

RUTH D. WILLIAMS, MD

Learning Peer Review

During the pandemic, instead of attending meetings and socializing with our friends, many ophthalmologists bought a Peloton, watched “Emily in Paris,” and went on long walks. We also wrote a lot of academic papers. A survey of ophthalmologic scientific journal editors found that submissions increased by an average of 42% during the two years of the pandemic compared with the two previous years.¹ Many of these articles were expedited COVID-related content, but many were submitted because researchers finally had the time to finish a paper. Naturally, this increase in papers necessitated an increase in peer review volunteers.

Not only is there a need for more reviewers, the expertise required is increasingly specific. For instance, many papers use large datasets, AI, or data registries like the IRIS Registry; the field of data science continues to grow; and research methodology is more complex. “Editorial review of the data science in a paper is often necessary, and there are a limited number of people with such expertise,” said Emily Chew, editor of *Ophthalmology Science*. In addition, as Henry Jampel, editor of *Ophthalmology Glaucoma*, noted, “Some papers require competent reviewers for submissions dealing with health economics, and those people can be hard to find.”

Furthermore, the review process now often requires input from people with expertise in equity and diversity issues. Like data science and health economics, equity research has also become a primary scientific discipline. And now that this is the case, ensuring that published research follows the principles of equity research is proving to be a challenge. Henry reports that editors are discussing “health equity tourism,” which is when investigators turn to health equity research without developing the necessary scientific expertise.²

Both Emily and Henry note that the most difficult aspect of the review process is finding competent and timely reviewers. How might we increase the pool of reviewers? Henry assigns manuscripts to Wilmer residents and analyzes their reviews. Not only is this a great way to teach ophthalmologists how to be good reviewers, but he also uses their performance to praise them when writing letters of recommendation. He suggests that we consider incentives for getting peer review training. Recently, *Ophthalmology* editors sent out an email asking for new peer review volunteers. Emily thinks we

might be surprised by who is willing to do this work. “Even if new recruits aren’t as sophisticated in their approach,” she said, “they can be trained and mentored.”

Matilda Chan, a cornea specialist at the University of California, San Francisco, proposed a peer review training program as her Leadership Development Program (LDP) project. Her idea was timely because several editors of major ophthalmology journals, including Russ Van Gelder, the editor of *Ophthalmology*, along with Mike Chiang, director of the NEI, are developing a Consortium Training Program for aspiring reviewers. The two-year training will include a curriculum, a mentorship program, and participation as a reviewer for a major ophthalmic journal. Participants will be assigned to complete a number of reviews per year, which will be critiqued by seasoned reviewers.

Young ophthalmologists often ask how to get on the podium or on a specialty society’s committee. While volunteering to do peer review is less immediately visible than speaking and committee work, it is a terrific opportunity to showcase analytic and organizational skills and to develop expertise. Young ophthalmologists with some training or interest in data science, health economics, or equity research can cultivate proficiency in one of these disciplines. Our journal editors will take note.

Perhaps the best reason for an ophthalmologist to become a peer reviewer is for the personal satisfaction of learning to read papers more critically, which makes journal reading more enjoyable.



Ruth D. Williams, MD
Chief Medical
Editor, EyeNet

1 <https://europepmc.org/article/pmc/pmc9054569>. Accessed Sept. 20, 2022.

2 www.statnews.com/2021/09/23/health-equity-tourists-white-scholars-colonizing-health-disparities-research/. Accessed Sept. 20, 2022.