5,000 new manuscripts are submitted to JBC each year. Next, your paper is passed on to a member of the editorial leadership team—Editor-in-Chief Lila Gierasch, Deputy Editor F. Peter Guengerich, or Co-Editor Herbert Tabor—who decides which Associate Editor is best equipped to manage the review. You may suggest an Associate Editor, and your suggestions are usually followed, unless someone is unavailable or overloaded. Manuscripts are assigned daily, so there is minimal delay at this point.

In terms of the critical review of the science in your manuscript, the Associate Editors are the nexus for the review process. JBC Associate Editors are research-active scientists with expertise in particular areas as well as a broad view of science so that they can critically assess the significance of research in established and emerging fields. There are 25–30 Associate Editors serving at any time (see http://apps.asbmb.org/JBCboard/default.aspx), and they are your conduits to the publication process at JBC.

Upon receiving an assigned manuscript, the Associate Editor reads over the author’s cover letter and the manuscript and decides whether to send the manuscript out for review. At JBC, only a small fraction of submitted papers (less than 10%) are not recommended for review, in most cases because the Associate Editor views the manuscript to be outside the biological chemistry field and/or better suited to a more specialized journal. When the Associate Editor decides a manuscript should be reviewed, he or she selects reviewers with the goal of obtaining an unbiased and well-informed review. Typically two reviewers from the Editorial Board (EBMs for short, see http://apps.asbmb.org/JBCboard/Default.aspx?Members=ebm for a full list) are invited. Authors may suggest reviewers who have appropriate expertise, with preference for Editorial Board members, or restrict certain individuals from the review. On occasion, reviews are solicited from experts who are not members of the Editorial Board, and in some cases more than two reviews are sought. Some journals regularly solicit more than two reviews in manuscript evaluation, but we at JBC have found that our system of manuscript evaluation, which includes deep involvement of the Associate Editor in the review process, careful vetting and selection of Editorial Board members, and ongoing training and exchange of information and insights among the Associate Editors and Editorial Board members, effectively balances thorough, consistent review and expeditious handling of the review process.
Reviewers address key questions including: How significant is the work and does it make a novel contribution to the field, are experiments rigorously performed, do the results support the conclusions drawn, and is the manuscript clearly written with full presentation of data and methods? Their responses and detailed written reviews guide the Associate Editor’s decision on the fate of a manuscript. Reviewers are given a deadline of 2 weeks to complete their review for a Regular Article and 5 days for an Accelerated Communication. The timeline for reviews leads to the current average time from submission to first decision of 21 days for Regular Articles and 12 days for Accelerated Communications.

The possible decisions an Associate Editor may make when reviews come in are to accept your manuscript with no changes or only minor revision (i.e. without a second review; approximately 20% of submitted manuscripts), to recommend major revisions (frequently with additional experiments), or in some cases, where referees have identified more systemic problems that may be difficult for the authors to address, to reject the manuscript. Clearly, the outcome of this set of possible scenarios makes all the difference to authors. Authors should recognize that the Associate Editors weigh these decisions carefully and adjudicate on the basis of the evaluations of the reviewers, as well as their own assessment of the paper. For example, a paper may be scientifically sound, with clear description of procedures and results, but not achieve the level of significance required for publication in JBC. Because this decision is a pivotal one, an Associate Editor does not make it lightly. In cases in which the two referee reports express similar opinions about a manuscript, the decision of the Associate Editor is relatively straightforward. When the opinions are split, the Associate Editor can use one of several approaches to reach a decision. The Associate Editor may contact the reviewers to clarify comments or questions raised in light of the other referee report. Another option is for the Associate Editor to request reviews from an additional referee. Ultimately the choice of what action to take is up to the Associate Editor. Authors should not expect that the fate of the manuscript is a simple synthesis of the recommendations of the two reviewers. For instance, the reports may come from referees with rather different technical expertise, or one might have overlooked a fatal flaw that another saw. If a revised manuscript is invited, and the revisions that were recommended are major, it will be re-reviewed before the next decision is made. To prevent a drawn out process of repeated revisions, JBC generally allows only a single major revision of a manuscript, and reviewers are given 7 days to return reviews on revised manuscripts.

At JBC, authors work closely with their Associate Editor over the course of the review process. This partnership is now being explicitly recognized by including on published papers the name of the Associate Editor who handled the review of the manuscript. Moreover, the Associate Editors are fully invested in the biological chemistry field. They care both about the vigor of our field and its scientists and the soundness of the science published in JBC, which represents a pillar of the field. Indeed, all the scientists involved in the editorial process at JBC are deeply committed to a constructive, fair, and transparent review process that provides clear feedback to authors. Associate Editors are always willing to engage in a dialog with the corresponding author about editorial decisions in order to clarify any aspect of the review process or to consider possible grounds for rebuttal/appeal of the initial decision. Such dialogs are generally best conducted in writing via email in order to keep a record of the information exchanged. Nonetheless, there will inevitably be instances when authors might wish to have additional editorial opinions solicited beyond the Associate Editor handling their manuscript, particularly if they feel some part of the process was flawed. Toward that end, we have recently established an Appeals Committee, and an author request to the Editor-in-Chief will trigger an examination by this committee of the review of the manuscript in question.

These robust and efficient practices have served the JBC community well; the impact of having a publication in JBC is heightened by the confidence a reader can have in the review process and the standards for presentation of high quality data with full statistical analysis. JBC is responsible, along with the authors, for the integrity of the data we publish. We have staff in the Rockville office that can be called upon to check figures for evidence of any impropriety. Checks will be done if an Associate Editor or reviewer suspects a problem during the review process. If a problem is detected, we will either decline the manuscript or ask the authors to provide the original image data files, depending upon the severity of the problem. We also check figures in a proportion of the manuscripts we accept. In the event of a major problem, we may request original data or initiate the withdrawal of an accepted paper prior to full redaction. If we receive a message questioning the integrity of data appearing in one of our published papers, we are obliged to analyze it. In cases where data integrity has been questioned, we may request original data files to compare and examine. In the most serious cases, we may ask for withdrawal of a published manuscript or print a retraction, pending the approval of the ASBMB Publications Committee. Although we at JBC are committed to tracking down bad data in submitted or published papers, we’d prefer to
confidently endorse the data we’re publishing; toward that end, we are undertaking a major effort to educate potential authors about proper methods to process image data. For example, we have introduced a new series in ASBMB Today called Due Diligence (see https://www.asbmb.org/asbmbtoday/201701/DueDiligence/ for the most recent installment).

Once your submitted manuscript has navigated all the stages of the review process at JBC and has been accepted, things happen quickly! Your paper will appear as an open-access Paper in Press, usually on the same day it was accepted. This emphasizes JBC’s commitment to publish high quality scientific reports of significant new findings rapidly and freely available to the entire scientific community, without a delay of up to several weeks for a manuscript to go through the redaction process. In addition, top papers may be selected as Editors’ Picks, which will be highlighted in emails and on the journal’s homepage. Other efforts to publicize your work are being launched at JBC, so stay tuned for these.

The JBC editors take pride in providing an efficient review process carried out by scientists who are committed to the authors of JBC and to the quality of papers it publishes. We hope that this editorial has provided insights and information to de-mystify the JBC review process. If you have any questions, please contact JBC at jbc_feedback@asbmb.org. Also remember that when you submit to JBC, you join a community of authors that includes many Nobel laureates, members of the National Academy of Sciences, and distinguished scientists from across the globe who care deeply about conducting research that illuminates a mechanistic understanding of life processes and communicating results that stand the test of time.