

JUNE 2025 • VOLUME 48 • NUMBER 2

# SCIENCE EDITOR



*A PUBLICATION OF THE COUNCIL OF SCIENCE EDITORS*

**IN THIS ISSUE:**

A MANUAL FOR AUTHOR GUIDELINES ADVANCING  
COMMUNICATIONS BETWEEN EDITORS AND INSTITUTIONS  
SCIENTIFIC COMMUNICATION IN A NEW US GOVERNMENT REGIME





## Operationalizes the **Data → Insights → Knowledge → AI Value Chain**

**20%**

of the World's research  
passes through Straive

**15,000+**

Data, Analytics,  
Knowledge, AI &  
Ops experts

**15+**

State hubs for social  
health & education  
data in the US

**50M+**

Data points across  
ESG, Capital Markets,  
Insurance, Compliance

**2 of 5**

US Students benefit  
from Straive's content,  
data & technology



[www.straive.com](http://www.straive.com)

[straiveteam@straive.com](mailto:straiveteam@straive.com)



## Together, we drive **progress for publishers**

Digital Science started in 2010 by looking for ways to solve challenges we were facing as researchers ourselves. Today, our innovative technologies empower organizations with insights, analytics and tools that advance the research lifecycle.

Through our different product solutions, we help publishers to discover trends, track research outcomes, streamline workflows, enhance author services, and make collaboration more seamless.

### Digital Science Solutions

Altmetric Dimensions Figshare Overleaf ReadCube Writefull

Discover how we can support you: [digital-science.com/publishers](https://digital-science.com/publishers)



Serving the world's largest publishers and Fortune 500 companies, Aptara's full-service content production accelerates information providers' transition from print to digital. From creation and design to new media enhancements and output for all digital devices and platforms, Aptara can leverage your business needs by creating innovative digital products that deliver content optimally while giving content providers renewed agility and revenue opportunities.

**Committed to  
delivering  
world-class  
solutions**



## INNOVATION THAT SETS YOU APART FROM THE REST

Our skilled professionals and industry veterans understand your brand requirements to develop customized content. Our proven track record ensures repeat business. Since we are chosen by industry professionals, we ensure:

- Top quality services
- Scalable and technological solutions
- Consistent on-time delivery
- Cost-effective content production
- 24 x 7 client support

### Our Areas of Expertise:

- K-20 Education
- Publishing & Conversion Services
- Corporate Learning & Performance
- IT Services
- Data Management Services
- Customer Lifecycle Management



## Services Offered



Digitization and/or conversion of legacy content



End-to-end services including Production Editing services for STEM, humanities, and trade publications



Automated page-charge collection process using SciPris



Automated Abstracts and Conference Proceedings into XML, PDF, Responsive HTML, and EPUB3



Editorial and publishing production services



Educational publishing to design preeminent programs in K-20 content space



Rights and permissions, plagiarism check, and content development



Animation development and voiceover audio services



Tagging video content for a consistent display, test-to-speech functionality and searchability



User-driven accessibility services



Back-office process support and project management services



+1 (703) 352-0001



[www.aptaracorp.com](http://www.aptaracorp.com)



2901 Telestar Court,  
Suite 522 Falls Church,  
VA 22042



[moreinfo@aptaracorp.com](mailto:moreinfo@aptaracorp.com)

**Council of Science Editors**  
**P.O. Box 7**  
**Mullica Hill, NJ 08062**

## *A True One-Stop Content Solution*



Peer  
Review



Copy  
Editing



Rapid  
Publication



Online  
Hosting



Print  
Services

**KGL** KnowledgeWorks  
Global Ltd.  
CJK GROUP

**KGL** PubFactory

**Sheridan**   
CJK GROUP

US | UK | India | Start your journey at [kwglobal.com](http://kwglobal.com)



# SCIENCE EDITOR

JUNE 2025  
VOLUME 48 • NUMBER 2

[www.CSEScienceEditor.org](http://www.CSEScienceEditor.org)

## EDITOR-IN-CHIEF

Jonathan Schultz

## MANAGING EDITOR

Beverly Lindeen

## ADVISERS

Patricia K Baskin

Barbara Gastel

## EDITORIAL BOARD MEMBERS

Tony Alves

Elizabeth Bales

Janaynne Carvalho do Amaral

Alyson Chapman

Dana Compton

Emilie Gunn

Bernadette Hromin

Kristin Inman

Jenna Jakubisin

Anna Jester

Leslie Neistadt

Amanda Norvelle

Jason Roberts

Rebecca Seastrong

COMPOSITION SERVICES Aptara, Inc

PRINTING AND BINDING Sheridan

MANUSCRIPT TRACKING Aries Systems, Inc

## BOARD OF DIRECTORS

PRESIDENT Emilie Gunn

PAST PRESIDENT Glenn Landis

PRESIDENT ELECT Brittany Swett

VICE PRESIDENT Erin Landis

SECRETARY Christina Bennett

TREASURER Jennifer Regala

TREASURER ELECT Chhavi Chauhan

## DIRECTORS

Amanda Ferguson

Kristin Inman

Peter Olson

EXECUTIVE DIRECTOR Heather Trivitz



[www.CouncilScienceEditors.org](http://www.CouncilScienceEditors.org)

## FEATURES

- 54 A Manual for Author Guidelines: Improving the Author Experience *Lauren A Koenig and Jillian Poland*
- 59 Advancing Communications Between Editors and Institutions: News from the Office of Research Integrity *Susan Garfinkel and Patricia Baskin*
- 60 Reimagining Peer Review: A More Efficient and Rewarding Approach *Ashutosh Ghildiyal*

## ESSAY

- 63 Scientific Communication in a New United States Government Regime: What We Need to Consider Now *Kristin S Inman*

## CASE STUDY

- 68 Transparency Principles and Best Editorial Practices: A Case Study of REMAT—Revista Eletrônica da Matemática *Greice da Silva Lorenzetti Andreis*

## INTERVIEW

- 74 Community is Key *Jonathan Schultz*

## WEBINAR REPORT

- 77 Driving the SDGs Forward: The Soft Power of Publishers *Eleonora Colangelo and Steven D Smith*

## MEETING REPORTS

- 81 Moving from Ideas to Implementation: Highlights of the 2025 Researcher to Reader Workshop on Peer Review Innovation *Tony Alves, Jason De Boer, Alice Ellingham, Elizabeth Hay, and Christopher Leonard*
- 85 The 2025 AAAS Annual Meeting: Storytelling and More *Abdurrahman Radwan, Francesca Landon-Harding, Madison Brown, and Barbara Gastel*

## DEPARTMENTS

- 88 CSE's Commitment to Diversity, Equity, Inclusion, and Accessibility: Staying the Course *Peter J Olson, Emilie Gunn, and Amy Ritchie Johnson on behalf of the CSE DEIA Committee and the CSE Board of Directors*
- 90 CSE Mentor–Mentee Profile *Erin Wunderlich*
- 91 CSE Recommendations: A Response to Recent U.S. Government Directives *Jill Jackson and Stephanie Casway on behalf of the CSE Editorial Policy Committee*

**On the cover:** This Science Editor cover features a watercolor and ink on paper illustration of “a cross section through an HIV virus particle (upper; red and purple) attaching to a host target cell (lower; blue and green) e.g. a CD4 T cell, a type of white blood cell found in the immune system.” The story of HIV/AIDS is devastating and hopeful: within most readers’ lifetimes, HIV/AIDS went from a horrific, almost certain death sentence, to a manageable disease that is close to being cured. If, or when, that happens, it will likely be considered an historic triumph of science and public policy. Then, in May, the Trump administration ended an important program working on an HIV vaccine. Fortunately, other countries appear to be continuing this essential work. **Credit:** HIV attachment, HIV viral life cycle, illustration. David S. Goodsell, The Scripps Research Institute. Source: Wellcome Collection. CC-BY.



[www.CSEScienceEditor.org](http://www.CSEScienceEditor.org)

Copyright © 2025 by the Council of Science Editors Inc. Opinions expressed by authors contributing to this publication are those of the authors and do not necessarily reflect the opinions or policies of the Council of Science Editors Inc or the Editorial Board of Science Editor. For more information visit [CSEScienceEditor.org](http://CSEScienceEditor.org).

# A Manual for Author Guidelines: Improving the Author Experience

Lauren A Koenig and Jillian Poland

Journal author guidelines are often the first line of communication between editors and authors, and they play a large role in determining the quality and volume of submissions received by an academic journal. Thoughtfully analyzing and designing author guidelines is crucial for research journals because it benefits both authors and editorial offices (Figure 1).

As user experience (UX) researchers at Wiley, we have cumulatively analyzed feedback from thousands of authors across research disciplines about the role of author guidelines in publishing. A consistent theme that emerged was that clear, well-structured author guidelines influence how favorably authors perceive a journal and where they will ultimately submit their manuscripts. Authors tell us that among journals with similar metrics, they tend to select a journal based on the clarity of their guidelines.

We also found that when authors are provided effective guidelines, it is easier for them to properly prepare their submissions the first time. For societies and publishers that encourage manuscript transfers between journals, standardized guidelines simplify the transfer process, making it easier for authors to compare requirements and choose whether to accept a transfer.

Subsequently, the editorial office receives fewer requests for help, spends less time sorting through improperly prepared files, and returns fewer manuscripts for corrections. This decreases the overall time from submission to publication of the final article.

We have developed strategies to enhance both the content and design of author guidelines to help editors reap

these benefits. In this article, we will walk you through key steps to improve your guidelines, as well as how to maintain them and manage changes to ensure they remain effective for years to come (Figure 2).

## The (Re)Writing Process

Authors across disciplines and with varying degrees of publishing experience will come to your journal with different needs. These authors must sort through a variety of requirements when preparing their submissions, depending on the kind of research data they generate and the type of article they want to publish. How do you write 1 document tailored to so many user perspectives and article types?

## Focus on the Author

Writing clear guidelines requires you to deeply consider your intended audience and their preexisting knowledge of publishing.

To start understanding your authors, conduct a thought exercise drawing on your knowledge of the journal and the expertise of the editorial board. Consider questions that reveal how authors interact with your guidelines. Examples include:

### Why improve Author Guidelines?

#### Business Benefits

- Improves author perception of your journal
- Increases incoming transfers and new submissions

#### Editorial Office Benefits

- Decreases tedious article reformatting
- Reduces turnaround times

#### Author Benefits

- Faster research submission time
- Increases author satisfaction
- Encourages authors to submit again



Figure created by Lauren Koenig, Jillian Poland and L. Mitchell (Designer)

**Figure 1.** Key benefits of improving author guidelines illustrated across 3 stakeholder categories: business benefits, author benefits, and editorial office benefits. Credit: Lauren Koenig, Jillian Poland, and L Mitchell.

Lauren A Koenig, PhD (<https://orcid.org/0000-0001-5740-3095>), and Jillian Poland (<https://orcid.org/0009-0007-5731-013X>) are with John Wiley & Sons.

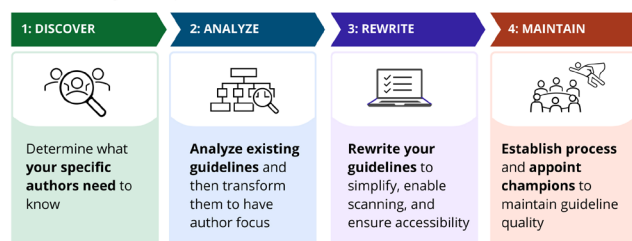
Opinions expressed are those of the authors and do not necessarily reflect the opinions or policies of their employers, the Council of Science Editors, or the Editorial Board of Science Editor.

<https://doi.org/10.36591/SE-4802-02>



## CONTINUED

## How to Improve your Author Guidelines



For full context, refer to the article "A Manual for Author Guidelines: Improving the Author Experience" by Lauren Koenig and Jillian Poland.

Figure created by Lauren Koenig, Jillian Poland and L. Mitchell (Designers)

**Figure 2.** The key steps editors can take to improve their journal's author guidelines are the following: discover, analyze, rewrite, and maintain. Credit: Lauren Koenig, Jillian Poland, and L. Mitchell.

- Are our authors predominantly early-career, advanced, or a mix of both?
- What are common questions authors ask the editorial office?
- How does our specific discipline influence the way authors approach submission?

If possible, collect and analyze author feedback through a short survey designed to understand who reads your author guidelines, their needs, and behaviors. Examples of survey questions:

- How many papers have you submitted to a journal for publication in the last 5 years?
- What was your primary reason for reading the author guidelines?
- Did the author guidelines provide the information you were looking for?

We recommend learning more about survey design best practices by reviewing the article by Costantini, "Authoring Surveys: Guidance for Societies, Publishers, and Publishing Professionals".<sup>1</sup>

You can generate valuable insights by including an open-ended question that asks for suggestions for improving the publishing experience. Analyzing these responses can reveal authors' priorities and challenges. To conduct thematic analysis, group similar comments, such as questions about "revision" or those about "editorial emails," on a virtual whiteboard. Creating a visual representation of these concerns can guide you in how and where to address potential issues in your author guidelines.

## Assess Your Current Author Guidelines Structure

Now that you have developed an understanding of your authors as the foundation for your new guidelines, you will

want to break down your current author guidelines into its distinct sections.

Assess each section in your guidelines and label them with 1 or more broad categories, such as "submission requirement," "journal policy," or "figure format instructions." Structuring, organizing, and labeling the content of your current guidelines will help you make sense of large amounts of text. Use this activity to document where you might need to write new material or remove redundant content. The categories will also be useful in defining a new structure.

## Develop an Author-Focused Outline

Once you have identified the different parts of your author guidelines, rearrange each section to make the most sense *from an author's perspective*. This is where it is important to think back to your research about authors' values. For example:

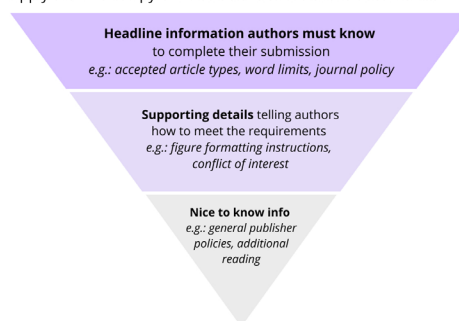
- Clearly describe revision requirements, like using tracked changes to mark edits, to prevent authors from needing to recreate their revisions retroactively
- Highlight open access fees and discounts upfront to help authors who must choose a journal based on available funding
- Detail any required information authors need to collect from external sources, like their funder or institution, so that they can factor these steps into their submission timeline

There are some general best practices you can follow that apply regardless of your specific author types:

- **Group similar content together.** Use the section categories you developed when assessing your current structure to group similar content together. For example, group all data-related instructions (i.e., data sharing policy, data availability statement requirement, and data formatting instructions) in 1 section.
- **Use the Inverted Pyramid writing style.** Present information in order of importance, starting with the most critical details (Figure 3). This helps authors determine if their manuscript meets the basic criteria. Then, follow with manuscript preparation or post-acceptance details.<sup>2</sup> You should also apply this pattern within sections by prominently stating the most important part of each policy, followed by specifics such as any background information or step-by-step instructions.
- **Help authors focus only on the information they need.** Consider authors' varying experience levels and submission needs in organizing your guidelines. One approach is to apply the tenets of information foraging theory, which suggests that people seek information

## Inverted Pyramid for Author Guidelines

Apply the inverted pyramid structure to the entire document...



...as well as to each section within it.



Figure created by Lauren Koenig, Jillian Poland and L. Mitchell (Designer).

**Figure 3.** When applied to author guidelines, the inverted pyramid writing style helps readers quickly access the most important information first. Credit: Lauren Koenig, Jillian Poland, and L Mitchell.

in a way similar to how animals forage for food—they want to find valuable information with minimal effort.<sup>3</sup>

Within our context, this can entail signposting high-level requirements with headers or tables for experienced authors, so they can move through the instructions faster, and providing detailed descriptions further down for those who need them. For example, experienced authors might only need to know that a journal requires them to provide an ORCID because they already understand and have a persistent digital identifier. They can skip any text with supporting details. In comparison, a novice author may want to read an explanation about what an ORCID is and how they can create their own.

By structuring your guidelines this way, you present the information in a user-friendly, “choose your own adventure” style.

### Rewrite and Simplify

In addition to reorganizing your existing content, you will likely need to rewrite current sections and create new sections. A common author complaint is that it is difficult to find specific journal requirements within long, complicated paragraphs. Simplify your writing to make it easier for authors to quickly locate and understand the necessary information

Here are 3 recommendations for making your author guidelines easy to follow:

1. **Incorporate industry standards.** Many journals use different terms for the same topics, which can confuse authors. Avoid this by adhering to industry standards. This not only saves you time on creating new descriptions, but also helps authors recognize familiar terms. For example, use the NISO Standard Terminology for Peer Review instead of writing out

multiple paragraphs to describe your journal’s review process.<sup>4</sup>

2. **Keep it simple.** Using simple language makes instructions more accessible and minimizes the risk of misunderstandings. This approach benefits all readers, including multilingual authors who often rely on translation tools.<sup>7,8</sup> Translation tools are more accurate with simpler language, making it easier for researchers globally to engage with content.<sup>7</sup>

Clear language also reduces cognitive load, which is crucial for authors who are neurodivergent, experiencing a cognitive disability, or who may struggle with complex instructions. With growing awareness of neurodiversity, simplifying language can help remove barriers for a large group of researchers.<sup>10-12</sup>

Authors are already navigating a sea of jargon in their fields and although some industry-specific terms cannot be simplified, that makes it even more important to simplify other content where possible. Aim for an 8th-grade reading level (around 14 years old) because it is similar to journalistic writing and ensures readability. Simplifying instructions will make the submission process smoother and less time-consuming for everyone, regardless of their academic experience.

3. **Keep it brief.** Most readers skim long text. Even though your audience may have advanced degrees, they are often busy. Work with this behavior by using short sentences, strategic paragraph breaks, and bullet points to highlight key information.

### Consider Web Accessibility and Navigation

Once you have structured your guidelines to be author-centric and simplified your content, consider how authors will access these guidelines on your website.



## CONTINUED

## Ensure Web Accessibility

You should ensure web-based author guidelines follow the latest web accessibility guidelines to accommodate all authors, including those using screen readers. In many parts of the world (including the United States and the European Union), accessible web content is no longer a recommendation—it is the law.<sup>5,6</sup> Make your content accessible by using alt-text for images, descriptive linked text, and contrasting colors with readable fonts. We recommend adhering to the Web Content Accessibility Guidelines, an international standard set by the Web Accessibility Initiative.<sup>13</sup>

## Enhance Navigation

Help authors navigate your page by using clear, descriptive headings that outline the logical flow of information and consider adding a table of contents or sidebar menu for quick and easy access to different sections.

Incorporate search engine optimization best practices when crafting headings to enhance searchability, ensuring key topics are easily discovered by search engines. If you are considering creating collapsible sections to help reduce information overload, keep hidden information to a minimum. It is important to use effective headings to signpost this content and ensure your site remains user friendly because hidden information will not appear in a search engine's results or when authors use the find command (Ctrl+F).

## Maintaining the Guidelines

Writing author guidelines is not a one-and-done task (Figure 4). Your journal policies will change as the industry and your team evolve. For example, a few years ago, only specialized journals needed an artificial intelligence (AI) policy. Now, journals across disciplines must include AI usage policies and weave them into existing guidelines. Your guidelines must be flexible enough to adapt to such changes without losing their clarity or tone of voice.

### Maintaining Author Guidelines

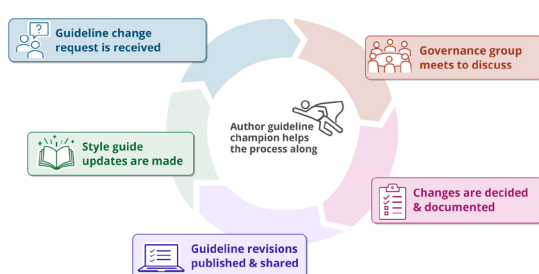


Figure created by Lauren Koenig, Jillian Poland and L. Mitchell (Designer)

**Figure 4.** This figure outlines the steps for regularly updating journal author guidelines in response to evolving industry standards. Credit: Lauren Koenig, Jillian Poland, and L. Mitchell.

Here are some recommendations for maintenance:

- **Make a style guide.** As you draft your author guidelines, document your approach and rationale. When you or other editors make updates in the future, this documentation can serve as a useful reference to simplify updates and ensure consistency.

Include detailed rules on language and terminology to maintain a uniform tone and style. For example, decide whether your journal will address authors directly as “you” or in the third person as “authors,” and specify preferred terms for common concepts.

Think of it as writing notes in a cookbook to describe how and why you adjusted a recipe—the next time you make the dish, you get consistent results without repeating the decision-making process.

- **Form a governance group.** A single person cannot keep guidelines updated on their own. A governance group of subject matter experts can consult on the direction of the guidelines and determine if changes are needed. This group helps keep guidelines aligned with a common purpose.

Group members should represent key stakeholders, such as the managing editor, editor-in-chief, and associate editors. Larger organizations might also include a project manager and representatives from the legal and research integrity departments.

- **Designate a “champion” for the author guidelines.** When it comes to implementing the group's recommendations, appointing a champion for the author guidelines can provide accountability.

A champion acts as the primary point of contact and decision-maker. Their duties might include managing updates, coordinating with different departments to check accuracy of the content, and ensuring compliance with regulations and standards like the Committee on Publication Ethics (COPE) or the Directory of Open Access Journals (DOAJ).<sup>14,15</sup>

- **Establish a process for managing changes and keeping guidelines current.** Change is inevitable. Prepare for changes by establishing a process for managing them. Determine how change requests are submitted, reviewed, and approved (typically involving your champion and governance group).

We strongly recommend keeping a log of changes made to the guidelines, including:

- A description of the change
- The reason for the change
- Who requested the change
- The date the change was made

Schedule regular reviews of the entire guidelines to ensure they remain cohesive and up to date. At

## CONTINUED

each review, go over the log of changes to assess the overall impact and identify any new policies needed or outdated instructions to be removed or updated. Always keep in mind any discipline-specific updates in your journal's field.

## Conclusion

Crafting effective author guidelines requires a thoughtful approach that combines user-centric design, clear language, and adherence to industry and accessibility standards. Although having all this structure around guidelines can feel overly meticulous, these documents are the face of your journal. Outlining a clear strategy for maintaining these instructions will ensure they remain useful and relevant over time.

By investing time in creating effective guidelines, you can improve the overall submission experience and establish a productive, long-lasting relationship between your journal and your authors.

## Acknowledgements

We would like to thank Lara Roth-Mitchell for creating the figures used in this manuscript and our colleagues at Wiley for their valuable feedback during the writing process. We would also like to thank Anna Jester. Her invitation to us to share findings at the 2024 Council of Science Editors annual meeting inspired us to write this article.

## References and Links

1. Costantini RA. Authoring surveys: guidance for societies, publishers, and publishing professionals. *Sci Ed*. 2024;47:23–26. <https://doi.org/10.36591/SE-4701-11>.
2. Nielsen J. Inverted pyramid: how to structure content for readability. Nielsen Norman Group; May 15, 2023. <https://www.nngroup.com/articles/inverted-pyramid/>.
3. Budiu R. (2019, November 10). Information foraging: a theory of how people navigate on the web. [accessed April 7, 2025]. Nielsen Norman Group; November 10, 2019. <https://www.nngroup.com/articles/information-foraging/>.
4. [NISO] National Information Standardization Organization. Peer review terminology standardization. [accessed April 7, 2025]. NISO; July 5, 2023. <https://www.niso.org/standards-committees/peer-review-terminology>.
5. European Union. Accessibility of public sector websites and mobile apps. [accessed April 7, 2025]. EUR-Lex; October 26, 2016. <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=LEGISSUM%3A4314916>.
6. ADA.gov. Guidance on web accessibility and the ADA. U.S. Department of Justice Civil Rights Division; March 18, 2022. <https://www.ada.gov/resources/web-guidance/#top>.
7. plainlanguage.gov. Why use plain language? [accessed April 7, 2025]. U.S. General Services Administration. <https://www.plainlanguage.gov/about/benefits/>.
8. Amano T, Ramírez-Castañeda V, Berdejo-Espinola V, Borokini I, Chowdhury S, Golivets M, González-Trujillo JD, Montaña-Centellas F, Paudel K, White RL, et al. The manifold costs of being a non-native English speaker in science. *PLOS Biol*. 2023;21:e3002184. <https://doi.org/10.1371/journal.pbio.3002184>.
9. Steigerwald E, Ramírez-Castañeda V, Brandt DYC, Báldi A, Shapiro JT, Bowker L, Tarvin RD. Overcoming language barriers in academia: machine translation tools and a vision for a multilingual future. *BioScience*. 2022;72:988–998. <https://doi.org/10.1093/biosci/biac062>.
10. Doyle N. Neurodiversity at work: a biopsychosocial model and the impact on working adults. *British Med Bull*. 2020;135:108–125. <https://doi.org/10.1093/bmb/ldaa021>.
11. ADHD Aware. What is neurodiversity? [accessed April 7, 2025]. ADHD Aware; 2022. <https://adhdaware.org.uk/what-is-adhd/neurodiversity-and-other-conditions/>.
12. Taylor H, Zaghi A, Rankin S. Marginalising dyslexic researchers is bad for science. *eLife*. 2023;12:e93980. <https://doi.org/10.7554/eLife.93980>.
13. W3C. W3C accessibility standards overview. [accessed April 7, 2025]. W3C Web Accessibility Initiative; 2019. <https://www.w3.org/WAI/standards-guidelines/>.
14. <https://publicationethics.org/>
15. <https://doaj.org/>



# Advancing Communications Between Editors and Institutions: News from the Office of Research Integrity

Susan Garfinkel and Patricia Baskin

In September 2024, the Office of Research Integrity (ORI) published the Final Rule on Public Health Services (PHS) Policies on Research Misconduct (42 CFR Part 93),<sup>1</sup> which makes significant changes to the current regulation implemented in 2005. Many of these changes were designed to keep pace with the changing landscape of research over the last 20 years and to clarify research misconduct processes for institutions. The Final Rule must be implemented by all PHS-funded institutions by January 1, 2026, which means that all institutional policies for handling research misconduct must be revised to be consistent with the Final Rule.

Among many changes in the Final Rule, one that is especially relevant to journal editors and publishers is the revision to the confidentiality provision at 42 CFR §93.106.<sup>2</sup> Confidentiality related to institutional research misconduct proceedings centers around protecting involved parties from reputational harm or retaliation and currently allows limited disclosure only when there is a “need to know.” Institutions have taken a very narrow view of need to know in the past. The 2024 Final Rule expands the need to know to include institutional review boards, journals, editors, publishers, coauthors, and collaborating institutions.<sup>2</sup>

The practical aspect of this change for journals, editors, and publishers is that institutional officials (i.e., research integrity officers [RIOs]) conducting research misconduct

proceedings now will be allowed to share limited information about these matters. Thus, when an institution clearly verifies inaccuracies in submitted manuscripts or published articles that need to be corrected, an institution can communicate with the journal about the unreliable data, even when the research misconduct proceedings are still ongoing. The expectation is that any information that may be shared with journals will remain confidential to the extent possible, but information about the unreliable data itself may be further disclosed. This should make it easier for journals to take the necessary steps to correct the scientific record when concerns are raised without waiting for institutions to complete their processes and make findings of research misconduct.

## Improved Communications for Editors

Separately, in 2022–2023, a working group of RIOs from various institutions, along with journal editors and publishing staff whose remit includes managing research integrity issues, was convened to discuss improved collaboration between institutions and journals when there are allegations of research misconduct (falsification, fabrication, or plagiarism [FFP]).<sup>3</sup> The working group discussions found that when journals that generally pledge confidentiality in the peer review and publication processes are alerted to suspicions of FFP in a paper, usually by peer reviewers and readers, the editors and staff of the journal are responsible for determining the accuracy of the data and correcting the scientific record (through corrections and retractions) as needed. The Committee on Publication Ethics (COPE) guidelines<sup>4</sup> suggest editors contact the authors for explanations of the data in question, and if they do not receive satisfactory explanations, to notify the author's institution about the data. It is the institution's responsibility to review the data and also to address the behaviors of its employees, sometimes through research misconduct proceedings. However, journal editors are often reluctant to

(Continued on p. 67)

*Susan Garfinkel, PhD, is Independent Consultant and Owner, Research Integrity Partners, LLC. Patricia Baskin, MS (<http://orcid.org/0000-0002-9850-4391>), is Deputy Chief, Publications, American Academy of Neurology.*

*Opinions expressed are those of the authors and do not necessarily reflect the opinions or policies of their employers, the Council of Science Editors, or the Editorial Board of Science Editor.*

<https://doi.org/10.36591/SE-4802-03>

# Reimagining Peer Review: A More Efficient and Rewarding Approach

**Ashutosh Ghildiyal**

Peer review has been a fundamental pillar of scholarly publishing for decades, serving as a critical mechanism for maintaining academic rigor and research integrity. Yet, the contemporary landscape of scholarly evaluation is fraught with mounting challenges that threaten the sustainability of this essential process. Reviewers are experiencing burnout as submission volumes increase, and many scholars are becoming increasingly unwilling to participate. These issues have led to inefficiencies in the peer review process, contributing to delays, inconsistent quality, and growing frustration among reviewers.

But what if peer review did not have to feel like a burden? What if it could be a more meaningful and intellectually rewarding experience that also resulted in higher quality?

The issue of low-quality or fraudulent papers passing through peer review is not a failure of peer review itself, but a result of weak editorial standards and insufficient safeguards. The problem goes beyond a shortage of reviewers or reviewer fatigue—though these are valid concerns. At its core, it is about reaffirming the role of scholarly publishers as gatekeepers, ultimately accountable to readers who rely on research to be trustworthy, reliable, and useful.

It is the gatekeeper's role to uphold and protect this rightful expectation. With this reaffirmation naturally comes the question of what steps must be taken to strengthen the gatekeeping function, which involves both editors and peer reviewers. First, editors and peer reviewers must be carefully selected. Then, they need to be properly trained, valued, and inspired. They should also be given sufficient time, independence, and appropriate compensation or rewards for their work, along with the right degree of creative

freedom. Additionally, they must be well-supported with tools and technologies that ease their workload and reduce fatigue, allowing them to focus on their core responsibility: maintaining quality and integrity in research publishing.

Investing in these aspects is essential. Beyond a certain point, excessive mechanization risks diminishing the value of the publishing process. Emphasizing the gatekeeping role as the foundation of scholarly publishing can enhance the long-term value and sustainability of the industry.

Editors can be supported through additional training, access to more educational resources and networking opportunities, and the use of advanced technologies, including artificial intelligence (AI) tools for screening and editing—provided their use cases and value have been properly tested and established. Peer reviewers can benefit from better training, improved compensation or recognition, career advancement opportunities, and technologies that reduce cognitive load, enhance efficiency, and support reviewer training.

With increasing reviewer fatigue causing peer review delays—and challenges like undetected fraud—publishers might consider fully AI-based peer review. However, this would be a critical mistake, risking superficial assessments, ethical blind spots, and a decline in scholarly rigor. Peer review is more than polished writing—it requires insight, critical thinking, and nuanced evaluation, which remain uniquely human capabilities. AI can assist, but the depth and integrity of peer review must stay in human hands. A better approach is to reduce reviewer fatigue by offering meaningful recognition, particularly career-enhancing incentives, and equipping reviewers with AI tools that enhance efficiency and focus. This leads to higher-quality assessments without replacing human judgment.

This article explores 1 such idea: a potential technological framework designed to support reviewers, ultimately leading to greater satisfaction and higher-quality output in the reviewer role. The vision is for a technology-based framework that enables reviewers to enter a flow state by removing distractions and eliminating cognitively tedious tasks, allowing them to focus primarily on deep reading,

Ashutosh Ghildiyal (<https://orcid.org/0000-0002-6813-6209>) is Vice President, Strategy and Growth, Integra.

*Opinions expressed are those of the authors and do not necessarily reflect the opinions or policies of their employers, the Council of Science Editors, or the Editorial Board of Science Editor.*

<https://doi.org/10.36591/SE-4802-05>

## CONTINUED

critical analysis, and extracting insights. Ideally, this framework would help reviewers complete their work in a maximum of 2 sittings—one focused on generating insights and the other on organizing and refining them.

The same technology could also enhance reviewer training by gamifying the process, making it more engaging and effective. However, although such tools improve efficiency and focus, they do not fully address reviewer motivation, which depends on benefits and recognition—challenges that must be tackled separately.

This raises an important question: Why invest in such a framework instead of simply improving compensation or recognition? Although better incentives can increase participation and ensure timely review completion, they do not inherently guarantee quality. Quality stems from sustained attention. This article advocates for a tool designed to preserve and enhance attention, which is increasingly under threat in today's society.

## The PRISM Framework: A Vision for a More Enriching Peer Review Experience

The Peer Review Intelligent Support Module (PRISM) offers a fresh, big-picture approach to addressing the challenges of peer review. Rather than focusing solely on specific process improvements, PRISM reimagines the human engagement aspect of peer review. Its goal is to transform the review experience into something not only more efficient but also more fulfilling and intellectually stimulating, ultimately resulting in higher-quality and more helpful peer reviews.

PRISM integrates concepts from behavioral science, AI, and immersive technologies to create a more rewarding and meaningful process for reviewers. At its core, PRISM is built on the idea of intellectual engagement and inducing a flow state that accelerates peer review timelines and improves the overall quality of peer review.

## Key Elements of the PRISM Framework

### 1. Fostering a Flow State for Reviewers

PRISM enhances engagement by promoting a flow state—a focused, intrinsically motivated state. Key features include:

- **Distraction-Free Environments.** Adaptive and immersive workspaces that reduce distractions and improve focus.
- **Automated Administrative Support.** AI-driven tools that handle tasks like citations, plagiarism detection, and formatting, allowing reviewers to focus on content. These systems follow a walled garden approach: although they may interact with a large language model-based system, they do not generate new content. Instead, they perform predefined tasks, such as checking, proofreading for language, and verifying

references—adding value to the review process by saving time.

- **Real-Time Feedback.** AI-powered insights provide instant feedback, enhancing learning and motivation.

### 2. The PRISM Pod & Console: A Seamless, Socio-Technical Solution

PRISM includes 2 key components to optimize the reviewing process:

1. **Cognitive Support Space (Pod).** A dedicated space in the reviewer's office or home for deep, focused work.
2. **AI Console.** A virtual assistant that helps with taking audio notes, organizing and proofreading them, translating them into other languages if needed, conducting factual and reference checks, and performing predictive research impact analysis.

These components work together to streamline the review process, making it more efficient and intellectually rewarding. This framework and its tools can be integrated with publishers' peer review systems.

## Accelerating Peer Review with PRISM: A Technology-Enhanced 2-Phase Approach

PRISM streamlines peer review into a highly efficient 2-session model, enabling reviewers to complete thorough evaluations in just a few hours.

1. **Session 1: Deep Reading and Voice-Note Feedback (2–3 h)**  
Reviewers engage in deep reading and critique, capturing insights via voice notes. PRISM transcribes and organizes these notes into structured feedback, minimizing the need for lengthy written comments.
2. **Session 2: Refinement and Finalization (2–3 h)**  
After a brief reflection period, reviewers revisit their voice notes and refine their feedback, ideally on a later day. AI tools assist in organizing content, improving clarity, and ensuring alignment with the manuscript's objectives. The result is a polished, cohesive review that effectively conveys the reviewer's perspective.

## How PRISM Enhances Efficiency and Quality

- **Initial Review Phase.** Reviewers focus on manuscript evaluation while PRISM transcribes voice notes in real time.
- **Refinement Phase.** AI-driven tools refine the review, ensuring it is comprehensive, well-structured, and clear.

By structuring the review process into focused sessions and eliminating time-consuming tasks like formatting and



CONTINUED

---

editing, PRISM allows reviewers to concentrate on delivering insightful feedback. Automated quality checks and plagiarism detection further enhance efficiency and reliability.

### **Applying the PRISM Framework to Reviewer Training**

The PRISM framework can be a powerful tool, not only for enhancing the peer review experience but also for training new and experienced reviewers.

By integrating elements like structured learning, gamification, and AI-driven personalized learning, PRISM can help reviewers develop essential skills, gain confidence, and improve the quality of their evaluations. Gamified training modules, including interactive case studies, simulated peer review exercises, and scenario-based challenges, can allow reviewers to engage with real-world examples and ethical dilemmas. AI-enhanced personalized learning can adapt training paths based on individual strengths and weaknesses, providing instant feedback and insights into reviewing tendencies. Cognitive support tools such as AI-assisted review guidance, preloaded checklists, and distraction-free training environment can ensure that reviewers can apply their training effectively in real-world scenarios. Furthermore, PRISM can continuously evaluate training effectiveness through performance analytics, reviewer feedback loops, and longitudinal impact assessments, ensuring ongoing improvement.

By leveraging PRISM for reviewer training, scholarly publishers can cultivate a skilled, engaged, and motivated reviewer community, ultimately enhancing the quality and integrity of peer review while making the process intellectually rewarding.

### **Why PRISM Can Help**

PRISM is not just a set of tools—it is a rethinking of the entire reviewer experience. By integrating advanced technologies

like AI and immersive tools, PRISM aims to eliminate the frustrations that currently plague peer review. Reviewers can focus on the intellectual challenge of evaluating manuscripts, without being bogged down by tedious administrative work.

Through these improvements, PRISM aims to make peer review something scholars want to engage with, not something they feel obligated to do.

The framework also seeks to have a long-term impact on the sustainability of the peer review process. By combining professional development and efficiency, PRISM can cultivate a more committed and skilled group of reviewers, ensuring that peer review remains robust and reliable.

### **Looking Forward: A Future-Proof Solution**

Ultimately, PRISM offers a vision for a future-proof peer review system—one that adapts to the evolving challenges of modern scholarly publishing.

At its core, PRISM has the potential to function as an adaptive ecosystem that evolves alongside the dynamic landscape of scholarly communication. The vision extends beyond operational optimization. PRISM invites us to imagine a scholarly review environment where learning, professional development, and research integrity are seamlessly integrated. It can enable a future where peer review becomes a true opportunity for intellectual growth—where reviewers feel valued and motivated, and where the highest standards of academic rigor are not just maintained but actively pursued.

By placing human potential at the center of technological innovation, PRISM has the potential to offer a compelling blueprint for the future of scholarly publishing—one that empowers authors, supports reviewers, strengthens publishers, and ultimately serves the broader academic community and the readers who rely on rigorous, trustworthy research.

# Scientific Communication in a New United States Government Regime: What We Need to Consider Now

Kristin S Inman

On January 20, 2025, a new Administration was sworn into office and issued a flurry of executive orders, initiating a series of actions that I believe will change the course of scholarly publishing, at least for the next several years. Here, I provide an inside view of the immediate consequences of those orders, focusing first on those related to the operations of the federal government staff, offices, and departments/centers. I follow with broader implications for the scholarly publishing community, related to the intricate relationship between this community and the federal government—notably as a critical funder of research and as a financial supporter of several journals.

I am writing this from my personal experience and perspective as a (now former) science editor for *Environmental Health Perspectives* (EHP), a journal published with support from the National Institute of Environmental Health Sciences (NIEHS), an institute of the National Institutes of Health (NIH). My intent is to approach this topic with as much objectivity as possible, but to also share my firsthand experience of how these actions have affected government-backed journals, and to propose necessary considerations for nongovernment journals and publishers. My goal is the spread awareness for those who are not intimately associated with a government entity and to describe how

I think the changes to the federal government will affect scholarly publishing as a whole.

## It Started with an Order

To me, it all began with Executive Order (EO) 14151: “Ending radical and wasteful government DEI programs and preferencing”. This order states that “The Biden Administration forced illegal and immoral discrimination programs, going by the name ‘diversity, equity, and inclusion’ (DEI), into virtually all aspects of the Federal Government”.<sup>1</sup> Government organizations were told to terminate all offices, positions, and programs related to DEI, a concept rooted in equitable treatment of persons regardless of race, sexual orientation, gender identity, disability, or religious beliefs.

I signed onto my computer on the morning of January 22, 2025, and opened the first of many emails to come from the Department of Health and Human Services (HHS).<sup>2</sup> This one was unlike any I had ever seen. It essentially said that I would be penalized if I failed to report anyone who attempted to circumvent EO14151 (Figure 1). In an ad-hoc meeting with my team, I learned that government agencies were given 24 hours to scrub all mentions of DEI and related terms from their websites. The NIEHS strategic plan, which included ambitious DEI-related goals, was removed from the website entirely (Figure 2).

In the days that followed, supervisors were told to provide lists of DEI-related activities and related personnel. Government employees were instructed to immediately step down from any DEI-related activities, committees, or responsibilities, both internal and external. As a member of the board of directors for CSE, I had to decline to participate in any DEI-related voting or discussion.

Meanwhile, the White House had also issued EO 14168<sup>3</sup> for the purpose of “restoring biological truth” to the federal government. This order stated that “Federal funds shall not be used to promote gender ideology”—which in practice

*Kristin S Inman is a former science editor for Environmental Health Perspectives, a journal published with support from the National Institute of Environmental Health Sciences (NIEHS), an institute of the National Institutes of Health (NIH).*

*Opinions expressed are those of the author and do not necessarily reflect the opinions or policies of their employers, the Council of Science Editors, or the Editorial Board of Science Editor.*

<https://doi.org/10.36591/SE-4802-08>



DEPARTMENT OF HEALTH & HUMAN SERVICES

Office of the Secretary

Washington, D.C. 20201

**TO:** HHS Employees

**THROUGH:** Dorothy A. Fink, MD, Acting Secretary

**FROM:** Scott W. Rowell, Deputy Chief of Staff - Operations

**DATE:** January 22, 2025

**SUBJECT:** Information: DEIA Office Closure

The Department of Health and Human Services is taking steps to close all agency DEIA offices and end all DEIA-related contracts in accordance with President Trump's executive orders titled *Ending Radical and Wasteful Government DEI Programs and Preferencing* and *Initial Rescissions of Harmful Executive Orders and Actions*.

These programs divided Americans by race, wasted taxpayer dollars, and resulted in shameful discrimination.

We are aware of efforts by some in government to disguise these programs by using coded or imprecise language. If you are aware of a change in any contract description or personnel position description since November 5, 2024, to obscure the connection between the contract and DEIA or similar ideologies, please report all facts and circumstances to [DEIAtruth@opm.gov](mailto:DEIAtruth@opm.gov) within 10 days.

There will be no adverse consequences for timely reporting this information. However, failure to report this information within 10 days may result in adverse consequences.

Thank you for your attention to this important matter.

**Figure 1.** Copy of the email that was sent to all HHS staff and contractors.

meant the term *gender* and any associated concepts were banned from government websites, documents, and grant making.<sup>4</sup> The President additionally rescinded Biden-era orders and actions addressing topics such as climate change, environmental justice, and equity for specific racial and ethnic groups.<sup>5</sup>

## The Ripple Effect

Grants supporting DEI, "gender ideology," HIV and AIDS research,<sup>6</sup> COVID-19 research,<sup>7</sup> and other areas were cut, with termination letters stating that the research "no longer effectuates agency priorities." Even as I write this article, I continue to see LinkedIn posts describing grant money that was rescinded, and the topics triggering grant cancellation now are expanded to include those that are related to LGBTQ health. For an up-to-date idea of the scope of this

funding crisis, the Department of Health and Human Services (HHS) maintains public lists of HHS contracts terminated in full or part since January 21, 2025.<sup>8</sup>

At *EHP*, we had to have serious conversations about whether to publish certain manuscripts—not just new submissions but also those that were already in the pipeline. *EHP* was established by the NIEHS director in 1972<sup>9</sup> and has a long history of editorial independence from the institute—the freedom to act without political interference. This independence was in line with the principles of scientific integrity highlighted in the NIEHS's recently withdrawn statement on the topic. However, new questions arose: Would publishing about climate change put a target on our back? Would mentioning health disparities put us on the chopping block? Many authors understood this and withdrew their papers to publish in a non-government-



CONTINUED



## NIEHS 2025-2029 Strategic Plan

**The 2025-2029 NIEHS Strategic Plan has been removed.**

Please check back for updates.

**Figure 2.** The message that replaced the NIEHS 2025-2029 strategic plan on January 22, 2025—an eerie reminder of content that seemed to “vanish” overnight.

backed journal, but some did not, and still others accused the journal of censorship. I imagine these conversations were, and are still, happening between other government-funded journals and authors, and that there is equal frustration at having to reconcile scientific integrity with federal restrictions (eg, Johnson<sup>10</sup>).

### DOGE: Massive Restructuring of Government

The next big change for the academic publishing landscape, in my opinion, came with the institution of the “Department of Government Efficiency” (DOGE), followed almost immediately by a reduction of the federal workforce. Beginning mid-February 2025, probationary employees were fired en masse; federal employees were offered deferred resignation (to be paid through September 2025 if they resigned), voluntary separation incentives, and early retirement options, while federal contractor option periods were not renewed. I was one of the first *EHP* contractors to have my contract expire—I was informed by my contract company on March 13, 2025, that the previous day had been my last. On February 6, federal employees received a memo informing them that the President required that “Agency Heads shall promptly undertake preparations to initiate large-scale reductions in force (RIFs), consistent with applicable law.”<sup>11</sup> Agency heads were instructed to submit a plan for massive downsizing of their departments, with a final date of execution of September 30, 2025. Once downsizing is complete, agencies are to hire no more than 1 person for every 4 who were let go.<sup>12</sup> At the time of this writing, RIFs had begun in earnest at many federal institutes, including NIH.

### What It Means for Scholarly Publishing

The direct consequences of these orders were felt by federal staff, departments, and related entities, but it is likely the changes being implemented now will have an impact on science and scholarly publishing for many years to come.

### The Devastation of Federally Funded Journals

Government-backed journals are relatively unique in that, because they are supported by tax dollars, they are fully open access and charge no article processing charges (APCs). While the world was discussing Plan S<sup>13</sup> and deciphering the Nelson Memo,<sup>14</sup> federally funded journals were offering fully accessible content. These journals have been critical for the dissemination of science, especially for those in resource-limited areas who may not have the means to publish in journals with APCs, and who may not have access to articles behind paywalls.

I was unable to find a reliable, complete list of federally funded journals in the U.S., but know there are a handful of HHS-funded human health journals, including *EHP*, *Journal of Health and Pollution*, *Preventing Chronic Diseases*, *Morbidity and Mortality Weekly Report (MMWR)*, and *Emerging Infectious Diseases*. Several others cover agriculture, materials science, and security. There are likely several more supported by other federal agencies. The loss of federal employees and contractors (like me, formerly) means fewer staff to manage these journals—assuming they are not shut down altogether.

On April 16, 2025, an authenticated draft plan to restructure HHS was leaked (Figure 3),<sup>15</sup> proposing the discontinuation of funding for *Emerging Infectious Diseases* and *Preventing Chronic Diseases*;<sup>16</sup> funding for *MMWR* was proposed to remain. To my knowledge, no other HHS-supported journals were named. However, between the federal limitations on language and the widespread cutting of federal dollars, I expect that others will meet a similar fate. Indeed, as of this writing, *EHP* and *Journal of Health and Pollution* announced that they would no longer be accepting new submissions for publication, citing an anticipated loss of critical contracts for peer review and publication of manuscripts.<sup>16</sup>

For those journals that remain, a new problem emerges. The inability to publish on certain topics represents a significant ethical dilemma: turn away good science,

**Figure 3.** Excerpt of the authenticated draft plan to restructure the Department of Health and Human Services (HHS). From HHS 2026 Discretionary Budget Passback.<sup>17</sup>

### Reforming and Restructuring CDC

The Budget reforms the Centers for Disease Control and Prevention to refocus CDC on emerging and infectious disease surveillance, outbreak investigations, preparedness and response, and maintaining the Nation's public health infrastructure. The Budget includes funding to support NSC's Biothreat Radar Detection System. The Budget also discontinues funding for the Emerging Infectious Diseases and Preventing Chronic Disease monthly peer-reviewed journals. Funding for the Morbidity and Mortality Weekly Report is maintained.

ensor authors to remove offending language, or face the possibility of that science being taken down from any online sites. Moreover, will publication of such science be seen as a refusal to comply with executive orders? If so, what will the consequences be for the journal? These journals will have to walk a fine line between failing to comply with federal orders and author censorship; both options would mean an almost certain end to the journal.

Beyond the implications for federally funded journals, I expect significant challenges to established policies and standards for journals, publishers, and societies in the scholarly publishing arena.

### Who Will Do the Science?

Between the cancellation of grants and the reduction of the federal workforce, many of whom were scientists, I predict the scientific enterprise as a whole will be hit hard. Laboratories are scrambling to reassign orphaned scientists (those whose principal investigator had been fired or incentivized to step down) or are shutting down entirely. Those who have built their careers researching such topics as exposure to noise pollution in minority populations, HIV treatment and vaccine development, climate change mitigation strategies, mental health in transgender persons, and many other topics for which the current administration has disallowed federal funding, will now have to find nongovernment funding or shift the focus of their science. Both options seem daunting—researching, writing, and submitting a grant is no easy task, and available funds are limited, with NIH being the largest public funder of biomedical research in the world.<sup>18</sup>

A potential, not often discussed, consequence of the current environment is the lack of *future* scientists. I have been thinking a lot about these new scientists, those who are just graduating or finishing their postdoctoral work, those who have their entire career ahead of them. Will they stay the course and pursue an academic track in the face of dwindling grants and uncertain government support? I suspect that even when we find our “new normal”, there will be an evident gap in the number of trained scientists that are available to do the work. I fear this shortage of quality scientists may continue for generations.

### Will the Quality of Science be Maintained?

I am additionally concerned for the quality of the science overall. Less money often equals fewer opportunities—opportunities to validate data, follow up on unexpected findings, and respond to reviewer requests for more data. Will we need to lower the bar for what we consider publishable? Indeed, this bar is specific to the journal, but science is driven by the need to know more, to validate, and to question what we think we know. This becomes increasingly difficult with limited funding. Will we need to trade quality for quantity? I think back to my graduate school days when cloning a gene was an entire PhD project (my PhD project, in fact) and today, it can be done in weeks. Will we amend what is considered a “publishable unit” to maintain scientific excellence?

I hope that we are all thinking about the answers to these questions. I offer no solutions but encourage us to come together as a community to consider the challenges ahead and, if necessary, adapt our practices in ways that support scientific integrity and the standards of the field. Scholarly publishing has seen its fair share of challenges and has come out stronger in the end. I invite all who are reading this article to broadly share this information, consider the questions I've posed, and engage in earnest conversations with colleagues and friends about the future of scholarly publishing.

### References and Links

1. <https://www.whitehouse.gov/presidential-actions/2025/01/ending-radical-and-wasteful-government-dei-programs-and-preferencing/>
2. <https://www.opm.gov/media/e1zj1p0m/opm-memo-re-initial-guidance-regarding-deia-executive-orders-1-21-2025-final.pdf>
3. <https://www.whitehouse.gov/presidential-actions/2025/01/defending-women-from-gender-ideology-extremism-and-restoring-biological-truth-to-the-federal-government/>
4. <https://www.opm.gov/media/yv1h1r3i/opm-memo-initial-guidance-regarding-trump-executive-order-defending-women-1-29-2025-final.pdf>
5. <https://www.whitehouse.gov/presidential-actions/2025/01/initial-rescissions-of-harmful-executive-orders-and-actions/>
6. Cohen J, Reardon S. 'Orchestrated assault': new tsunami of NIH grant cuts hits South Africa hard. *Science*. 2025;387:6741. <https://doi.org/10.1126/science.zceghod>

CONTINUED

7. Kozlov M. Exclusive: NIH to cut grants for COVID research, documents reveal. *Nature*. 2025;640:17-18. doi: <https://doi.org/10.1038/d41586-025-00954-y>
8. <https://www.hhs.gov/radical-transparency/ending-wasteful-spending/index.html>
9. <https://ehp.niehs.nih.gov/journal/ehp/history>
10. <https://apnews.com/article/science-trump-executive-order-gender-c44f80a1cce8b0c4751e64cc2751d67e>
11. <https://www.opm.gov/policy-data-oversight/latest-memos/guidance-on-agency-rif-and-reorganization-plans-requested-by-implementing-the-president-s-department-of-government-efficiency-workforce-optimization-initiative.pdf>
12. <https://www.whitehouse.gov/fact-sheets/2025/02/fact-sheet-president-donald-j-trump-works-to-remake-americas-federal-workforce/>
13. <https://www.coalition-s.org/>
14. <https://www.whitehouse.gov/wp-content/uploads/2022/08/08-2022-OSTP-Public-access-Memo.pdf>
15. [https://insidemedicine.substack.com/p/scoop-leaked-pdf-outlines-major-hhs?utm\\_medium=web](https://insidemedicine.substack.com/p/scoop-leaked-pdf-outlines-major-hhs?utm_medium=web)
16. <https://www.nytimes.com/2025/04/29/science/science-journal-environment-trump.html>
17. <https://insidemedicine.substack.com/api/v1/file/aeb694ea-31c0-4f46-b083-721500448910.pdf>
18. <https://www.nih.gov/grants-funding>

(Continued from p. 59)

proceed to this step as they are concerned about violating author–journal confidentiality, damaging an author’s reputation, or potentially provoking a lawsuit if suspicions are unsubstantiated. Similarly, if institutional investigations are initiated, confidentiality restrictions prevent institutions from sharing information about ongoing investigations with journal editors.

The recommendations from the working group discussions included a call-to-action for institutions to expand the “need to know” criteria to allow sharing information with journals. With the ORI Final Rule, institutions may now discuss the validity of research with editors, making it more comfortable for journal editors and institutional officials to interact regarding questions of potential FFP in submitted and published articles. This openness will lead to greater efficiency and timeliness in correcting the literature record because as soon as FFP is verified by an institution, it may be shared with journals to take earlier actions (such as retractions or corrections).

The future for continued interactions between journals and institutions is largely predicated on whether journals are open to expanding confidentiality policies for managing and reporting suspicions of incidents of FFP to include discussions with institutions. If journals do expand their policies, authors of articles need to be made aware,

through submission confirmation letters or in the journal’s Information for Authors, that editors may communicate with institutional officials without the knowledge of the author under circumstances in which the evidence strongly suggests potential research misconduct may have occurred.

All policy changes that lead to transparent and trusting communications between institutions and journals will simplify the jobs of editors and institutions alike, and these trusting relationships may likely facilitate more rapid resolutions for correcting the scientific record.

## References and Links

1. <https://www.federalregister.gov/documents/2024/09/17/2024-20814/public-health-service-policies-on-research-misconduct>
2. <https://www.federalregister.gov/documents/2024/09/17/2024-20814/public-health-service-policies-on-research-misconduct>
3. Garfinkel S, Alam S, Baskin P, Bennett C, Carruthers B, Engler J, Flanagan A, Garrity S, Graf C, Imperiale MJ, King C, et al. Enhancing partnerships of institutions and journals to address concerns about research misconduct: recommendations from a working group of institutional research integrity officers and journal editors and publishers. *JAMA Network Open*. 2023;6:e2320796. <https://doi.org/10.1001/jamanetworkopen.2023.20796>
4. <https://publicationethics.org/guidance/flowchart/scientific-rigour-published-data-dealing-concerns>



# Transparency Principles and Best Editorial Practices: A Case Study of REMAT—*Revista Eletrônica da Matemática*

Greice da Silva Lorenzzetti Andreis

## Abstract

Scientific journals serve as an important means for disseminating research across various fields and among researchers from diverse countries. Legitimate journals must prioritize the scientific quality of their publications, as well as be aware of transparency and ethical issues throughout the editorial process. This article presents a case study on the implementation of transparency principles and best editorial practices recommended by the Committee on Publication Ethics (COPE), the Directory of Open Access Journals (DOAJ), the Open Access Scholarly Publishing Association (OASPA), and the World Association of Medical Editors (WAME) in *Revista Eletrônica da Matemática* (REMAT), a Brazilian journal. Through a comprehensive review and application of guidance documents on transparency and best practices in scientific publishing, REMAT's editorial policies were revised, approved by its editorial board, and published on the journal's website. This review influenced the journal's editorial workflow, improving its processes and promoting greater transparency for readers, authors, reviewers, and editors, while reinforcing REMAT's commitment to integrity and ethics in scientific publishing.

## Introduction

This article presents a case study on the implementation of transparency principles and best editorial practices

in REMAT,<sup>1</sup> a Brazilian scientific journal with 10 years of publications (2015–2025). Established in 2015 and affiliated with the Federal Institute of Education, Science, and Technology of Rio Grande do Sul (IFRS), the journal publishes articles that present original, partial, or final results of scientific research in mathematics education, and in pure and applied mathematics. REMAT is an open access scientific journal operating on a continuous publication model.

One of the priorities of the REMAT editorial board is to ensure that its editorial policies align with the standards expected of journals committed to integrity and transparency in their processes. Accordingly, in 2024, the editorial board revised the journal's policies based on the best editorial practices. The primary documents consulted include: *Guidelines on Good Publication Practice* (GPP),<sup>2</sup> *Principles of Transparency and Best Practice in Scholarly Publishing* (POT),<sup>3</sup> *Ethics Toolkit for a Successful Editorial Office* (SEO),<sup>4</sup> and *Strategic Plan 2025–2028* (SP).<sup>5</sup>

Published in 1999 by COPE, GPP is advisory in nature. With this publication, COPE members hope that the guidelines will be disseminated, endorsed by editors, and refined over time. The document defines topics and outlines possible actions to ensure good practices, including “study design and ethical approval, data analysis, authorship, conflict of interests, the peer review process, redundant publication, plagiarism, duties of editors, media relations, advertising, and how to deal with misconduct.”<sup>1p43</sup>

In September 2022, COPE, DOAJ, OASPA, and WAME published the fourth version of POT. Based on the principles of transparency and best practice in scholarly publishing, the document outlines actions to be taken, categorized into 4 dimensions: journal content, journal practices, organization, and business practices.

Published in December 2022, SEO helps editors and publishers identify areas in need of development, promote best practices in scientific publishing, and deal

Greice da Silva Lorenzzetti Andreis (<https://orcid.org/0000-0002-8674-0223>), Federal Institute of Education, Science, and Technology of Rio Grande do Sul, Caxias do Sul Campus, Caxias do Sul, RS, Brazil

Opinions expressed are those of the authors and do not necessarily reflect the opinions or policies of their employers, the Council of Science Editors, or the Editorial Board of Science Editor.

<https://doi.org/10.36591/SE-4802-06>

## CONTINUED

with allegations and cases of misconduct. The document indicates the development of guidelines for authors and for reviewers, the development processes to help identify ethical concerns, and the development guidelines for promptly responding to suspected ethical breaches by authors, reviewers, and editors. Instructions and reference sources are provided for preparing these guidelines. POT is indicated as a source for developing such guidelines.

Finally, SP<sup>5</sup> defines 4 strategic priorities for the period 2025–2028: integrity; education; collaboration; and diversity, equity, inclusivity, and accessibility. These priorities address the main current challenges in academic publishing, as well as the growing number of publishers and journals.

Since 1997, COPE provides guidance on best practices for addressing ethical issues in journal publishing. It was founded in 1997 to address breaches of research and publication ethics. A voluntary body providing a discussion forum and advice for scientific editors, it aims to find practical ways of dealing with these issues and to develop good practice.

The authors thought it essential to attempt to define best practice in the ethics of scientific publishing. The COPE guidelines should be useful for authors, editors, editorial board members, readers, owners of journals, and publishers and provides guidelines, flowcharts, discussion papers and a case database on its website to guide ethical publishing.

Over the past 10 years, members of the REMAT editorial board have participated in webinars organized by the CSE and the Brazilian Association of Scientific Editors (ABEC Brasil), as well as in programs such as the CSE Publication Certificate Program and the ABEC Education Program: ABEC Brasil Certification for Scientific Editors. Through these experiences, REMAT editors have gradually

developed their editorial policies. In 2024, after studying and discussing the aforementioned documents,<sup>2,5</sup> they began refining the existing policies. Subsequently, new policies were established, including a policy on the use of artificial intelligence. On October 29, 2024, the revised editorial policies were approved by the REMAT editorial board and published on the journal's website on November 6, 2024.

As important as having clear guidelines based on ethical principles is ensuring that these guidelines are well understood by editors, reviewers, authors, and readers. A common challenge faced by scientific journals is the high rejection rate of submissions during the desk review phase, often due to authors' lack of familiarity with the journal's editorial processes. Figure 1 shows REMAT's rejection and acceptance rates, based on a report generated by the journal's publishing system, Open Journal Systems (OJS).

The data in Figure 1 indicate a desk rejection rate of 51% for submissions over the past 2 years. At REMAT, the main reasons for rejection at this stage include failure to conform to the journal's format, failure to submit the "Declaration of Conflict of Interest, Originality, and Authorship," failure to meet the requirement of at least 1 author holding a Master's degree, and submission of manuscripts that fall outside REMAT's focus and scope.

To improve this 51% rate, the REMAT editorial board created the "Authors' Declaration," an expansion of the existing declaration, which will be described in a later section. The aim is to provide all authors with a document outlining the journal's policies, thereby facilitating understanding of REMAT's guidelines and discouraging submissions that do not comply with the journal's rules.

The research was conducted to analyze and document the implementation of transparency principles and best

Trends		
2022-11-29 — 2024-11-29 <span>Filters</span>		
Name	2022-11-29 — 2024-11-29	Total
Submissions Received	310	1048 (104/year)
Submissions Accepted	80	186 (33/year)
Submissions Declined	326	1013 (63/year)
Submissions Declined (Desk Reject)	195	576 (62/year)
Submissions Declined (After Review)	131	437 (45/year)
Submissions Published	78	346 (35/year)
Other Submissions ⓘ	7	9
Submissions In Progress	7	9
Imported Submissions	0	0
Days to First Editorial Decision ⓘ	26	36
Days to Accept	244	243
Days to Reject	28	37
Acceptance Rate ⓘ	17%	18%
Rejection Rate ⓘ	83%	97%
Desk Reject Rate	51%	55%
After Review Reject Rate	32%	42%

**Figure 1.** *Revista Eletrônica da Matemática* trends over the past 2 years (November 29, 2022, to November 29, 2024) and throughout its entire publication period (2015–2024). Source: Open Journal Systems, Statistics, Editorial Activity, Trends; data from November 30, 2024.

## CONTINUED

editorial practices at REMAT, ensuring that its policies align with international standards of ethics and integrity in scientific publishing. Additionally, it proposes strategies to enhance authors' understanding of editorial guidelines, aiming to reduce the rejection rate at the desk review stage.

## Principles of Transparency and Best Editorial Practices

This section presents the key elements extracted from the previously discussed documents,<sup>2-5</sup> which guided the REMAT editorial board in reviewing its editorial policies. Table 1 presents the guidelines on good publication practice, according to GPP, and the status of REMAT before the revision of editorial policies in 2024.

Table 2 presents the principles of transparency and best practices in scholarly publishing, according to POT, and the status of REMAT before the revision of editorial policies in 2024. Each of the 16 items is detailed in the document to assist editors in aligning their scientific journals with best practices.

The SEO recommends developing guidelines for authors and reviewers, establishing processes to identify ethical concerns, and creating protocols for promptly responding to suspected ethical breaches by authors, reviewers, and editors. Each of these topics is related to POT, as shown in Figure 2. Note that the numbering is the same as in Table 2 of this study, allowing for verification of REMAT's status in each of the 4 listed topics.

COPE begins its Strategic Plan 2025–2028 by presenting the ethical principles that should guide researchers, editors, reviewers, and others involved in scientific publishing:

Ethical principles guide and support researchers, editors, reviewers and others involved in publication ethics to do their work responsibly and transparently. These principles are here to:

- Make sure research is accountable
- Prevent misconduct
- Help others repeat the research ('reproducibility')
- Protect people

**Table 1.** Guidelines on Good Publication Practice,<sup>2</sup> and the status of *Revista Eletrônica da Matemática* (REMAT) before the revision of editorial policies in 2024.

Guidelines	Status of REMAT before November 2024
Study design and ethical approval	Did not require any statement or documentary proof of ethical approval from research ethics committee for studies involving humans or animals
Data analysis	Did not require or indicate the disclosure of research data; did not provide actions for cases of data fabrication and falsification
Authorship	Authorship contribution adopted by REMAT has followed CRediT <sup>6</sup> specification system since 2021
Conflicts of interest	Since 2021: requires authors to submit a conflict of interest statement; reviewers instructed to declare any conflicts of interest
Peer review	Since the journal's creation, 2015: <ul style="list-style-type: none"> <li>• Double-blind peer review process<sup>1</sup></li> <li>• Authors not required to provide lists of potential reviewers</li> <li>• Acceptance rate and publication time monitored semiannually</li> <li>• Until 2024, reviewers filled out evaluation form with specific questions about the manuscript, which helped the editor in making editorial decisions</li> </ul>
Redundant publication	Did not have specific guidelines for redundant publication, but did not accept papers already published in other journals
Plagiarism	Has provided guidance on plagiarism since creation; since 2021: has used similarity checking tools
Duties of editors	Editors make decisions regarding the acceptance/rejection based on clear criteria of importance, originality, clarity, relevance to the scope of the journal, and consideration of peer review evaluations; submitted manuscripts confidential; until 2024, did not have specific policy outlining responsibilities of the editors
Media relations	Did not have a media policy
Advertising	Did not have an advertising policy
Dealing with misconduct	Did not have a policy for handling cases of misconduct



## CONTINUED

**Table 2.** Principles of Transparency and Best Practices in Scholarly Publishing (POT),<sup>3</sup> and the status of *Revista Eletrônica da Matemática* (REMAT) before the revision of editorial policies in 2024.

POT No.	POT Name	Status of REMAT before November 2024
1	A journal's name is unique	In all communications, uses full name along with the e-ISSN number to prevent readers and authors from confusing it with other journals
2	The website protects users and has high professional standards	Website uses the HTTPS protocol and the Open Journal Systems system for publishing; text is clear; site has its own design and clearly displays focus and scope, target audience, types of manuscripts accepted, authorship criteria, and e-ISSN number
3	The publishing schedule is clear and kept to in practice	Publication frequency is clearly stated on website (continuous publication); publication schedule is strictly maintained
4	Preservation of the journal content is clearly indicated	Hosted on the <i>Portal de Periódicos do IFRS</i> ; periodic backups by IFRS; portal is part of the <i>Preservação Digital de Periódicos Eletrônicos Brasileiros da Rede Cariniana – Rede Brasileira de Serviços de Preservação Digital</i> ; The Cariniana Network is part of the Lots of Copies Keep Stuff Safe (LOCKSS) program at Stanford University
5	Copyright terms for published content are clear	Copyright terms are displayed on webpage of published article
6	Licensing information; is in the policy and on published articles	Creative Commons Attribution 4.0 International License (CC BY 4.0) adopted; licensing terms are indicated on website and in full text of published articles
7	Publication ethics policies are available	<ul style="list-style-type: none"> <li>• Since its creation, has adopted policy on intellectual property</li> <li>• Starting in 2021, implemented policies on authorship and contributorship following the CRediT6 specification system and began requiring authors to submit conflict of interest statement</li> <li>• Until 2024, did not have policies on complaints and appeals, allegations of research misconduct, data sharing and reproducibility, ethical oversight, postpublication discussions, or corrections and retractions</li> </ul>
8	The peer review policy is clear	Since its creation, has provided detailed information on website about peer review process; states all manuscripts undergo double-blind peer review, evaluation process conducted by an Associate Editor, reviewers are external experts, and explains decision-making and who is involved in process; submission/acceptance/publication dates included in full text of articles
9	Charges or registration required for access to articles are clear to readers	Content is freely accessible to all
10	Journals clearly state ownership and management	Provides information on website stating journal is managed by IFRS
11	Editorial board members are experts in the journal's subject area	Editorial board consists of experts in fields of mathematics and mathematics education; full names/affiliations of its members provided on journal website and periodically reviewed
12	Journals provide contact information and full editor details	Provides full names/affiliations of editors and editorial office contact information, including complete postal address, on journal website
13	Any charges relating to manuscripts are clear to authors	Website states no submission, processing, or publication fees are charged to authors
14	Journals clearly state all revenue sources	Website states all funding received comes from IFRS
15	Journals have a transparent advertising policy	Did not have an advertising policy
16	Marketing to authors is appropriate, targeted, and unobtrusive	Does not engage in direct marketing activities, but until 2024, this information was not available on website

## CONTINUED

- Help guide decision-making when complex issues come up

They apply to all parts of research. For example, manuscript preparation, submission, peer review, publication, and correction of academic work.<sup>5p4</sup>

This citation highlights the importance of ethical principles in scientific publishing, emphasizing their role in ensuring responsibility, transparency, and integrity at all stages of the research process. In addition to preventing misconduct, these principles promote research reproducibility and the protection of those involved. SP<sup>5p4</sup> reinforces these aspects by addressing topics already covered in GPP, POT, and SEO, including research ethics, plagiarism, authorship and contributorship, peer review, allegations of misconduct, data, postpublication review, and conflicts of interest. Together, these elements underscore the need for clear guidelines for authors, reviewers, and editors, ensuring ethical practices from manuscript preparation to potential postpublication corrections.

## Methodology

A case study was chosen for this research based on the conditions mentioned in Yin: "(a) the type of research question posed, (b) the extent of control an investigator has over actual behavioral events, and (c) the degree of focus on contemporary as opposed to historical events."<sup>6p5</sup> Based on these conditions, the research strategy adopted was the case study, as we aimed to investigate *how* and *why* good editorial practices should be implemented. Additionally, the

study does not require control over behavioral events and focuses on contemporary issues, such as the movements for open science, ethics, and transparency in scientific publishing.

REMAT was selected as a representative case to explore the process of adapting to best editorial practices because it is a recent journal in the process of consolidation within the academic community, and also because it has an editorial team committed to ethics and integrity in scientific publishing and avoiding the characteristics of predatory journals. In addition to enhancing the journal's reputation through this research, it is hoped that the description of this process will serve as a foundation for other scientific journals at an earlier stage.

To review REMAT's editorial policies, the journal's editorial board conducted a study of GPP, POT, SEO, and SP. The board members were already familiar with the topics covered in these documents, but through this research, they conducted a thorough review of all the editorial best practices recommended in them. Subsequently, the board defined the policies and processes to be improved in the journal.

When finalizing the aforementioned policies, as a form of review, AI ChatGPT,<sup>7</sup> based on the GPT-4 architecture, was used. This tool has been progressively improving with each version, and one factor contributing to this progress is the increasing use of data to train its "parameters," which can be seen as adjustments that enhance its performance. These parameters include the model's "weights," which are numerical values that control how the model processes input and generates results<sup>8</sup> In this context, AI contributed as a tool in the process of updating existing policies and parameterizing new ones to meet the principles of transparency and best practices in scholarly publishing. It should be noted that the policies were reviewed and created by REMAT editors based on specific knowledge of best editorial practices, acquired through training or reading on the subject, as well as their experiences in publishing.

Once finalized, the texts of each policy were submitted to ChatGPT-4 to identify essential points. For each policy, the tool provided both positive aspects and areas for improvement. The latter were analyzed by the editors, who assessed their relevance and appropriateness, as well as the manner in which they were presented in the policy.

Finally, the revisions were submitted to the REMAT editorial board, approved, and published on the journal's website. In October 2024, an oral presentation was given at the ABEC Meeting 2024 about this process.<sup>9</sup>

The translation of this article from Portuguese to English was done using Google Translate, with a review by ChatGPT-4.

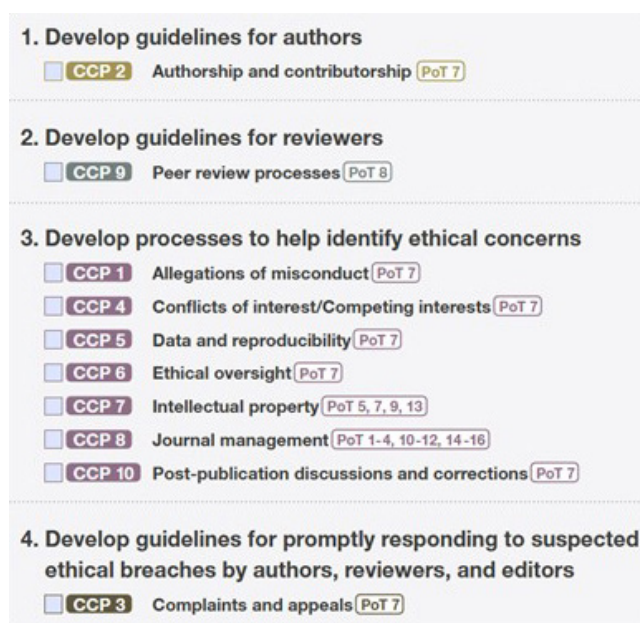


Figure 2. Committee on Publication Ethics COPE checklist.<sup>4p32</sup>

## CONTINUED

## Case Study: Adaptation of REMAT's Editorial Policies

This section presents the restructuring of REMAT's editorial policies, carried out in accordance with the principles and practices outlined in GPP, POT, SEO, and SP. Table 3 (online only) displays the additions made to REMAT's editorial processes. It is worth noting that, over the past 10 years, REMAT has adopted several best editorial practices, which are listed in Tables 1 and 2 and can be viewed in full on the journal's website ([https://periodicos.ifrs.edu.br/index.php/REMAT/editorial\\_policies](https://periodicos.ifrs.edu.br/index.php/REMAT/editorial_policies)).

It can be observed that REMAT made several revisions to its policies in pursuit of good editorial practices. In Table 3, both new policies and small additions to existing policies are noticeable. This differentiation is explained below. By analyzing the second column of Table 3, it is clear that 10 principles out of the 16 proposed GPP were considered, and that 66% of REMAT's new practices align with the POT 7 principle. Therefore, the main changes involved the principle of ethics in publishing. Furthermore, the third column shows that the final version of REMAT's editorial policies encompasses all 16 principles from POT.

Regarding allegations of misconduct, COPE<sup>4</sup> recommends that journals establish a clearly defined process for addressing such allegations, both pre- and postpublication. Furthermore, journals should allow discussions about publications and have mechanisms in place for correcting or retracting articles already published. In addition, in the event of complaints against the journal or its editorial board, journals must present policies that clearly describe how the process is conducted. While REMAT remains attentive to cases of misconduct and maintains good communication between authors and editorial team (editors and reviewers), it has addressed these issues more specifically by creating the Allegations of Misconduct Policy, the Post-Publication Discussions and Corrections Policy, and the Complaints and Appeals Policy.<sup>10</sup> Due to concerns about the use of AI in scientific publications, REMAT also developed the Artificial Intelligence Use Policy, providing guidance to its authors and editorial team on how to use it responsibly and avoid misconduct. These policies are mentioned in Table 3, with the main information, and are fully available on the journal's website.

By the end of 2024, REMAT required its authors to submit a declaration of manuscript originality, in addition to declaring authorship, contributorship, and conflicts of interest. COPE recommends that journals clearly present policies that ensure transparency regarding who contributed to the work and how they contributed, specifying authorship and contributorship. Furthermore, journals must clarify the processes for managing potential disputes between authors. COPE also suggests that journals be prepared to address

conflicts of interest identified before or after publication. Another important aspect for editors is ethical oversight. COPE recommends that participants' consent be verified for the publication of results and that authors maintain ethical conduct throughout the research. Additionally, it must be ensured that there was ethical conduct with vulnerable populations, ethical handling of research involving animals and human subjects, and appropriate treatment of confidential data. REMAT addressed these aspects through the revision of the Authorship and Contributorship Policy, the Conflicts of Interest/Competing Interests Policy, and the creation of the Ethical Oversight Policy.

Another good practice recommended by COPE is that journals should adopt policies on data availability to allow for the reproducibility of research, enabling its validation and the reuse of data. In this regard, REMAT created the Data Sharing and Reproducibility Policy to guide its authors on this practice.

With regard to intellectual property, COPE advises that journals should have policies that clearly describe copyright and publishing licenses. Furthermore, it should be clarified what prepublications may prevent consideration by the journal, as well as what constitutes plagiarism and redundant/overlapping publication. Additionally, costs to authors and readers must be transparent. These guidelines were addressed with the update of the Intellectual Property Policy, and a key change to highlight is that, as of September 2024, copyright belongs to the authors. The Allegations of Misconduct Policy also provides guidance on plagiarism and redundant/overlapping publication.

With the Management Policy, REMAT clarifies the responsibilities of the entire editorial team. According to COPE, it is recommended that journals have a well-defined and implemented infrastructure. Training the editorial team is also important, as it contributes to the efficiency of the services provided by the journal. Furthermore, the journal must inform its policies, processes, and the software used for management, as well as other tools adopted, to ensure an efficient editorial flow. These items are detailed in the Digital Archiving and Preservation Policy, Publishing System, Interoperability Protocol, Promotion, Indexers, Promoters, Associations, Persistent Identifiers, Bibliometric Indicators, and Digital Preservation.

Finally, COPE recommends that peer review processes be well-defined and transparent. Furthermore, it suggests that journals provide training for editors and reviewers and establish policies on peer review, as well as processes for handling conflicts of interest, appeals, and disputes that may arise during the peer review process. In this regard, REMAT updated the Peer Review Process Policy.

(Continued on p. 76)



# Community is Key

**Jonathan Schultz**

As the Director of Journals at the American Society of Clinical Oncology (ASCO), a society that publishes some of the top cancer research journals, Emilie Gunn is used to dealing with challenges. That experience will serve her well as the new President of the Council of Science Editors (CSE), as the organization and its members deal with political upheaval and an uncertain future for U.S. research funding. In this conversation from earlier this year, Emilie spoke with *Science Editor* Editor-in-Chief, Jonathan Schultz, about her path to scientific publishing and the importance of community.

**Science Editor:** How did you get involved in scientific editing and publishing, and what career path led to your position?

**Emilie Gunn:** I came into it by accident, as I think a lot of us did. I didn't know this job existed until I applied for it. In college, I was an English major, and I didn't really know what I wanted to do with that after I graduated. I liked the idea of teaching, but I didn't think that would be my career, necessarily. When I told my dad that I was going to major in English, he was a little disappointed at first, and then he said, "that's fine for now because you can always go back later and major in something useful". I ended up teaching middle school for a few years after college. It was a job I loved, and I still feel passionately about education, but after a few years it felt like it was time to move on. I looked in the newspaper, like the actual print newspaper, looking for anything in the world of publishing, whether that meant magazines or journals or books. I saw this job [editorial assistant at ASCO] and thought, well, that sounds interesting. I've been here ever since. That was 2005, so it'll be 20 years in May that I've been at ASCO.

**SE:** We have basically an identical career. I started at the American Heart Association in 2005 as an editorial assistant and now I'm a Sr Director.

**Emilie Gunn:** That's so funny. I started as an editorial assistant and was very lucky that I had a great supervisor

who gave me interesting things to work on and challenged me consistently and was very supportive of me trying to learn new things and take on greater responsibility. And he really encouraged me throughout my career. So I was very lucky to have that.

**SE:** What do you enjoy most about your career?

**Emilie Gunn:** There are so many things, but I really like working for a nonprofit. When I think about what ASCO does and how my work feeds into that, it's a great reason to get out of bed in the morning. ASCO, as an organization, has a mission to conquer cancer through education and research, and who can't get behind that? The field of publishing is interesting because it's so collaborative. We don't hesitate to call up one of our colleagues in publishing and say, "Hey, I'm having this issue: how did you deal with that? What did you do when this came up?" People just share, "This is how we did it," and we think nothing of it. I really love that nature of publishing in general. Even though it doesn't sound like much, I really love the fact that we produce a tangible product every 10 days. Copies of the journals show up on my desk, and I can say that I had a hand in bringing that about. It's this big goal to find the cure for cancer, and I like being able to play a role in that through publishing research and educating clinicians who are treating patients with cancer.

**SE:** Pivoting to CSE, this May, you start your term as CSE President. Can you talk a little bit about what CSE has meant to you and what you are looking forward to doing as president.



Emilie Gunn

Jonathan Schultz (<https://orcid.org/0000-0003-1030-5062>) is Editor-in-Chief, Science Editor, and Director, Journal Operations, American Heart Association.

<https://doi.org/10.36591/SE-4802-12>

## CONTINUED

**Emilie Gunn:** I first got involved with CSE when I was still an editorial assistant. My supervisor encouraged me to join and said, it's not worth joining unless you're going to be active and he recommended the Education Committee. So that's what I did and jumped in right away. We were evaluating applications for annual meeting scholarships and my first task was to help with that. I stayed on the education committee for a long time, and I've also been involved with some of the short courses. CSE has kind of always been my go-to place to learn something new and to expand my network of other publishing professionals. It's just such a great way to get to know other people and to be current in what's going on in the field of publishing. As president, I am really excited and so grateful to be able to give back to an organization that's given so much to me.

I think one of the big things I'd like to do is pull in more volunteers from all different walks of life. To get people who are early career and late career people who are involved with production and with editorial, to tap into this big group of diverse experiences and opinions. I also think it would be interesting to work with some of our sister societies like SSP [Society for Scholarly Publishing] and ISMTE [International Society of Managing and Technical Editors] that do work similar to ours, especially in the current political climate. I think CSE has an opportunity to make a name for itself as a place that is open and welcome to everybody, and I think working with other societies is a good way to get that done.

**SE:** Looming over everything are the actions of the current U.S. administration, with regard to diversity initiatives, research funding, and more. How do you see CSE's role during this time?

**Emilie Gunn:** CSE has always had a commitment to diversity as long as I've been a member. We offer a lot of resources around diversity. We have the DEIA committee where people can be involved with different initiatives. We offer a page of resources about DEIA and how to apply them at your own publications. I don't see any of that ending. In fact, if anything, I would think that this is the time to double down on those efforts and for CSE to show that diversity is important to us and, despite the political climate, we're not going to leave our focus on it.

It can be a little scary to do that, especially with the current political climate. I do think it's important for CSE to remain fully committed to it.

**SE:** That's great to hear. What are some of the biggest changes you've seen occurring in the industry and where do you see science editing and publishing going in the future?

**Emilie Gunn:** I'm going to date myself. I know I already did with the newspaper, but I'll do it again. When I started

at ASCO, we had just launched our first online manuscript submission system. We were on BenchPress and were in this weird in-between stage where we still had a bunch of paper files and then we had some that were online. Putting together an issue literally meant making a stack of file folders. We had one file folder for each manuscript, and then you would walk it down the hall to production and say, here's the issue. I'd say we've come a long way just in terms of efficiency and the online tools that we can use for authors and reviewers. Think of the money we spent FedExing manuscripts out to editors or the time we spent sending faxes: The whole of manuscript submission and peer review has changed.

Open access obviously is a big thing that has come along just in the past 10 years or so. I think we're only going to continue to see more of that. I would be fairly surprised to see a journal launch these days that's not open access. I think we're going to also see a big emphasis on sharing data sets and more transparency into the research that took place and how it took place, which hopefully will lead to more collaboration among researchers. We'll see. Everything is going to become more and more open as we go.

**SE:** What skills, abilities, and personal attributes have you found to be essential to success in our field?

**Emilie Gunn:** I definitely think flexibility is key. Publishing is always changing. There's always some new standard that we have to pay attention to or some new process that is going to change how we do our work. Being open to just change is really important and being able to go with the flow. Collaboration as well, there are so many different aspects to producing a journal, you need to have a big team and you need to be able to work together well. Flexibility and collaboration are the two key things to work in publishing and to get along well.

**SE:** Building on that last point, can you talk a little bit more about the importance of community?

**Emilie Gunn:** Community is key. Within CSE, there's definitely a community of publishers and of publishing professionals, which is how we learn from each other. As I was preparing for this interview, I literally got an email saying, "I'm having this issue at my journal. Do you think we can set aside some time to talk?" Having those people that you can reach out to makes you better at what you do because you're not just relying on yourself, and you've got everybody's input. Even with our own publishing team here at ASCO, we still have to work well with the marketing team and the team that produces our guidelines. Being willing to understand that you're a member of a larger community is so important.

**SE:** What do you think you'd be doing if you weren't in scientific publishing? Teaching obviously, but anything else?

## CONTINUED

**Emilie Gunn:** I don't know. I don't think I would be a classroom teacher necessarily, but I would probably have some sort of role in education, like curriculum design or a librarian. When I was in college, I worked at the library on campus in the reference section. Students doing research would come in and ask for help, and I loved that. If I wasn't in publishing, I would probably be in library science.

**SE:** Is there anything that you could tell our readers that might surprise them about yourself?

**Emilie Gunn:** It's not very surprising, but I like to read a lot. I love to knit and crochet. I am kind of an old soul, I think.

**SE:** What do you read?

**Emilie Gunn:** Mostly just contemporary literature and I try to read a few classics every year. Right now I'm going back to read *The Scarlet Letter*, which I haven't read since high school.

**SE:** Are you liking *The Scarlet Letter*? I feel like that's one that's kind of ruined by high school.

**Emilie Gunn:** I loved *The Scarlet Letter* in high school, and I'm actually excited to read it as an adult with a different perspective.

(Continued from p. 73)

Returning to the issue of the high manuscript rejection rate at REMAT during the desk review phase, starting in 2025, REMAT will require the submission of the Authors' Declaration along with the manuscript for evaluation. The declaration includes:

- Declaration of originality
- Declaration of authorship and contributorship
- Declaration of research approval by a Research Ethics Committee, if applicable
- Declaration of conflicts of interest/competing interests
- Declaration of data availability for reproducibility
- Declaration of the use of AI
- List of all REMAT editorial policies (full text)
- Signature of all authors

With these adjustments, starting in 2025, authors will be required to submit 3 mandatory documents: the manuscript, the Authors' Declaration, and a text review statement (in Portuguese, English, and Spanish) issued by a professional in the field.

## Final Considerations

This case study documents the progress made in implementing transparency principles and best editorial practices recommended by COPE, DOAJ, OASPA, and WAME at REMAT. The revisions to the journal's editorial policies have not only improved its processes but also increased awareness among readers, authors, reviewers, and editors regarding its workflows and the critical role of ethical research practices, along with the journal's commitment to ethical reviewing and publishing.

Furthermore, these revisions reinforce REMAT's dedication to the ethical publication of scientific research,

evidenced by its ongoing efforts to ensure that authors are better informed about the journal's guidelines. Changes such as the expansion of the authors' declaration and the inclusion of guidelines on the use of AI reflect REMAT's adaptation to the contemporary demands of scientific publishing. Although this study did not explicitly address the consequences of failing to meet these ethical standards, it is important to recognize that noncompliance can undermine the journal's credibility, negatively affect the trust of the academic community, and result in sanctions, such as being listed as a predatory journal or having articles retracted.

## Acknowledgment

The author gratefully acknowledges the financial support provided by the Dean of Research, Postgraduate Studies, and Innovation (Pró-Reitoria de Pesquisa, Pós-Graduação e Inovação – PROPPi) of the Federal Institute of Education, Science, and Technology of Rio Grande do Sul (IFRS) through the research project code PVD2508-2024.

## References and Links

1. <https://periodicos.ifrs.edu.br/index.php/REMAT>
2. <https://www.citiprogram.org/citidocuments/PABI%20Columbia/gp.pdf>
3. <https://doi.org/10.24318/cope.2019.1.12>
4. <https://doi.org/10.24318/AkFpEBd1>
5. <https://publicationethics.org/about/what-we-do/strategic-plan>
6. Yin RK. Case study research: design and methods. 3rd ed. Sage Publications; 2003.
7. <https://openai.com/index/introducing-gpts>
8. <https://doi.org/10.54675/EWZM9535>
9. Andreis GSL, Arcaro, K, Boff DSB, Paula MC, Milhomens DMM, Silva MJ. Políticas editoriais da Revista Eletrônica da Matemática: uma revisão a partir dos princípios COPE. Proceedings of the ABEC Meeting; São Paulo, Brazil, 2024. <https://doi.org/10.21452/abecmeeting2024.246>
10. <https://publicationethics.org/about/what-we-do/our-story/core-practices>

# Driving the SDGs Forward: The Soft Power of Publishers

**Eleonora Colangelo and Steven D Smith**

In October 2024, CSE, with support from Digital Science, hosted a webinar exploring the use of soft power in scholarly publishing.

Coined by political scientist Joseph Nye in the 1980s, “soft power” refers to the ability to influence through culture, values, and ideas rather than coercion—a concept traditionally associated with diplomacy and international relations.<sup>1</sup> Only more recently has it been applied to science diplomacy to inflate diplomatic ties beyond transactional relationships, in an increasingly multipolar global landscape.<sup>2</sup>

Organized and moderated by Eleonora Colangelo (Frontiers) and Steve Smith (AIP Publishing), the webinar extended this political category to publishers for the first time, positioning them as active contributors to global discourse rather than mere content gatekeepers. By aligning their work with the United Nations Sustainable Development Goals (SDGs), publishers can “lead with purpose” as architects of global discourse and wielders of influence.<sup>3</sup>

## Publishers Mitigating Global Threats: Basics and Case Studies of Soft Power

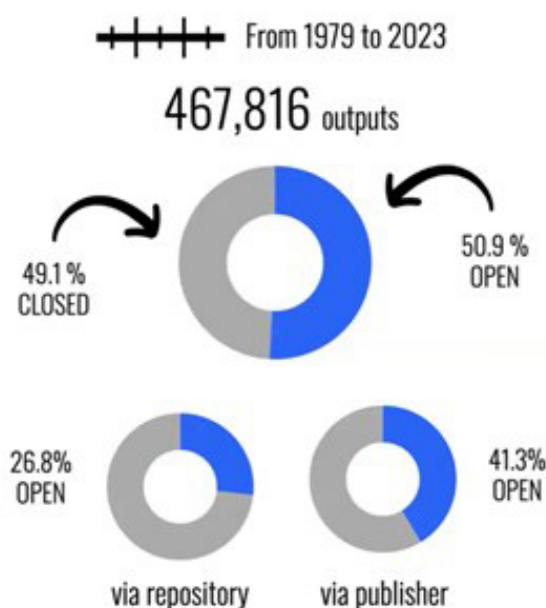
Monica Granados, Director of Open Science at Creative Commons, opened the webinar through 2 case studies of soft power applied to academic publishing.

First, she highlighted the intersection between a publisher’s soft power and SDG 3, Good Health and Well-Being, through the lens of the COVID-19 pandemic. As the World Health Organization declared a global emergency, publishers responded with an unprecedented wave of collaboration. By 2021, over 77% of COVID-19–

related research was freely accessible: a breakthrough that accelerated vaccine development and demonstrated the way in which publishers can enable swift, impactful responses to global crises.

Her second example, focused on SDG 13, Climate Action, told a more challenging story. Despite decades of urgency, only half of climate-related research outputs have been openly accessible since 1979. Creative Commons, with data from the Curtin Open Knowledge Initiative and Sesame Open Science, aims to address this through their Unbinding Project,<sup>3</sup> which seeks to make approximately 18,000 papers from 200 publishers cited in the Intergovernmental Panel on Climate Change’s Sixth Assessment Report Open Access (Figure 1). These papers represent the most up-to-date and critical knowledge on climate change, selected by leading scientists to inform mitigation, adaptation, and solution strategies.

Granados’s insights ultimately served as a call to action for publishers—to ‘open up the papers’ and turn access into action for global equity, resilience, and sustainability. The



**Figure 1.** State of all open/closed publications about climate change. Source: Curtin Open Knowledge Initiative.

Eleonora Colangelo (<https://orcid.org/0009-0006-5741-1590>) is Open Science Policy Analyst/Public Affairs Officer, Frontiers.  
Steven D Smith, DPhil (<https://orcid.org/0000-0001-5729-4247>), is Publisher for Portfolio Development, AIP Publishing.

Opinions expressed are those of the authors and do not necessarily reflect the opinions or policies of their employers, the Council of Science Editors, or the Editorial Board of Science Editor.

<https://doi.org/10.36591/SE-4802-04>



## CONTINUED

Open Climate Data project highlights the incubator power of such a message.<sup>4</sup>

## Quality Content as the Seed of Soft Power

Stephan Kuster, Head of Public Affairs at Frontiers, echoed Granados's remarks, emphasizing that high-quality content is the foundation of publishers' soft power. He stressed that by aligning with the SDGs and advocating for Open Access, publishers have an ethical duty to broaden their influence, ensuring research moves from niche topics to impact policymakers, industry leaders, and society. Kuster argued,

That is going to be more than a marketing slogan; it's an actual promise to our authors, a promise to research funders, a promise to wider society. We need to find the power to back up that responsibility. The publication of an article should not be the end of the publisher's role, but rather just one more step, followed by many others.

According to Kuster, through initiatives such as Frontiers Policy Labs, Frontiers exemplifies the "soft power in action" concept by fostering conversations that transform research findings into actionable decisions. Similarly, partnerships like the one with World Economic Forum, leading to the *Top 10 Emerging Technologies* report, highlight how publishers can serve as key intermediaries, showcasing science-driven innovations and shaping industry dialogue as trusted facilitators.<sup>5</sup>

Analysts describe soft power also as a cultural legacy, a long-term and cross-generational force. Programs like *Frontiers for Young Minds* embody this concept, where children actively engage in peer-reviewing Nobel laureates' research alongside science mentors.<sup>6</sup> Through such initiatives, soft power's influence extends beyond the present, by inspiring critical thinking and a deeper understanding of science as a process, leaving a lasting mark on how young minds first engage with research.

The discussion shifted focus to Frontiers' flagship journal, *Frontiers in Science*. Embodying the multistakeholder approach central to soft power, the journal serves as a dynamic platform where research is integrated with parascientific content (i.e., youth-friendly versions, expert editorials, and policy perspectives). Over time, it has become a bridge connecting researchers with policymakers, industry leaders, and nonexpert voices. Here lies the true convening power of publishers, further amplified in the case of Frontiers through initiatives like the Frontiers Planet Prize: This annual award goes beyond simply recognizing impactful research; it provides seed funding and global visibility, transforming groundbreaking ideas into tangible, real-world solutions.

The main takeaway from the Frontiers case study is clear: soft power cannot be effective or even expected without a

foundation of trustworthy, high-quality content. This idea is a recurring theme among top publishers. Most importantly, it can generate new models to explain how this sociological category informs publishers' agendas.

## Content as Hard Power: The CA2 Model to Explain Soft Power

It all begins with content. Starting from this premise, Marios Karouzos, Head of Publishing Strategy – Reviews, News, and Opinion at Springer Nature, introduced a structured approach to leveraging soft power: the CA2 model—Curate, Amplify, Convene, Accelerate. He argued that publishers' content represents their hard power, whereas their ability to convene stakeholders amplifies their soft power and positively influences behaviors.

As outlined by Karouzos, Springer Nature's SDG-focused initiatives exemplify this synergy, aligning with the recent United Nations (UN) Pact for the Future declaration: "Advances in knowledge, science, technology, and innovation could deliver a breakthrough to a better and more sustainable future for all. The choice is ours."<sup>7</sup> Springer Nature responds to this manifesto through a 3-pillar strategy based on content, people, and planet. With over 900,000 SDG-related publications, the publisher's extensive portfolio serves as a cornerstone of influence. Through events, SDG Hubs, and policy briefs, they bridge research and real-world applications, exemplifying how curated content and strategic partnerships can catalyze sustainable change. Recognizing the need to translate academic research into actionable insights, Karouzos highlighted Springer Nature's policy briefs as key tools for summarizing findings in an accessible format for policymakers, able to resonate in high-level discussions.

At the heart of his presentation was the publisher's collaboration with international organizations to ensure research informs global policymaking. Recent engagements include participation in the UN's Science Summit and a partnership with UN Women, for which Springer Nature signed the Media Compact to promote gender equity in science and media. However, internal engagement makes the difference in Springer Nature's approach. The publisher's commitment to the SDGs extends beyond external initiatives, with employees actively involved through working groups like SDG 5, Gender Equality. This group has launched impactful projects, including the *Breaking Barriers Conference Series*, which addresses gender equity and its intersection with other SDGs. Karouzos concluded,

Soft power starts with hard power—the content we publish. But when combined with convening the right people and embracing corporate responsibility, publishers can become a force for sustainable change.

## CONTINUED

## Memories From a Staffer: How to Energize Soft Power as Advocacy

Seasoned policy advocate and Senior Policy & External Affairs Manager at Taylor & Francis, Andrew Bostjancic, shared a personal perspective, recalling his early days on Capitol Hill and the challenges policymakers face in accessing actionable research. This biographical note highlighted the potential of storytelling and related strategies as powerful tools for operationalizing soft power.

Bostjancic, now a Fellow in the SDG Publisher Compact, first elaborated on how this global, multi-stakeholder initiative, part of the Higher Education Sustainability Initiative, is tackling the challenges publishers face in democratizing knowledge for systemic change. The Compact functions as both a think tank and an action group, facilitating collaboration among publishers, researchers, editors, and policymakers to integrate the SDGs into their work. One of their key initiatives is the Sustainable Solutions Summit, which brings together authors, educators, reviewers, and editorial boards to explore emerging trends and develop actionable recommendations.<sup>8</sup> The “Top Action Tips” provide practical guidelines for researchers and publishers alike.<sup>9</sup>

Reflecting on his years of experience in government affairs, Bostjancic also shared strategies for leveraging soft power to influence SDG progress. These strategies involve crafting a clear and compelling advocacy message, understanding the target audiences, and tailoring stories and data to resonate with their specific needs. He also emphasized the importance of leveraging multiple channels, building strategic partnerships, and consistently incorporating a call to action as key pillars for energizing a soft power agenda.

Bostjancic concluded with an exercise in reflection:

Think about how the SDGs align with your values, experiences, and aspirations. Envision the world we could create if we succeed—and the stakes if we fail. Personalize your message and bring it into your advocacy efforts. Stories can be transformative tools when paired with the rigor of research.

## Digital Science’s Taxonomies: A Product-Centric Perspective on Soft Power

Data plays a beneficial role in shaping a storytelling approach that channels soft power into lobbying discussions. Michelle Herbert, Customer Engagement Manager – Publishers at Digital Science, concluded the discussion by highlighting how soft power can be framed through a data-driven perspective.

In 2020, Digital Science pioneered an SDG taxonomy, mapping the 17 goals across Dimensions’ vast repository of publications. According to Herbert, this innovation revealed

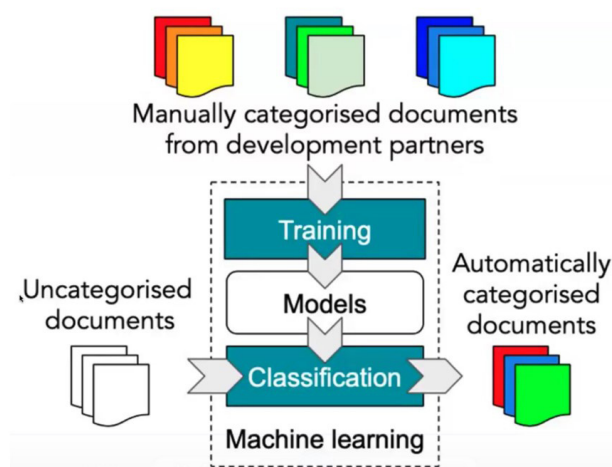
subtle links between research and global challenges, equipping publishers, policymakers, and researchers to tackle sustainable development with clarity and purpose (Figure 2).

Data from 2015 to 2023 shows a marked increase in SDG-related publications, with SDG 3 dominating journal articles, and SDG 16, Peace, Justice, and Strong Institutions, leading among books (Figure 3). These insights enable publishers to refine strategies, assess SDG relevance, curate focused collections, and amplify visibility.

Tools like Altmetric offer complementary insights by tracking online engagement with SDG-aligned publications. Between 2015 and 2023, mentions on social media, news outlets, and Wikipedia increased significantly: It turns out that although books receive fewer mentions than journal articles, they often sustain attention in formal platforms like Wikipedia. A key example is *The 2024 State of Climate Report: Perilous Times on Planet Earth*, released on October 8, 2024. Garnering coverage in 187 news outlets, over 12,000 discussions on X (formerly Twitter), and Wikipedia updates in 3 languages, the report illustrated the reach of SDG 13.<sup>10</sup> Dimensions analysis showed a strong contemporary relevance, with most references from 2024. Gaining traction globally, particularly in the United States, UK, and Germany, this case study capped an insightful discussion on the technical facets of publishers’ soft power, showcasing how detailed taxonomies can inform impactful strategies.

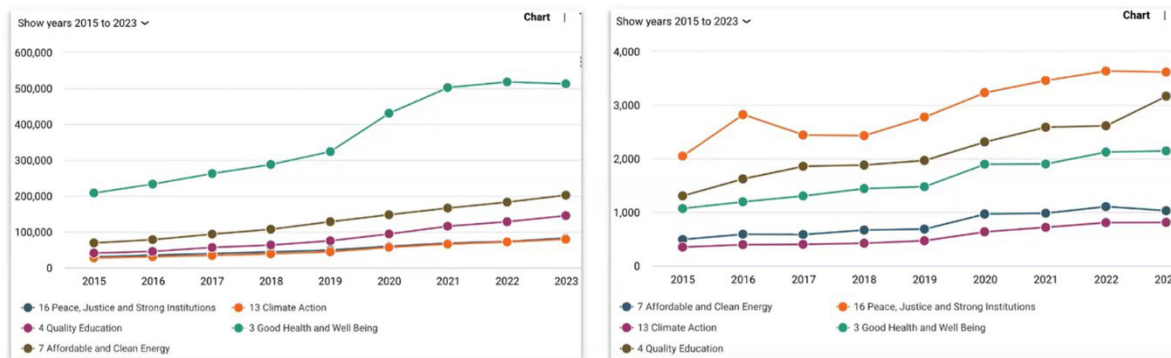
## In Summary and What Is Next

Soft power shifts the narrative around publishers, repositioning them not just as profit-driven entities or



**Figure 2.** Artificial intelligence-driven Sustainable Development Goal (SDG) Classification by Digital Science. By October 2024, Dimensions indexed over 149 million publications under the SDG framework, enabling stakeholders to measure impact, refine strategies, and lead meaningful progress toward global sustainability.

## CONTINUED



**Figure 3.** A comparative visualization of Sustainable Development Goals (SDGs) in publications. The first box showcases the top 5 SDGs featured in journal articles from 2015 and 2023, while the second highlights the top 5 SDGs in books over the same period.

catalysts of disparities, but as proactive agents capable of addressing these disparities and driving sustainable progress within the science business ecosystem and beyond. From specific case studies to data-driven insights, each speaker highlighted a unique dimension of influence. Together, their narratives formed a cohesive argument around publishers as active shapers of global discourse. Moving forward, several key issues must be addressed to solidify soft power as the dominant framework for publishers: balancing qualitative and quantitative insights and ensuring trustworthy content to prevent bad science from reaching policymakers. These and other critical points were touched upon during the webinar's Q&A session. Although not fully explored here, they warrant further investigation in a dedicated article.

## References and Links

1. See the more recent contribution on soft power in the context of great-power rivalries: Nye JS. Soft power and great-power competition: shifting sands in the balance of power between the United States and China. Springer Nature; 2023. <https://doi.org/10.1007/978-981-99-0714-4>
2. Gluckmann PD, Turekian V, Grimes RW, Kishi T. (2017). Science diplomacy: A pragmatic perspective from the inside. *Sci Diplomacy*. 2017;6. [accessed April 22, 2025]. [https://www.sciencediplomacy.org/sites/default/files/pragmatic\\_perspective\\_science\\_advice\\_dec2017\\_1.pdf](https://www.sciencediplomacy.org/sites/default/files/pragmatic_perspective_science_advice_dec2017_1.pdf)
3. Ghildiyal A. Scholarly publishing and the SDGs: leading with purpose for a sustainable future. *Sci Ed*. 2025;48:22–26. <https://doi.org/10.36591/SE-4801-02>. Although the article touches on points from the webinar, it does not specifically explore soft power in relation to publishers' contributions to Agenda 2030 and societal change.
4. <https://creativecommons.org/about/open-science/open-climate/>
5. [https://www.weforum.org/publications/top-10-emerging-technologies-2024/?utm\\_source=chatgpt.com](https://www.weforum.org/publications/top-10-emerging-technologies-2024/?utm_source=chatgpt.com)
6. For further details, see do Amaral J, Schultz J. Frontiers for Young Minds: communicating passion and excitement about science. *Sci Ed*. 2022;45:124–126. <https://doi.org/10.36591/SE-D-4504-05>.
7. The Pact for the Future was adopted at the UN Summit of the Future on September 22, 2024, to revitalize the multilateral system with a new peace agenda and to promote networked multilateralism: <https://www.diplomacy.edu/resource/265366-2/>
8. Slide deck and recording of the 2022 Sustainable Solutions Summit: <https://www.sdgcompactfellows.org/upcoming-events/sustainable-solutions-summit>
9. The Top Action Tips provide actionable and easy-to-use ideas and best practices: <https://www.sdgcompactfellows.org/top-action-tips-2-1>; DOI citations for each tip: <https://www.scienceopen.com/search#collection/99e3fa87-3532-40a3-8c1c-20520d7c0c09>.
10. Ripple WJ, Wolf C, Gregg JW, Rockström J, Mann ME. The 2024 state of the climate report: Perilous times on planet Earth. *BioScience*. 2024;74:812–820. <https://doi.org/10.1093/biosci/biae087>.

# Moving from Ideas to Implementation: Highlights of the 2025 Researcher to Reader Workshop on Peer Review Innovation

Tony Alves, Jason De Boer, Alice Ellingham, Elizabeth Hay, and Christopher Leonard

This follow-up session to 2024's Researcher to Reader (R2R) workshop continued from where the previous year's initiative ended: charting a course for the accelerated evolution of the peer review process in scholarly publishing. *Peer Review Innovations: What are Strategies for Implementing Solutions Across Scholarly Communications?* brought together a group of invested individuals from across the industry including publishers, funders, technologists, librarians, and research integrity experts. The aim this time around was to move beyond identifying challenges to instead focus on actionable solutions that could be started by the attendees. With peer review under increasing strain due to rising submission volumes, reviewer shortages, and concerns about integrity, the discussion centered on practical strategies to improve efficiency, fairness, and transparency.

## Lessons from the 2024 Workshop

The lessons learned from the previous workshop helped to shape the framework of the 2025 discussions. Twelve

months ago, we explored the root causes of peer review's most pressing problems. First, we established that there was indeed a looming crisis in peer review. 93% of attendees voted that peer review needed major improvements (revisions?) and that the current workflows were both under strain and incentivizing malpractice. Some people were worried about artificial intelligence (AI)-generated fake research, others about identity fraud among reviewers, lack of training for peer review, and overburdened editorial teams.

However, there was also consensus that peer review remains an essential pillar in upholding the integrity of scientific research. Open peer review and AI-assisted reviewer selection were seen as promising, but widespread adoption and standardization were cited as being necessary to maximize their impact.<sup>1</sup>

The attendees identified the below challenges and themes to focus on for innovation:

- **Disincentivizing malpractice.** How can we prevent unethical behavior in peer review?
- **Professional recognition for peer reviewers.** What systems can ensure reviewers receive appropriate credit for their work?
- **Adoption of persistent identifiers (PIDs).** How can we enhance identity verification in peer review?
- **Technology in peer review.** What role should AI and automation play in improving efficiency?
- **Quality vs quantity.** How can we balance the increasing volume of submissions with maintaining rigorous review standards?

The 2025 workshop set out to build on these insights and move on from talking about problems to concrete implementation strategies to solve them.

Tony Alves (<https://orcid.org/0000-0001-7054-1732>) is with HighWire Press; Jason De Boer (<https://orcid.org/0009-0002-6940-644X>) is with De Boer Consultancy and Kriyadocs; Alice Ellingham (<https://orcid.org/0000-0002-5439-7993>) and Elizabeth Hay (<https://orcid.org/0000-0001-6499-5519>) are with Editorial Office Limited, and Christopher Leonard (<https://orcid.org/0000-0001-5203-6986>) is with Cactus Communications.

Opinions expressed are those of the authors and do not necessarily reflect the opinions or policies of the Council of Science Editors or the Editorial Board of Science Editor.

<https://doi.org/10.36591/SE-4802-11>



## CONTINUED

## 2025 Workshop Session 1: Identifying Challenges and Opportunities

The first session opened with a broad discussion on whether the challenges identified in 2024 (Figure 1) were still relevant, and if new problems had emerged. Overall, it was agreed that they were still relevant, with any new challenges falling into existing issues.

We repeated the poll about the current state of peer review, with the results in Figure 2.

While it was interesting to see the number of attendees who voted that peer review needed major improvements, the percentage who voted that it is no longer fit for purpose increased.

Attendees then broke into small groups to discuss each of the challenges and their root causes, the barrier these challenges create, before moving on to a more positive discussion to identify successes and existing strategies in each of the areas that could be expanded. Groups were moved around during the discussion to maximize perspectives brought to each of the challenges discussed. Several themes emerged:

- **Reviewer identity fraud remains a real, persistent problem.** Some participants pointed to fake reviewer accounts created to manipulate journal decisions, while others noted that a lack of multifactor authentication in submission systems makes it easy for fraudulent reviews to slip through and game the system.
- **AI's role in peer review sparked debate.** Some participants saw AI tools as essential for streamlining administrative tasks, while others worried about biases in AI-generated reviewer recommendations and the ethical implications of AI-assisted manuscript screening.
- **The sheer volume of submissions continues to strain the system.** Participants questioned whether all research should go through traditional peer review,

or if alternative models, such as community-driven postpublication review, could help alleviate pressure on journals.

- **Professional recognition for peer review** is not administered consistently and is not always effectively integrated into systems that matter to the peer reviewer, for example, funding and career development. The variance in recognition schemes, training, regional approaches, and lack of accountability for reviews leads to variance in quality and subjectivity.

## 2025 Workshop Session 2: Designing Innovative Solutions

After a short recap of Session 1, participants were tasked with thinking of bold, practical strategies to tackle the identified challenges. Each table worked on a different area of peer review innovation, focusing on immediate actions, medium-term strategies, and “blue-sky” ideas.

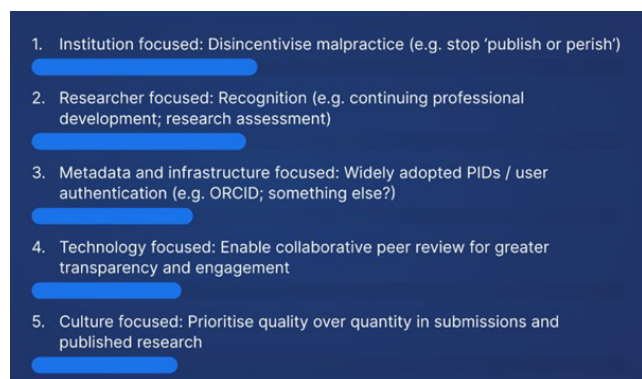
### Key Solutions

Creating a **professional governing body for peer reviewers**, which would establish industry-wide ethics guidelines, offer certification programs, and provide accreditation for high-quality reviewers.

Implementing **multifactor authentication for reviewers**, building on and enhancing existing PIDs such as ORCID to reduce fraudulent reviews and improve identity verification. It is impossible to open a bank account (or crypto account) without some kind of background check involving bills, passports, and other proof of your identity. Within the financial sector, this is known as Know Your Customer (KYC). It minimizes the risk of fraud and identity theft and seems to be something the majority of the world has grown to live with, if perhaps not love. Why not have the same protocols to prevent fraud and identity theft—or spoofing—in the academic world? Is the value of the scientific corpus worth preserving this way?

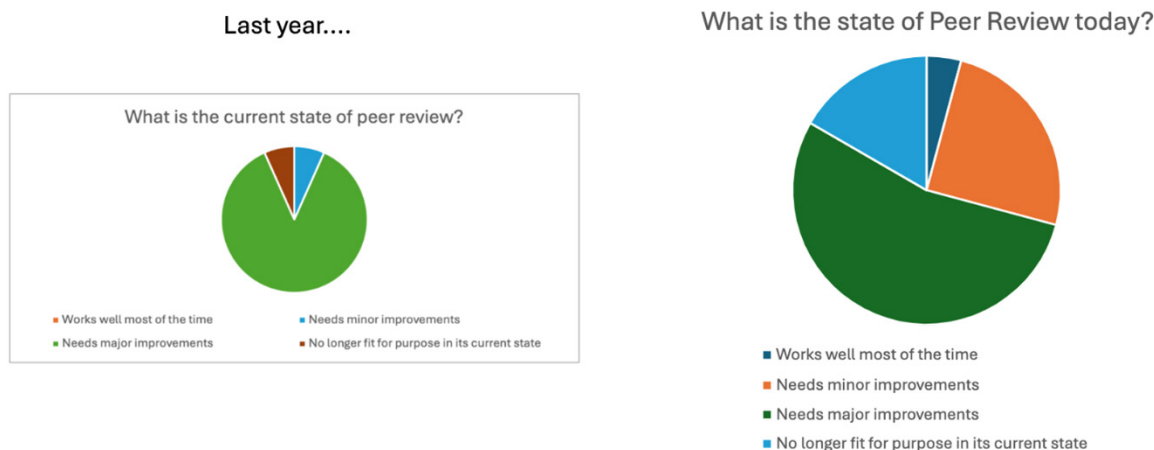
Although there is an STM Task and Finish Group looking at this,<sup>2</sup> the sense in our room was that this was essential. Why are we leaving the most important quality control checks to volunteers who, for the most part, are strangers to us—simply an email address in most cases. Most people felt that ORCID would be the ideal vehicle through which this could happen, but although ORCID is developing protocols to identify individuals through community efforts, it is not an identity verification system. How this will play out is still an open question it seems.

Building a **peer review registry**, where reviews travel with papers across journals, reducing redundant reviews and streamlining the process for both authors and editors. Portable peer review has long been touted as a way to streamline peer review processes, but for various reasons



**Figure 1.** Key themes around problems in peer review identified in the 2024 workshop.

CONTINUED



**Figure 2.** What is the state of peer review? Responses from 2024 compared with 2025.

has not taken off yet. Standardized peer reviewing has a lot of attractions from an author and reviewer point of view, but every journal has its own foibles and ways of doing things and would not be able or willing to use a standardized report. However, this should be possible within a publishing house for cascade purposes across journal portfolios.

Shifting from “full-paper” peer review to targeted reviews, where reviewers evaluate specific sections (e.g., methodology, results), rather than entire manuscripts, helping to reduce workload. There was talk about AI being able to do simple checks on a manuscript around metadata, references, protocols, etc., and leaving the results and discussion sections to the reviewer. Or maybe, as we do with statistical review now, have several experts look at specific parts of the paper. There was even talk about “do we need to review every paper?”

Enhancing professional recognition for reviewers by integrating peer review activity into funding and career assessments and offering tangible benefits such as article processing charge discounts, professional badges, and faster publication timelines for active reviewers. The low visibility of what used to be Publons was a source of regret for some, but there are newer players who are actively recognizing peer review as a service that needs its own rewards. ResearchHub, for instance, rewards reviewers in its platform with special crypto tokens, \$RSC, that can be spent in other ways on their platform or withdrawn as currency. In the absence of a large cross-publisher scheme to mirror this, the larger publishers could certainly consider implementing something similar across their own platforms. Leader boards and gamification could turn reviewing into something fun, while at the same time offering real benefits to those who contribute the most.

Although there was some back-and-forth on how to implement solutions, the problems and the need to

address each one, achieved a level of consensus that was unexpected.

Each group presented their ideas, and participants voted on the most impactful solutions, refining them into actionable implementation plans for the final session.

### 2025 Workshop Session 3: Creating a Roadmap for Action

The final session focused on turning the best ideas into real-world initiatives. Groups outlined specific steps, stakeholders, and timelines needed to bring these innovations to life. The resulting roadmap included:

- Establishing a Publication Ethics & Evaluation Regulatory (PEER) body to standardize peer review practices, standards, and training programs within the next 12–24 months. This would include setting a mission and vision, membership strategy, developing guidelines, legal and ethical considerations, and forming an executive board.
- Launching a UK-based pilot program for peer reviewer accreditation, with international expansion in later phases. This could form part of the regulatory body posed above. The accreditation would include core quality indicators. This idea could go as far as placing the onus on the authors to secure reviews from reviewers on the register and then submitting their paper with the reviews.
- Collaborating with STM to integrate peer review authentication into their ongoing researcher identity initiatives.<sup>3</sup>
- Developing a third-party platform for shared reviewer pools, reducing the burden on individual journals, and increasing reviewer efficiency. Again, this could form part of the regulatory body and reviewer register suggested above.

## CONTINUED

- Piloting a targeted peer review model, selecting a few journals to experiment with reviewing only critical sections of manuscripts instead of full papers.
- Participants left the session energized, with commitments from several attendees to carry these projects forward beyond R2R. The focus here was on what each of us in the room could do to start the ball rolling on each initiative.

### Where Do We Go from Here?

The closing discussion reinforced that the scholarly community is ready for change—but systemic challenges require collaboration between publishers, institutions, funders, and researchers. Several next steps were identified:

- Engaging key stakeholders, including STM, the European Association of Science Editors (EASE), Committee on Publication Ethics (COPE), Future of Research Communication and e-Scholarship (FORCE11), ORCID and institutional research offices, to support pilot projects.
- Conducting industry-wide surveys to gauge reviewer sentiment and identify further pain points.
- Tracking the success of the PEER initiative and accreditation pilots, ensuring they provide tangible benefits to reviewers and institutions alike.

One key takeaway was that peer review reform cannot happen in isolation. Real progress will require coordination across the ecosystem, sustained funding, and buy-in from researchers themselves.

This workshop at R2R 2025 successfully built upon the discussions from 2024, turning ideas into real plans. If the next year sees meaningful action from journals, funders, and institutions, peer review could soon be on a path toward a more transparent, efficient, and rewarding future.

### Acknowledgements

The authors would like to thank all of the workshop participants for their wholehearted contributions to the conversations, debates, and outputs. We are also extremely grateful to Mark Carden, Jayne Marks, and the Researcher to Reader 2025 Conference organizing committee for the opportunity to develop and deliver this workshop.

### References and Links

1. Alves T, De Boer J, Ellingham A, Hay E, Leonard C. Peer review innovations: insights and ideas from the Researcher to Reader 2024 Workshop. *Sci Ed.* 2024;47:56–59. <https://doi.org/10.36591/SE-4702-04>
2. <https://stm-assoc.org/new-stm-report-trusted-identity-in-academic-publishing/>
3. <https://stm-assoc.org/what-we-do/strategic-areas/standards-technology/researcher-id-tfg/>

# The 2025 AAAS Annual Meeting: Storytelling and More

**Abdurrahman Radwan, Francesca Landon-Harding, Madison Brown, and Barbara Gastel**

Themed “Science Shaping Tomorrow,” the 2025 American Association for the Advancement of Science (AAAS) annual meeting, held February 13–15 in Boston, MA, included stories of science and its communication and advice on telling such stories. This report shares some highlights of potential interest to science editors and those in related realms.

## Bringing Science and Technology to Life with Short-Form Video

By Abdurrahman Radwan

Short-form video is going viral—even in traditional media. A workshop featuring editors from *Scientific American* highlighted how platforms such as TikTok, Instagram Reels, and YouTube Shorts are transforming science communication and engaging younger audiences. The workshop also offered tips for scientists and communicators on how to create the most effective videos for each platform.

Workshop coordinator Arminda Downey-Mavromatis, associate engagement editor, began by defining short-form video and sharing key engagement statistics. She explained that these videos last 30 seconds to 3 minutes, are shot vertically, and receive 2.5 times as much engagement as long-form videos, with a 60%–70% higher completion rate. She also noted that 64% of Gen Z and 49% of Millennials use TikTok as a search engine.

Sunya Bhutta, chief audience engagement editor, compared the 3 major platforms. She highlighted TikTok’s trend-driven nature, creative editing tools, and comment-reply video feature that enhances engagement. Instagram Reels, she said, offer a polished aesthetic and benefit from

being saved to Meta’s ecosystem, increasing visibility. YouTube Shorts, although simpler and lacking advanced effects, are effective for driving engagement to long-form videos, as the long-form videos can simply be cut into multiple short-form ones.

Kelso Harper, senior multimedia editor, emphasized that an effective short-form science video needs a strong hook within the first 3–5 seconds. Scripts should be concise—about 150 words/minute—with clear visuals, such as green-screen effects or animations. Authenticity is key, she said, and removing pauses during editing ensures smooth pacing. Testing the script with a nonexpert friend can help ensure clarity and engagement.

Clara Moskowitz, senior editor for space and physics, reassured attendees that feeling awkward on camera is normal. She encouraged embracing natural communication styles over striving for perfection, as audiences value authenticity over polish. She also offered the following tip: Have a colleague read each line aloud, after which you repeat it on camera. Then edit out the colleague’s segments. This approach, she explained, avoids the need to memorize, helps reduce performance anxiety, and yields smoother delivery.

## Communicating Science to Gen Alpha Through Storytelling

By Francesca Landon-Harding

Lindsay Patterson and Sara Robberson Lentz, CEO and COO of Tumble Media, a company producing science podcasts for children, presented a workshop on practices scientists can use to engage children through storytelling without oversimplifying ideas.

Gen Alpha, born between 2010 and 2024, is the largest generation in history, constituting roughly 23% of the global population. In the United States, these “digital natives” account for 36 million active internet users. “If you want to reach them,” noted Patterson, “that [the internet and social media] is where you have to be.”

In communicating with this young population, the speakers said it’s important to keep their attention span in mind. They noted that podcasts tap into the ancient art of storytelling, while allowing listeners the flexibility to complete other tasks simultaneously.

*Abdurrahman Radwan and Francesca Landon-Harding are students in, and Madison Brown is a 2025 graduate of, the science journalism graduate program at Texas A&M University, where Barbara Gastel teaches.*

*Opinions expressed are those of the author and do not necessarily reflect the opinions or policies of their employers, the Council of Science Editors, or the Editorial Board of Science Editor.*

<https://doi.org/10.36591/SE-4802-09>



CONTINUED



**Figure.** Meeting reporters (from left to right) Francesca Landon-Harding, Abdurrahman Radwan, and Madison Brown.

Tumble Media's podcasts are about 20 minutes long, the length of the average commute to school. Every story features at least one scientist. Each scientist is asked the same 3 questions:

- "How would you describe what you do to a 7-year-old?"
- "What has your experience taught you about how science works?"
- "Why do you do what you do?"

"Kids don't care about the adult stuff like university affiliations, awards, or tenure," stated Robberson Lentz. "They relate to emotion." So, she said, insert enthusiasm and youthfulness into your voice. Think about what is surprising, unexpected, and fun. Help kids understand the nuance of science by talking about things you don't like.

Kids are seeking authenticity, not authority, Robberson Lentz added. Sharing your why can make you more relatable, unearthing the humanity behind the scientist. "Kids are like everyone else," she said. "They want to be seen and communicated to." The speakers encouraged scientists to imagine a Gen Alpha kid they might know. Try drawing a comparison to something relevant to the kid's life, they said. Use familiar language and keep their existing knowledge in mind.

Toward the end, audience members broke into small groups. Using Patterson's 3 questions, participants explored each other's whys. The workshop ended with a full-group discussion of participants' experiences in answering these questions.

## Scary Science: Risk, Danger, and Public Communication

By Madison Brown

How can scientists and journalists communicate with the public about "scary" scientific topics—such as climate

change, earthquakes, and AI—without promoting fear? This session sought to address this question.

Robert F Chen, of the University of Massachusetts School for the Environment, discussed "Climate Change, Community, and Communication: Connecting Science and People." He began by advising scientists to make climate change personal for the average person. In addition, he stated that "simple messages repeated often by trusted messengers [scientists] are effective." He also said to remain hopeful, optimistic, and ready to invest in student innovations.

Journalist Anna Kuchment discussed reporting she did for the *Dallas Morning News*. Most of her presentation, titled "How a Pro-Oil and Gas Public Reacted to News of Fracking-Related Earthquakes," described public reactions to earthquakes resulting from fracking. Some citizens were distraught about the earthquakes, while others deemed them necessary in order to drill for oil and gas. Kuchment stressed the importance of conveying all the facts and said not to be afraid of presenting scientific evidence that may make people uncomfortable.

Brian K Smith, a professor in the school of education and the computer science department at Boston College, spoke on "Doom-Saying About AI: Helping Journalists Understand Science and Not Panic." Using ChatGPT as an example, he described "the AI panic cycle," in which a new AI technology is greeted with panic, the panic peaks, and then the panic declines over time. To help decrease public panic, Smith encouraged journalists to identify unreasonably definite predictions about AI and raise questions about the motivations behind them. He then cautioned against feeding into hype and said to instead think critically about how AI affects the everyday person. He finished by encouraging the listeners to convey diverse perspectives when talking about AI and the impacts it may have.

## Science Breakthrough of the Year: The Long Shot

By Barbara Gastel

Each December, *Science* announces a breakthrough of the year, chosen with input from staff throughout the journal. This session presented the story of the 2024 breakthrough of the year: the drug lenacapavir, a single injection of which has shown 100% efficacy in preventing HIV infection for 6 months in women in Africa.

*Science* correspondent Jon Cohen, who has long covered HIV and AIDS, moderated the session. He noted that, distinctively, lenacapavir targets the virus's capsid. He also showed an animation showing how the drug seems to work.

The session featured presentations by 4 individuals active in developing or testing the drug. Wes Sundquist, of The University of Utah, discussed the underlying basic-science research; he noted that long-term National Institutes of

*CONTINUED*

---

Health support was crucial to the research, which began in the mid-1990s, and that academia and industry were important allies. Similarly, Jared Baeten, of Gilead Sciences, which produces the drug, emphasized teamwork and partnership by various parties and at various stages. He stressed “always keeping your eye on the prize,” which is not publication or FDA approval but rather serving society.

Also emphasizing partnerships, Linda-Gail Bekker, of the Desmond Tutu Health Foundation, Cape Town, South Africa, spoke from the perspective of a leader of the clinical trial of the drug. She recalled receiving a standing ovation after presenting the results at the conference AIDS 2024; she also recounted how, on receiving the call with the trial’s results, she had “frankly just wept.” Finally, Dazon Dixon-Diallo, of SisterLove, Inc, described the importance of community involvement in shaping the trial. One result, she said: Unlike other HIV prevention trials, this one did not exclude people who became pregnant.

“This is the dream team,” Cohen commented after the presentations. The discussion, however, ended less positively, as Cohen asked about implications of current US politics. Panelists expressed substantial concern about continued availability of funding for research and its applications. “Don’t stall at this point,” Bekker said. “It is a crisis if we do.”

**And More**

Other sessions of science communication interest included “Science for the Public and Policy: Oppenheimer, Bates, and Carson” and “How Can Public/Open Access Achieve Equity for Authors and Readers?”

---

The 2026 AAAS annual meeting, themed “Science @ Scale,” will be held February 12–14 in Phoenix, AZ. For information, see <https://meetings.aaas.org>.

# CSE's Commitment to Diversity, Equity, Inclusion, and Accessibility: Staying the Course

**Peter J Olson, Emilie Gunn, and Amy Ritchie Johnson on behalf of the CSE DEIA Committee and the CSE Board of Directors**

The Executive Orders issued in early 2025 by the incoming U.S. administration have sent shockwaves across the nation, drastically impacting multiple industries, communities, and populations—including the scholarly publishing industry. The unprecedented threats to federally funded research, public health monitoring, academic freedom, and the scholarly record are far-reaching and are likely to alter both the practice of scientific research and the communication of scientific information for years, if not decades, to come. A particularly troubling undercurrent pervading these threats is the prohibition of programs, practices, and initiatives that are essential for diversity, equity, inclusion, and accessibility (DEIA) efforts throughout the scientific enterprise, as well as the scholarly publishing industry. This sudden wave of adversity has left many in our industry feeling overwhelmed, disoriented, and unmoored.

Yet in the face of these many uncertainties, one thing is certain: the Council of Science Editors (CSE) remains committed to our role as an indispensable advocate and resource for the responsible and equitable communication of science. This commitment includes fostering a diverse community of members who support each other in CSE's mission and maintaining a safe space for members to share knowledge, exchange ideas, and offer suggestions for change. Through our publications, initiatives, partnerships, and core tenets, CSE has demonstrated its commitment to DEIA in several ways.

## Code of Conduct

The CSE Code of Conduct<sup>1</sup> makes it clear that our intention is to create an environment where everyone is welcome and comfortable. This environment spans all of CSE's interactive endeavors, including our events, committee meetings, educational offerings, and administrative procedures.

<https://doi.org/10.36591/SE-4802-07>

## Strategic Plan

Our strategic plan includes a goal to advance CSE's commitment to DEIA principles by promoting diverse membership and leadership throughout the organization, inviting speakers of all backgrounds to participate in our educational events, and ensuring that our content and resources address the needs of our entire community. In particular, our Annual Meeting, Fall Virtual Symposium, and other educational offerings seek to include DEIA-centered components where relevant, both in terms of topics and presenters.

## Recommendations Paper

Section 2.7 of the CSE Recommendations Paper<sup>2</sup> is a detailed documentation of DEIA best practices in the scholarly publishing industry. In addition to laying out a strong foundation establishing the need for said practices, this comprehensive section includes suggested actions that can be taken to implement DEIA efforts within scientific publications and science publishing institutions and cites multiple resources designed to help publishers execute these actions.

## DEIA Committee

Our DEIA Committee holds monthly meetings to discuss, develop, and implement DEIA-focused initiatives within the organization. With leadership from current co-chairs Amy Ritchie Johnson and Sumi Sexton, this dedicated team of CSE members works tirelessly to maintain and bolster current DEIA-centered goals while also exploring new ways of advancing and sustaining CSE's commitment to this increasingly critical aspect of our operations. The committee also contributes the present column in every issue of *Science Editor* to report its progress, share resources, provide updates about the committee's initiatives and activities, and explore DEIA-related topics.

## DEIA Scholarly Resources Page

Our DEIA Scholarly Resources page<sup>3</sup> provides a compilation of materials available from multiple societies to help editors

## CONTINUED

implement DEIA efforts at their own publications. The CSE DEIA Committee curates this page to ensure that the resources provided therein are as relevant and as up to date as possible, and their most recent initiative is to compile resources pertaining to the scholarly publishing industry's responses to the 2025 Executive Orders. CSE members and the community at large are welcome to visit this page to use these resources, as well as submit suggestions for additional resources via the CSE Diversity, Equity, and Inclusion Resources & Initiatives Collector.<sup>4</sup>

## C4DISC

CSE is a current member, and one of the 10 cofounding organizations, of the Coalition for Diversity & Inclusion in Scholarly Communications (C4DISC), which was formed to address the lack of DEIA in the scholarly publishing industry. As part of this important coalition, CSE strives to abide by the C4DISC Joint Statement of Principles<sup>5</sup> and promotes the usage of C4DISC's many Toolkits for Equity<sup>6</sup> to "provide a common framework for analysis, a shared vocabulary, and best practices to address racial disparities specific to the scholarly publishing community." These toolkits, which are intended for use at both institutional and individual levels, include the Antiracism Toolkit for Allies<sup>7</sup>; the Antiracism Toolkit for Organizations<sup>8</sup>; the Antiracism Toolkit for Black, Indigenous, and People of Color<sup>9</sup>; Guidelines on Inclusive Language and Images in Scholarly Communication<sup>10</sup>; and a Focused Toolkit for Journal Editors and Publishers.<sup>11</sup>

## Member Support Survey

On March 3, 2025, a CSE member support survey was distributed in an effort to understand the ways in which members have been impacted by the federal government's actions, align CSE's resources with member needs and challenges, and advocate for members more effectively. Among the many responses received, the most prominent impacts reported by respondents included stressors and challenges regarding the restrictions on inclusive language terms, obstacles to publishing high-quality research, loss of research funding and employment, and a general concern for authors. The question "How can CSE support you?" yielded pleas to continue our DEIA efforts by providing DEIA-focused resources, educational offerings, and community-building opportunities; to create safe spaces for members to voice their opinions and concerns; to be a strong champion of DEIA within the scholarly publishing industry; and to simply "keep being CSE." When asked about the preferred environment for members to discuss current events and other relevant topics, respondents indicated the CSE Listserv, unrecorded networking sessions, and CSE

Connect events as desirable options. The DEIA Committee and Board of Directors are currently reviewing this feedback, and plans are underway for a CSE Connect event that will allow members to discuss the many challenges facing the scholarly publishing industry, create a safe space for collegial support, and explore viable, sustainable options for moving forward.

## Reaffirming Our Purpose

The home page<sup>12</sup> of the CSE website states:

Our purpose is to serve our members in the scientific, scientific publishing, and information science communities by fostering networking, education, discussion, and exchange. Our aim is to be an authoritative resource on current and emerging issues in the communication of scientific information.

CSE holds fast to our purpose and our aim to be an authoritative resource on current and emerging issues in the field of science communication, and DEIA principles will continue to constitute an indispensable component of what we do. We believe that promoting equitable actions that advance multifaceted and multidisciplinary diversity strengthens the scientific process, scholarly discourse, research outputs, and communication of research for the benefit of a diverse global society. With this in mind, and across all of our efforts, CSE remains committed to fulfilling our goals, supporting our members, and being an invaluable resource for DEIA-centered action throughout the scholarly publishing community.

This article was commissioned and approved by the CSE DEIA Committee. Peter J Olson is CSE a Director at Large and Board Liaison to the CSE DEIA Committee. Emilie Gunn is CSE President. Amy Ritchie Johnson co-chairs the CSE DEIA Committee with Sumi Sexton.

## References

1. <https://www.councilscienceeditors.org/code-of-conduct>
2. <https://cse.memberclicks.net/recommendations-for-promoting-integrity-in-scientific-journal-publications>
3. <https://www.councilscienceeditors.org/deia-scholarly-resources>
4. <https://www.surveymonkey.com/r/G53ZC6B>
5. <https://c4disc.org/joint-statement-of-principles/>
6. <https://c4disc.org/toolkits-for-equity/>
7. [https://c4disc.org/wp-content/uploads/2020/08/toolkits-for-equity\\_antiracism\\_allies.pdf](https://c4disc.org/wp-content/uploads/2020/08/toolkits-for-equity_antiracism_allies.pdf)
8. <https://c4disc.pubpub.org/antiracism-toolkit-for-organizations>
9. <https://c4disc.pubpub.org/antiracism-toolkit-for-black-indigenous-and-people-of-color>
10. <https://c4disc.pubpub.org/guidelines-on-inclusive-language-and-images-in-scholarly-communication>
11. <https://c4disc.pubpub.org/toolkit-editors-and-publishers>
12. <https://www.councilscienceeditors.org/>



# CSE Mentor–Mentee Profile

## Erin Wunderlich

When Patricia (Patty) Baskin attended her first CSE meeting back in 1995, she felt very alone: “No one really said hello to me,” she recalls. Nevertheless, she became actively involved in the following years, chairing CSE’s short-course program, presenting at annual meeting sessions, and becoming *Science Editor* Editor-in-Chief. She also vowed to make everyone drawn to CSE feel supported.

Then, as president in 2017, Baskin took the lead in creating the Mentorship Committee. “This was a way to help our new members feel they belonged in CSE, on a more individual basis, and an opportunity for established members to stay involved,” Baskin said. “The mentorship program is a great way to build relationships and foster growth, for both the mentor and mentee.”

Through CSE, Baskin has mentored at least 5 people, and she remains open to more. In 2018, she mentored Kristin Inman, then a science editor who had just recently transitioned from being a postdoctoral fellow.

### The Mentorship

Listening to a panel of mentors and mentees at her first CSE annual meeting in 2018, Inman knew the mentorship program was right for her. “I wanted to break into and establish myself in the realm of scholarly publishing and editing,” Inman said, “and I wanted someone more advanced in their career to guide me in the right direction.”

When they were first paired, Baskin instantly knew Inman would be successful. “She was very good at identifying what her objectives were and putting them into priority,” she recalls. “We would take things one goal at a time, and she would always think them through.”

The mentorship consisted of holding monthly phone calls and listing achievable goals to complete by the end of the program. Inman recalls feeling nervous initially, thinking: What if we get on and there is nothing to talk about? What if she has nothing to teach me?

*Erin Wunderlich is a graduate student in science and technology journalism at Texas A&M University.*

*Opinions expressed are those of the author and do not necessarily reflect the opinions or policies of their employers, the Council of Science Editors, or the Editorial Board of Science Editor.*

<https://doi.org/10.36591/SE-4802-10>

The calls, however, were always productive—often exceeding the scheduled hour. Baskin, then the Executive Editor at the American Academy of Neurology, introduced Inman to other professionals with similar interests. She and Inman regularly corresponded by email, with Baskin responding to Inman’s questions or concerns. “After a while, I felt at ease with Patty,” Inman said. “She is very maternal and reassuring.”

Baskin said her main responsibility as a mentor was becoming a sounding board for Inman. “Being there to understand uncertainties or fears is important; listening is important,” Baskin said. “Letting Kristin know she was not alone, and that there were connections she could utilize, gave her a sense that there’s a place for her somewhere—she just had to find it.” And Inman has indeed found her place, establishing herself as an integral editor at *Environmental Health Perspectives*, securing long-term, part-time employment with Elsevier, and recently transitioning to an ethics and partner publishing manager for the American Physiological Society.

### Some Reflections: Inman

Inman said the most memorable takeaways from her mentorship included networking (as much as possible!), knowing how to market yourself in an ever-evolving job market, and having confidence in transferable skills.



Patty Baskin

(Continued on p. 92)

# CSE Recommendations: A Response to Recent U.S. Government Directives

Jill Jackson and Stephanie Casway on behalf of the CSE Editorial Policy Committee

Considering recent directives by the current administration of the United States government regarding manuscripts under review at scientific journals, the CSE Editorial Policy Committee highlights our recommendations on the following topics: anonymous authorship, editorial freedom, removal of author name from byline, retractions/corrections, and withdrawals of submitted manuscripts before publication.

The full CSE Recommendations for Promoting Integrity in Scientific Journal Publications are available at <https://www.councilscienceeditors.org/recommendations-for-promoting-integrity-in-scientific-journal-publications.1>

## Anonymous Authorship

Because authorship should be transparent and requires public accountability, it is not appropriate to use pseudonyms or to publish scientific reports anonymously. In extremely rare cases, when the author can make a credible claim that attaching their name to the document could cause serious hardship (e.g., threat to personal safety, loss of employment), a journal editor may decide to publish anonymous content. Other categories of authorship that may be acceptable in certain circumstances include group authorship and the inclusion of deceased or incapacitated authors. (Section 2.2.2)

## Editor Responsibilities and Editorial Freedom

Editors have the responsibility to inform and educate readers. Making clear and rational editorial decisions will ensure the best selection of content that contributes to the body of scientific knowledge. (Section 2.1)

An editor essentially is responsible for what appears in their journal. To establish and maintain high-quality journal content, an editor should, prior to accepting a position,

receive an explicit written statement from the journal's owner that defines the editor's responsibilities and autonomy. Regardless of the scientific field, editors should be given full responsibility for editorial decisions on individual manuscripts. (Section 2.1.1)

## Changes to Author Byline

Any changes the authors wish to make to the author byline after the initial submission of a manuscript should be made in writing and the document should be signed by all authors, including those being added or removed. The new author list should be stated directly along with a justification for the change. (Section 2.2.5)

## Correcting the Literature

The following definitions of retractions and corrections from the CSE Recommendations outline many of the reasons for correcting the scientific literature. Requests for retractions or corrections for reasons that fall outside these definitions should be thoroughly considered by an editor to ensure that the request will improve the quality of the scientific literature.

- **Retractions.** Retractions identify an article that was previously published and is now retracted through a formal issuance from the author, editor, publisher, or other authorized agent. Retractions refer to an article in its entirety that is the result of a pervasive error, nonreproducible research, scientific misconduct, or duplicate publication. (Section 3.5)
- **Corrections.** For a variety of reasons, correcting the literature is a critical part of the research enterprise. First, it addresses unreliable information that is part of the public record. Second, corrections enable the researcher to identify and use correct information, thereby saving time and resources. Third, corrections enhance a journal's reputation for taking a proactive role in publishing accurate information for its readership. The need for corrections may originate from an error or from misconduct. (Section 3.5)

<https://doi.org/10.36591/SE-4802-02>

CONTINUED

## Withdrawal of Submitted Manuscripts Before Publication

As stated in recent guidance from the International Committee for Medical Journal Editors (ICMJE), with whom we agree, “While not explicitly stated in the ICMJE recommendations, all coauthors should be aware of and agree with the decision to withdraw a manuscript.”<sup>2</sup>

## Conclusion

The recent U.S. government directives concerning manuscripts under review at scientific journals bring forth significant

ethical considerations. We hope the CSE Recommendations offer valuable clarity on these matters. CSE will continue to collaborate with partner organizations, such as the Committee on Publication Ethics (COPE) and ICMJE, to engage with members and provide ongoing guidance.

## References and Links

1. <https://www.councilscienceeditors.org/recommendations-for-promoting-integrity-in-scientific-journal-publications>
2. [https://www.icmje.org/news-and-editorials/icmje\\_guidance\\_notice.html](https://www.icmje.org/news-and-editorials/icmje_guidance_notice.html)

(Continued from p. 90)



Kristin Inman

Some other reflections:

- **Don't pigeonhole yourself.** “You're a conglomerate of your skills—so don't put yourself in an isolated box. Your skill set can be applied to so many different things. And as an editor who has had many hats, it makes you marketable to many other positions, and there's always other areas to grow in.”
- **Always make new connections.** “Reach out to people, even if you might be afraid to do so. People genuinely want to help and connect with you, and networking is the best way to expand your reach.”
- **You're not an imposter.** “If you feel like you are not qualified for something, it's not that you can't do it, but rather you need to apply your skills differently. Patty helped me see that. Reframe your negative thoughts.”
- **Practice adaptability.** “Science editing means many different things; it's kind of what you make it. There's not a unified definition, and it's frustrating, but you must roll with those punches.”

Inman has now been a mentor herself for several years, finding the experience to be a two-way street: “I learned just as much from my mentees as I learned from my mentor.”

## Some Reflections: Baskin

Baskin, who is now Deputy Chief for Publications at the American Academy of Neurology and remains very active in CSE, recalls finding her mentorship experience with Inman fulfilling.

Some other reflections:

- **Network, network, network.** “I pride myself on being a connector. Each time you reach out to someone, you are strengthening that relationship. By expanding your network in CSE, and outside of it, you are opening the door to future referrals along with advancing your own professional growth.”
- **Mentoring builds confidence in both the mentee and mentor.** “What I enjoy about mentoring is getting a new perspective of self-awareness. I obtained a new sense of self-worth that comes from helping people in different situations, and I get to see just how much I've grown in my career.”
- **Listen to fresh ideas.** “Mentoring exposed me to fresh ideas, and I reevaluated the way I organize my responsibilities and how I felt about my skills—it made me realize that I do know what I'm doing.”
- **You can be a mentor!** “Many people I approach to become a mentor think they don't know enough, but that's just not true. Anyone with experience, who is willing to guide another and share their ideas, can become a mentor. It's about recognizing all that you've accomplished and giving voice to it for someone else.”

Baskin encourages broad involvement in the mentorship program. “Mentoring can be a great way to strengthen confidence, improve skills, and hear different perspectives,” she says.