

Editorial

Academic Journal Peer Review and a Hearty Thanks to Our Reviewers

Peer reviewers are the unsung heroes of academic publishing. It is truly a labor of love and deeply appreciated by editor-in-chiefs of biomedical journals.¹ Scientific journals have a mission to inform (advances in the field, original research) and instruct (review articles, optimal clinical techniques), so above all else, an editor is concerned with the quality and accuracy of published articles.² To ensure this, assessment of manuscripts submitted to academic journals by individuals with expert knowledge on the subject presented in a paper are critical. It is an important process that most readers of a scientific paper think little about.

Recently I was looking at Scholastica blogs (academic journal publishing platform) discussing peer review (<https://blog.scholasticahq.com/>), while assessing software programs to help manage author article submission and peer review (PR).³ I had to chuckle when reading a PR experience comment which ran something like this: “1) receive prospective article from author, 2) search for someone to review said article, 3) wait 1-6 months for a response from prospective reviewers, expect a 50% decline rate, 4) ask someone different, 5) wait another 1-6 months, 6) hound those who agree to submit responses in approved format for 1-6 months, 7) get prospective author to edit article according to reviewer comments, 8) hopefully publish the article; time elapsed 3 months to 1.5 years!”⁴ Although this has a bit of hyperbole to it, there are certainly elements that ring true. This got me to thinking about the importance of our hard-working peer reviewers, PR protocols in general, and to delve into it more deeply for this editorial so AJTCVM readers could understand the process.

Reviewer critiques are an important part of the scientific process and help editors decide which manuscripts are suitable for their journal. Its beginnings, documented as early as 1665 by the Royal Society (*Philosophical Transactions*), were to ensure accuracy and quality through scrutiny of an article by outside experts.² Since then, peer review has become an established part of the academic publishing process with increasing use beginning in the 1940's.^{1,2,5} Exterior review has had its proponents but also its critics through the centuries. As an example, Jenner's article for publication on his seminal smallpox vaccination work was rejected by the Royal Society based solely on biased external scrutiny; and thus the Royal Society was not associated with one of the most important medical discoveries of the 18th century.²

Even taking into consideration some of the downsides of peer review (e.g. bias, publication delays), its considerable benefits have now established it as an intrinsic part of scholarly work. To reduce some of the negative aspects of PR, there are groups that have published guidelines for ethical conduct of peer review.^{6,7} The process facilitates a fair hearing for a manuscript among members of the scientific community and helps authors and editors improve the quality of papers.⁶ In a large scale international study, 4,037 (out of 40,000) authors of research papers from 10,000 journals completed a survey about their PR experiences.⁸ The results found that the PR process is highly regarded by most researchers and considered to be essential to the communication of scholarly research. Of interest, nine out of 10 authors responded that PR improved the last paper they had published.

There are three key roles in peer review: the authors who write the papers, the reviewers who provide expert opinions and the editors who make the final decisions.⁹ The fundamentals of PR and following best practices, as recommended by several medical editor and publication ethics groups, hold true across journals, but PR models can vary widely.^{5-7,10} Traditional peer review involves two to three reviewers for each manuscript and is based on consensus. The 3 most common types of PR involve single-blind, double-blind, and open review.⁹ In the single-blind review, the reviewer knows author identity, but the author doesn't know reviewer identity. This is the most common PR system across science disciplines.⁹ Benefits include allowing reviewers to provide honest, critical reviews without fear of reprisal from the authors. Problems include lack of accountability, which can allow a reviewer to submit unwarranted negative reviews and bias resulting from knowledge of author identity. Double-blind review blocks the identity of both reviewer and author. Bias resulting from knowing author identity is eliminated, however, reviewers can commonly guess author identity, and information important for complete critical appraisal (competing interests) is missing.¹¹

Open review removes blinding of authors and reviewers and may include the reviewer name and report alongside the published paper. This system affords greater accountability, public credit to reviewers, and helps readers assess PR quality. Revealing reviewer identity, however, sometimes leads to animosity from authors and reluctance of potential reviewers to critique manuscripts. Collaborative peer review is still another variation to

eliminate problems with open review. Journals such as *Frontiers* regard reviewers and authors as part of a social network where the author corresponds with the reviewer indirectly. The system is not lowering quality standards; rather it's saying author, reviewer and editor can work together more positively towards making articles publishable where possible.^{5,9} Other journals, such as *PLoS One*, *Scientific Reports* and *Peer J*, use a peer review process that solely judges the scientific and methodological validity of a manuscript and will publish all papers that meet the necessary standards of scientific rigor. This avoids loss of good quality studies to publish only groundbreaking research as seen in journals, such as *Nature* or *Science* with a very high volume of submissions.⁹

So, what are key factors that motivate scholars to peer review? Most individuals embark on PR with little to no formal training. Additionally, learning how to write consistently constructive peer review comments and navigate between numerous pitfalls (e.g. too critical, too vague, too open-ended) takes time and practice. In a 2015 peer reviewer survey, the top 2 reasons given for peer reviewing were: 1) to play a part in the scholarly community (93% respondents), and 2) to reciprocate for others reviewing their work (75%).¹² Other benefits that have been cited include improving critical thinking, giving/receiving feedback, gaining insights that improve writing skills and developing relationships with journals and editors.¹³ An improved PR process is also aided by editors providing guidance documents listing manuscript qualities important for their publication, not overly burdening reviewers with poorly written papers, and pairing manuscript subject with reviewer expertise. There are also some articles and online PR training that are now offered that reviewers can use to improve their PR skills.⁹

Academic journals, such as AJTCVM, depend on the hard work of these volunteer reviewers. All papers published in our journal, with the exception of the editorial, are peer reviewed. Currently, when a prospective paper is first received, a decision is made as to subject suitability. Next, the editorial staff decides whether the article is written well enough to go directly to peer review or if it needs to go back to the author for revision. Once the paper is ready for PR (single-blind), two reviewers with specialized knowledge on the category of paper are selected. If the paper is not approved by both reviewers, a third independent reviewer evaluates the paper. Once a paper is approved by consensus (reviewers and editor), the author sees the reviews and works with the editorial staff and many times with the reviewer indirectly to attain a publishable quality paper.

Although all journals agree reviewers should receive recognition for their contributions, reviewer acknowledgement remains rudimentary with debate on whether some forms, such as monetary recognition, may contribute to bias. Additional suggestions have included payment in kind (subscriptions, journals), publishing reviewer names with

a thank you each year, or awarding continuing education credits.^{1,5,13,14} While AJTCVM is considering the various forms of recognition, we would like to first start with acknowledging the contributions of the many peer reviewers to our journal. They are an intrinsic part of the scholarly work that goes into the production of clinical and research articles each year. In the February 2025 issue, we would like to thank the talented individuals that have served as peer reviewers for AJTCVM articles over the past years and going forward, we will recognize reviewers that have served over the previous year in the February journals. I would also like to invite those of you who have an interest in serving as a reviewer to contact me (saijk@watecvm.org). We are always looking for talented, knowledgeable individuals to join our publishing team!

THANK YOU PEER REVIEWERS!

Judith E Saik DVM, DACVP
Editor-in-Chief, AJTCVM

REFERENCES

- Fortier L. Reviewing is rewarding! Introducing our Scientific Review Board and continuing education credits for reviewers. *JAVMA* 2023; 261(1):7. <https://doi.org/10.2460/javma.261.1.7>
- Lock S. A Difficult Balance: Editorial Peer Review in Medicine. Nuffield Trust 1985:1-5. www.nuffieldtrust.org.uk
- Peer review. Scholastica blogs. Scholastica Academic Publishing Software and Services. https://blog.scholasticahq.com/search/?q=peer%20review&hPP=10&idx=prod POSTS_new_fields&p=0&is_v=1
- Mary. What does 'peer review' mean anyway. Scholastica 2011. <https://blog.scholasticahq.com/post/what-does-peer-review-mean-anyway/>
- Smart P. Unpacking the many models of peer review new and emerging: Interview with Pippa Smart. Scholastica 2020. <https://blog.scholasticahq.com/post/models-peer-review-new-emerging/>
- International Committee of Medical Journal Editors. Recommendations for the conduct, reporting, editing, and publication of scholarly work in medical journals. Updated January 2025. <http://www.icmje.org/recommendations/>
- Hames I. COPE ethical guidelines for peer reviewers. Committee on Publication Ethics 2013. https://publicationethics.org/files/Ethical_guidelines_for_peer_reviewers_0.pdf
- Mulligan A, Hall L, Raphael E. Peer review in a changing world: An international study measuring the attitudes of researchers. *J Am Soc Inf Sci* 2013; 64(1):132-161. <https://doi.org/10.1002/asi.22798>
- Wilson J. Peer Review: The Nuts and Bolts: A Guide for Early Career Researchers. London, UK: Sense about Science 2017. <https://senseaboutscience.org/wp-content/uploads/2016/09/peer-review-the-nuts-and-bolts.pdf>
- Squires B, Fletcher S. The World Association of Medical Editors (WAME): Thriving in its first decade. *Science Editor* 2005; 28(1): 13-16. <https://wame.org/WAME2015/Download/WAMETHrivinginitsFirstDecade.pdf>
- Hames I. Peer review golden rules and good practice checklist. *Sci Ed* 2016; 3(1):36-42. <http://dx.doi.org/10.6087/kcse.61>
- Peer review in 2015: A global view. Taylor & Francis Group. <https://authorservices.taylorandfrancis.com/wp-content/uploads/2022/11/White-paper-Peer-Review.pdf>
- 2018 Global State of Peer Review. Publons 2018. <https://doi.org/10.14322/publons.GSPR2018>
- Padula D. 4 ways journal publishers are recognizing peer reviewers. Scholastica 2016. <https://blog.scholasticahq.com/post/journal-publishers-recognizing-peer-reviewers/>



AJTCVM Peer Reviewers

AJTCVM thanks the many reviewers that have helped authors through manuscript review by sharing their clinical expertise and scientific knowledge. As part of our academic publishing process these individuals ensure research accuracy and significance of clinical techniques that AJTCVM publishes.

Antonio Alfaro	Signe Beebe	Tatang Cahyono
Joyce Carnevale	Connie Clemmons Chevis	Cheryl Chrisman
Roger Clemmons	Cynthia Courtney	Curtis Dewey
Constance DiNatale	Sarah Eaton	Lisa Ebner
Bruce Ferguson	Pauline Fong	Margaret Fowler
Shining Guo	Lorrie Hale-Mitchell	Joyce Harman
Dan Hawkins	Donna Hein	David Hirsch
G. Reed Holyoak	Songhua Hu	Janice Huntingford
Kristina Irwin	Min Su Kim	Ronald Koh
Cynthia Lankenau	Aituan Ma	Emily Mangan
Allison Marshall	Erin Mayo	Larry McCaskill
Cynthia McDowell	Mitch McKee	Anna McQuaid
Carolina Medina	Mushtaq Memon	Erin Miscioscia
Amelia Munsterman	Emily Parsons	Carla Pasteur
Harvey Ramirez	Jennifer Repac	Phil Rogers
Neal Sivula	Laura Smith	Karen Spracklen
Weerapongse Tangjitjaroen	Mitsie Vargas	Janet Varhus
Lindsey Wedemeyer	Cynthia West	Julia Wuerz
Susan Wynn	Huisheng Xie	Madeline Yamate
Wendy Ying	Jianliang Zhang	Jose Zilberschtein

Peer Reviewer Guidance⁹

Elsevier Researcher Academy: Certified Peer Reviewer Course: <https://researcheracademy.elsevier.com/navigating-peer-review/certified-peer-reviewer-course>

PLOS Reviewer Centre: <http://reviewers.plos.org/>

Publons Academy: <https://publons.com/community/academy/>

Nature Masterclasses: Focus on Peer Review: <https://masterclasses.nature.com/focus-on-peer-review-online-course/16605550>

Wiley: How to Perform a Peer Review: <https://authorservices.wiley.com/Reviewers/journal-reviewers/how-to-perform-a-peer-review/index.html>

SAGE Journals: Reviewers Guide: <https://us.sagepub.com/en-us/nam/how-to-review-articles>