Rethinking Peer Review in the AI Era

15-19 September 2025

Peer Review Week (PRW) 2025 will take place from **15–19 September 2025**, celebrating the essential role of peer review in upholding research quality and integrity. This year's theme, **"Rethinking Peer Review in the AI Era,"** invites a timely global dialogue on how artificial intelligence is reshaping the peer review landscape and the broader scholarly publishing ecosystem.

This theme was selected through a two-phase process led by the PRW Steering Committee. Nearly **30 ideas** were proposed and refined into four distinct categories, followed by a **global public poll** that attracted **894 valid votes** from researchers, editors, and publishing professionals worldwide. The most-voted theme – "Rethinking Peer Review in the AI Era" – as shown in Figure 1, reflects the community's deep interest in addressing both the opportunities and ethical complexities introduced by AI technologies in scholarly evaluation.
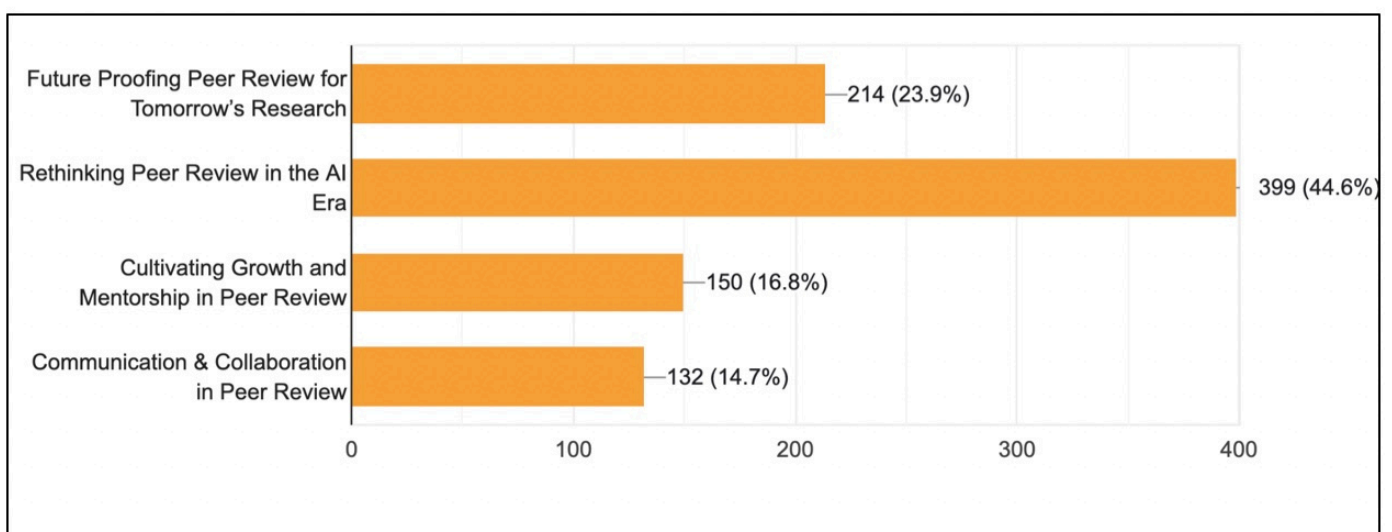

*Figure 1: *Results of global Peer Review Week theme poll*

Maryam Sayab, Co-Chair of the PRW Steering Committee 2025, said that "This year's theme represents an urgent and collective call to examine how AI intersects with research integrity, reviewer accountability, and transparency in publishing. Our goal is to empower the community to think critically and creatively about how peer review should evolve in this new technological era."

PRW 2025 will explore key questions, including:

- How can AI enhance, rather than undermine, reviewer integrity and transparency?
- What ethical guidelines should govern the use of AI in peer review?
- How can we train and support reviewers in the responsible use of AI tools?
- What aspects of peer review must remain uniquely human?

A Global Mandate: The World Votes on AI in Peer Review

This year's theme, "Rethinking AI in Peer Review," garnered significant global engagement, with 894 valid public votes demonstrating widespread international interest. Asia led in participation, reflecting its deep engagement, while Africa and Europe also showed strong representation, as shown in Figure 2. The Americas and Oceania contributed notable segments, underscoring the universal relevance of AI in scholarly evaluation and the diverse perspectives shaping this critical conversation.
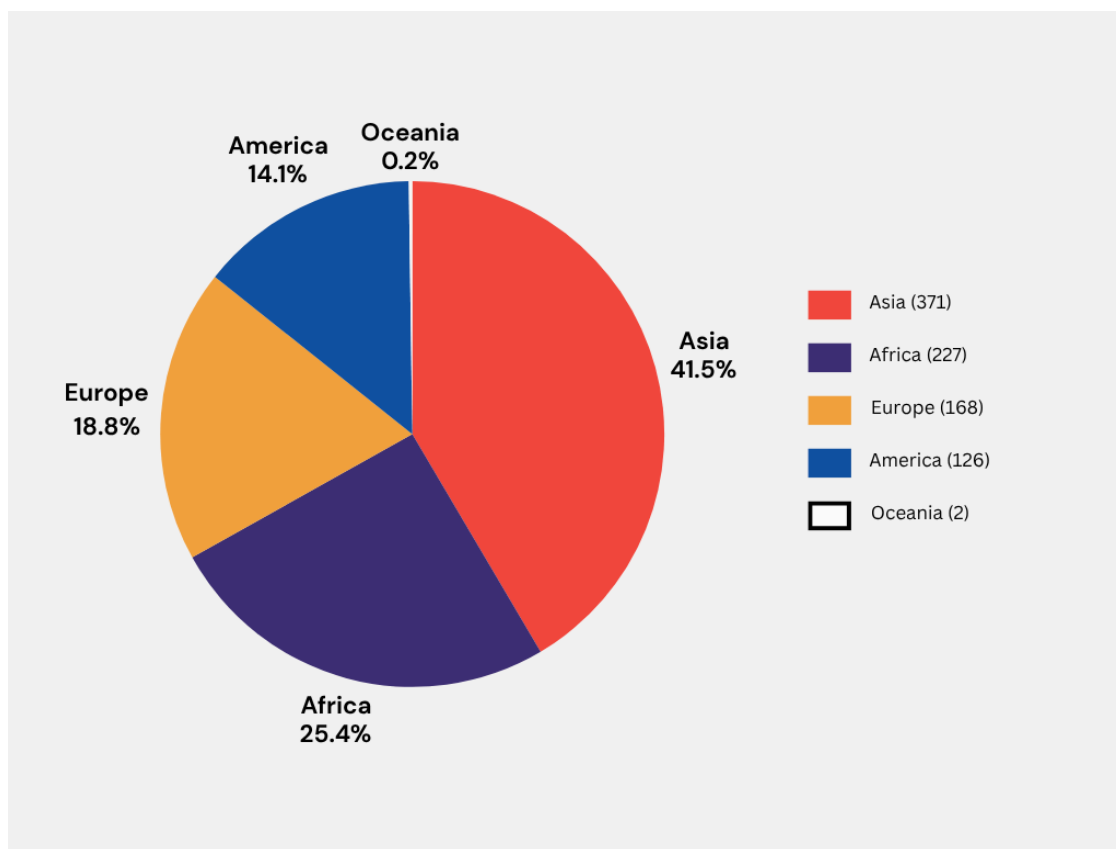

Figure 2: Distribution of Peer Review Week Theme Votes by Geographical Region.

As AI tools become embedded in editorial workflows, from reviewer selection and plagiarism detection to content screening and assessment, the scholarly community is being asked to rethink fundamental aspects of how knowledge is evaluated and validated. "A push toward prompt, effective, and constructive peer review seems to be dependent on embracing technology that can be trusted as being critical and reliable, rather than purely generative.", added **Maria Machado,** Co-Chair of the PRW Steering Committee 2025. "I believe that the most valuable outcome of integrating AI into peer review could be transforming the reviewer experience, making it more efficient and enjoyable, while increasing engagement."

Roohi Ghosh, Co-Chair of the PRW Steering Committee 2025, further adds "This year's theme is especially exciting; the conversation has moved beyond debating whether AI should be adopted; its integration is now an undeniable reality. Our focus must shift to reimagining peer review to transcend traditional methods, embrace AI's potential, and ensure that the process retains its essential humanity."

The week-long virtual celebration will feature a wide range of activities hosted by global organizations and institutions, including:

- **Webinars and Panel Discussions** on AI policy, peer review ethics, and evolving review models
- **Blog Posts and Articles** from experts in publishing, technology, and research
- **Videos and Podcasts** amplifying voices across disciplines and geographies
- **Workshops and Community Events** aimed at building literacy and engagement around AI use in peer review

"As a huge fan of online training, I'm particularly looking forward to the webinars this year. I'll get to learn more about all the new and exciting AI tools for peer review", noted **Gareth Dyke,** Co-Chair of the PRW Steering Committee 2025.

Participation is open to all - publishers, academic institutions, researchers, librarians, students, and technologists. Whether you're hosting a panel, writing a blog, or sharing your thoughts on social media, PRW welcomes all contributions. This is an opportunity to collaborate across borders and disciplines to shape the future of peer review in the AI era.

"Peer Review Week is more than a celebration; it's a platform to raise awareness, amplify diverse voices, and inspire meaningful change. In a joint statement, the **PRW Steering Committee** invited everyone to take part and help guide this transformation with responsibility, integrity, and vision.

To learn more, submit your activity, or explore the new Peer Review Week website at www.peerreviewweek.net.

We recommend and encourage using #PeerReviewWeek and #PRW2025 to join the conversation on social media and reach out for inquiries at contactprweek@gmail.com.