Different Forms of Peer Review

Speakers:

Adam Etkin
Founder and Manager Director
PRE Peer Review Evaluation
Needham, Massachusetts

Jody Plank
Rubriq Product Manager
Research Square
Durham, North Carolina

Chi Van Dang
Professor and Director, Abramson Cancer Center
University of Pennsylvania
Philadelphia, Pennsylvania

Moderator:

Julie Nash
Senior Partner
J&J Editorial
Cary, North Carolina

Reporter:

Michael Di Natale
Aries Systems Corporation
North Andover, Massachusetts

Recently, several high-profile cases have brought attention to potential flaws and difficulties within the traditional model for peer review. This has led to an increased interest in alternative models and support for peer review, which was the focus of this session, covering topics such as peer review evaluation, independent peer review, and open peer review. Each speaker offered a unique summary of the work he or she has done and continues to do within the peer review process, showcasing some exciting options sprouting up along the traditional path.

Adam Etkin, of PRE Peer Review Evaluation, was the first speaker. He described the current state of peer review and the general criticisms arising from recent cases of fraud and bad science reaching publication, as well as concerns over the ability of individuals to “game” the existing system. PRE has developed a service called PRE-Val for sharing information related to the peer review a submission has gone through and allowing publishers to present this analysis alongside the published submission. Etkin hopes this will help establish trust and transparency in the peer review process.

Etkin confronted what he called “the myth that peer review is broken”, noting that “bad apples spoil the bunch.” However, Etkin said that most still believe that peer review is helpful and a consideration when selecting where to submit. This is where PRE-Val comes into play.

The service leverages metadata from the submission system to confirm the paper has undergone peer review in the manner advertised by the publisher, providing independent third-party verifications of the peer review process at the journal and article level. PRE runs the collected data through their process and provides a badge for the submission to the publishing platform via an application programming interface. The badge can be placed anywhere the publisher wants a signal of peer review to be present (e.g., journal article page, search results, aggregator sites, article metric pages). The content exposed by the badge is determined on a case-by-case basis with the publisher.

Rubriq and its efforts to provide independent peer review were the next topic covered. Jody Plank, Rubriq product manager, explained that Rubriq offers a rigorous, double-blind review of manuscripts within a two-week period using reviewers with a published track record of expertise in the area covered by the paper. The reviews are generally conducted before submission; the intention is for a round of presubmission peer review that improves an article prior to submission.

“Presubmission peer review is not super novel,” said Plank. “Anyone who’s been in a research lab knows that people share their paper with friends and fellow researchers ahead of time, but it can be hard to rely on friends to give an honest opinion—some people like to be nice to friends. Independent services can provide honest feedback and allow authors to make a great first impression at their top-choice journal.”

A big difference between Rubriq’s model and most instances of professional peer review is that Rubriq’s reviewers are compensated for their work. Each reviewer receives a $100 honorarium, which he or she can choose to keep or donate to charity. Plank acknowledged that not all academics are in favor of this practice.

Rubriq currently boasts a network of nearly 4,000 reviewers and uses three for each submission reviewed. All reviewers hold doctoral-level degrees or tenure-track professorship in their fields. If Rubriq’s pool does not meet the requirement for an area, new reviewers with appropriate expertise are recruited.

For consistency, Rubriq reviews are performed using a scorecard as an assessment tool and guideline for reviewers. The scorecard offers both quantitative evaluation and qualitative commentary because reviewers need to justify the selections they’ve made on the scorecard. Reviewers rate items using checkboxes, and space is available for commentary specific to each point. The end product is a report provided to authors with scores broken down across categories and with comments aggregated by section.

The final topic of the session was open peer review. Chi Van Dang spoke of his experiences as a member of the eLife’s Board of Reviewing Editors. Dang explained that eLife has worked to diminish the presence of the “vicious reviewer”—a reviewer who may attack an author’s work rather than provide constructive feedback. At eLife, if you want to serve as a reviewer, your name will be shared with other reviewers. This, Dang said, helps mitigate the influence of vicious reviewers because their comments will be seen by their peers in the field. This openness in the review process extends to the publication; the major points from the decision letter after peer review and author responses are published with the paper.

(continued on page 92)
Ethics Clinic: Failure to Produce Data

Moderator and Speaker: Debra Parrish
Founder
Parrish Law Offices
Pittsburgh, Pennsylvania

Reporter: Ruth Einstein
Senior Production Manager
Wolters Kluwer
Baltimore, Maryland

The accessibility of research data is a complex issue that much of the scholarly community is trying to unravel and respond to. As this occurs, many journals’ policies around data availability, sharing, and retention are evolving. One component of this issue is the number of recent research misconduct cases that have involved allegations of data fabrication or falsification, which subsequently revealed that many of the coauthors never saw the data, and for which the data are no longer available. This need for original data, to confirm the integrity of a published article, raises questions regarding the obligation of coauthors to review supporting data even when they are not the author generating it, and to produce it when questions arise. During the Failure to Produce Data session, we were separated into two groups, given two such cases, and asked to consider questions around our expectations for data availability, our understanding of coauthors’ responsibility to confirm and retain data, and our opinion on what a journal’s response should be in these situations.

In the first scenario, an editor of a journal received allegations of misconduct related to a published article. When the editor contacted the author group, it became clear that the coauthors never reviewed the raw data, and the author responsible for the data wouldn’t share because he alleged it was secured from a confidential source. Upon further inquiry, the editor discovered that the affiliated university found research misconduct in two other articles coauthored by the same person and has determined his body of work is suspect based on a pattern of conduct and lack of evidence that data existed in multiple instances. When coauthors of some of the older published articles, some published 15 years earlier, were asked to produce anything that would support the existence of the original data or the collaboration, they protested, citing the length of time since the publication.

In parsing through this scenario, members of the group I was in said that they would want to assess the journal’s current policy on data sharing and accessibility, as well as the policy in place at the time the article was published to determine whether the author was in breach of either. We found that among the group, the journals represented had varying policies on data sharing, but everyone felt that if there were allegations of misconduct or fraudulent findings, the authors should be expected to produce the research data used. Debra Parrish, the moderator, shared with us that legally, the institution’s lead in this case and likely publish an Expression of Concern (EOC) to identify the possible misconduct and ongoing inquiry. We also discussed that the Committee on Publication Ethics (COPE) expectation of EOCs is that these are resulting in a retraction of the referenced article(s) or of the EOC once the inquiry has completed, but what we heard from the experience of the group was that many have seen institutions drag out inquiries for years and never conclude in decisive findings.

The second scenario examined an author group of an article published one year earlier in a journal with a policy that requires authors to share data if requested by another researcher. A researcher contacted the journal office to let them know that she hadn’t received the data as she’d requested. The author group responded that they were planning to provide, but that their current workload was keeping them from doing this quickly. The question we were asked to discuss for this scenario was “What steps, if any, would you take as an editor?”

As we discussed this scenario and the question put before us, we came up with more questions than we did decisive answers. For example, can or should journals act as mediators, requiring authors to supply data when requested by a third party? Aren’t some raw data difficult to produce in a usable or easily read format, and if so, isn’t there time and cost involved in reproducing it for that? Should the journal policy be more specific, identifying the expectation of timeframe for sharing requested data, and if so, what punitive measures should be in place? Beyond these questions, my group also discussed how some journals have statements collected from authors on whether they’d be willing to provide raw data or statistical code, and perhaps this type of policy reduces the number of authors who don’t comply with sharing because they’ve volunteered to do so. And, perhaps, a scenario such as this advocates for open data, requiring authors to publish raw data (whether through a repository or other means) with their article, to take the journals out of the mediator role.

continued (from page 79)

According to Dang, participation rates for optional open policies have been positive. By the numbers, 95 percent of eLife authors choose to have their decision letter and responses published along with their submission, 23 percent of reviewers agree to share their names with authors, and 80 percent of reviewers agree to share their names with another journal in the event of a rejection if passed onto another journal.