

# SCIENCE EDITOR

A Publication of the Council of Science Editors



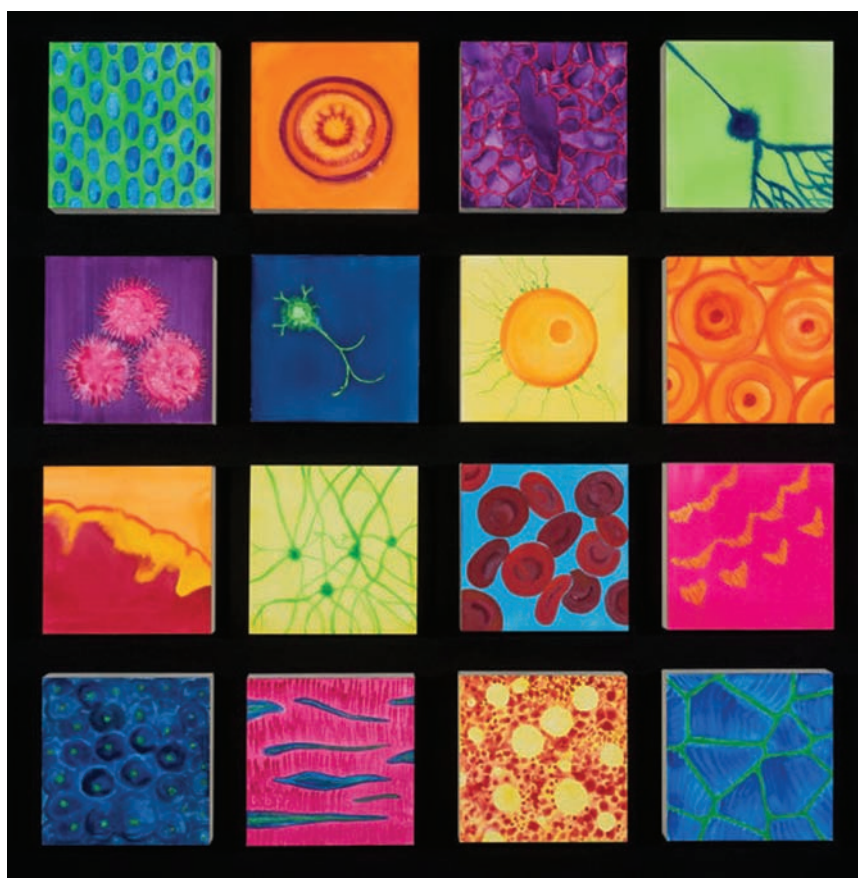
## *In this issue*

*Authorship and Deceased Scientists*

*When Plagiarism Isn't Intentional: Cultural Contexts*

*DOI Tracking: A New Tool Serves an Old Need*

*2015 CSE Annual Meeting Reports*



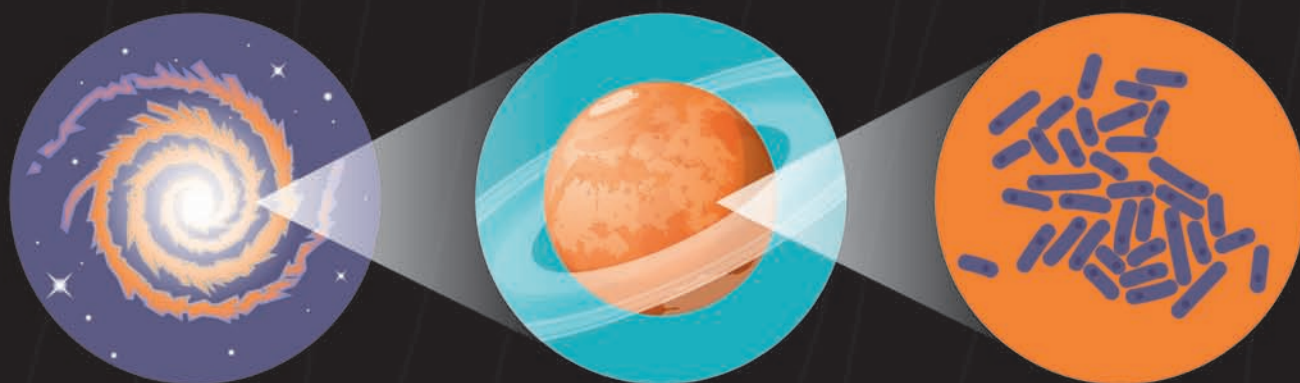
JULY–DECEMBER 2015 • VOLUME 38 • NUMBER 3/4

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# SCIENCE EDITOR

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Cover image: Portrait of a Human by Michele Banks. Watercolor on clayboard panels, 2012. Each of the 16 panels depicts a normal type of cell found in the human body—blood, bone, brain, eye, hair, skin, and muscle cells, to name a few. Only one panel has two cell types—the egg and sperm, which were meeting at the time. The artist considers this the “baby picture” of her emblematic human. Image courtesy of Michele Banks (Twitter: @artologica), Artologica ([www.etsy.com/shop/artologica](http://www.etsy.com/shop/artologica)).



Science Editor Online



## Review, Redesign, Renew

In this issue, we publish the last of the 2015 CSE annual meeting reports. So why take the time to look? The meeting reports are not only a refresher but also a nice distillation of each meeting session. Each report in this issue can serve as a jumping-off point for your own deeper exploration of a topic, such as what to do when an author fails to produce required data, the growing number of ways to understand and present a journal's impact, ideas for acknowledging the hard work of reviewers, and an authorship framework developed by the Medical Practices in Publishing Initiative to improve transparency in papers stemming from industry-sponsored clinical trials. So dig in and discover!

This issue tackles some tricky topics. Jaime A Teixeira da Silva and Judit Dobánszki discuss the challenges of handling papers whose authors die during the manuscript submission and publication processes. Michelle Yeoman explores unintentional plagiarism and offers tips for editors to help educate authors, reviewers, and others. Her intellectual approach to the topic (as well as an additional column with her personal

insight as an educator) is thoughtful and in-depth. We also republish (with a new commentary) a blog post by Stephen B Heard in which he decries the idea that “everything is broken”—and he attempts to provide some perspective.

As we begin 2016, here's a preview of what's coming for *Science Editor*. First, I'd like to announce the appointment of Jonathan Schultz to the role of deputy editor. Jonathan serves as the managing editor of *Circulation Research*, published by the American Heart Association. He is also the CSE web editor, and in 2014, he worked with Amanda Ferguson to develop



Jonathan Schultz



Tracey A DePellegrin  
Editor-in-Chief, *Science Editor*

CSE's new website. He is the recipient of the 2015 CSE Certificate of Appreciation. Jonathan brings an insightful and strategic perspective to *Science Editor*, and I'm thrilled to have a new partner in crime.

In keeping with our mission to not only tell the stories of best practices in publishing but to represent these tenets in action, *Science Editor* is launching a print redesign as well as a new journal website in spring 2016. More details will follow soon, but we're making some great strides in helping you to find, read, and share material published in *Science Editor*. Our

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*continued*

website will include individual HTML and PDF versions of articles, so you can easily share and discuss these with peers. To underscore CSE's commitment to education and dissemination of this information, some articles will be open access. To ensure minimal delays between acceptance and publication, many articles will appear online ahead of print. We hope that a faster turnaround time will encourage you to submit your best work for publication. And speaking of your best work—we're still interested in hearing from you—whether you'd like to write a story or a column, help to copyedit, propose an idea, or participate in an internship that we design together—let me know via email at [tracey.depellegrin@thegsajournals.org](mailto:tracey.depellegrin@thegsajournals.org).

No annual wrap-up would be complete without thanking those who have shared

their generosity, talents, ideas, and hard work with *Science Editor* and with CSE. Where would we be without managing editor Lindsey Buscher and her patience, dedication, and cheer? She's also the chair of CSE's Membership Committee and the subject of this month's Member Profile (and has a few tidbits involving pie charts in store for you in this issue!). I am especially grateful during my first year as a newbie editor-in-chief to have been given help from members of a top-notch, experienced editorial board. Each person has provided me with stories, support, and structure as I've learned the ropes. Thanks also to former editor-in-chief and incoming president Patty Baskin, past president Tim Cross, and of course our current president, Angela Cochran, plus Tim Bennett and David Stumph of Kellen Company,

for your leadership and encouragement. I'm continually amazed by both Dana Compton and Anna Jester for their tireless energy and contributions, even while juggling meeting plans and several committees. Keeping the engines running on the editing, proofreading, and production front have been Norman Grossblatt, Leslie Neistadt, Caroline Simpson, and Roxanne Young. And to our authors and their words that guide us in our mission—thank you from all of us at *Science Editor*. Saving the best for last—thanks to Andrew Van Wassenova, who has deftly handled every request we've pitched at him.

On a closing note, it's not too late to get involved in writing or discussing articles for our 2016 focus issue on peer review. In the meantime, we hope you'll enjoy this issue. 

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## Short Course for Journal Editors

*Speakers:*

**William Lanier**

Editor-in-Chief

*Mayo Clinic Proceedings*

Rochester, Minnesota

**Thomas Gerber**

Associate Editor

*Mayo Clinic Proceedings*

Rochester, Minnesota

**Jody Hundley**

Production Manager, Scientific

Publishing

American Heart Association

Dallas, Texas

**Bruce Polsky**

Principal

Hanell Publishing, LLC

Burnsville, Minnesota

*Reporter:*

**Josephine E Sciortino**

Editorial Director

Canadian Urological Association

Montreal, Quebec

This year the two-day Short Course for Journal Editors was attended by 27 editors and publishers. There was a wide range of experiences, and I can confidently report that we all learned something new.

### Introduction: William Lanier

Among the many reasons why journals exist, Lanier highlighted five that were attributed to former Short Course Director Ian Taylor:

1. To inform readers of new research results.
2. To educate readers about what is known.
3. To correct published results that were wrong.
4. To stimulate readers to learn more.
5. To entertain.

Journal editors try to identify fraud, duplicate publication, plagiarism, and other

forms of author misconduct, but we have insufficient time and resources to adequately police all bad behavior. Instead, we must rely on authors' institutional leadership, local ethics boards, and others to monitor these behaviors. Journal editors also do not determine what is true. Instead, we assess whether evidence is credible: for example, the data have been collected, analyzed, and interpreted according to established scientific standards. Science does not determine truth—it instead seeks to approximate truth.

### Ethical Obligations: Thomas Gerber

Journal editors have to deal with many different stakeholders at many different levels. The editor and publisher should have explicit and written Terms of Reference.

Policies on conflicts of interest, authorship, and research misconduct should be clearly written and accessible. If you don't have a policy on research misconduct, it would be a good idea to consult policies of other medical associations, such as the American Medical Association, and adopt them or adapt them (with permission, of course) for your journal's purposes.

Any misconduct must be handled by activating your written protocol, as opposed to dealing with each issue case by case. This automatic protocol activation ensures that there is no preferential treatment.

### Editorial Boards: William Lanier

Editorial boards are crucial. The credibility and functionality of an editorial board depend on 1) respect for peer review, 2) teamwork, and 3) organizational checks and balances.

There are many different ways to operate an editorial board. The best way for you and your journal depends on the size, mission, and history of the journal and the type of content it publishes.

The main duties of your editorial board include reviewing manuscripts, recruiting manuscript submissions, and representing the journal to the outside world. At

many journals, editorial board members are encouraged to submit papers to the journal, though this is not a universal requirement.

Board member tasks should play to each member's strengths and avoid any reasonable weaknesses. Honor the efforts and opinions of the board members. Many journals provide annual report cards for board members, which is a good way to quantify the contributions of your board. Personal gestures, such as sending notes or placing phone calls to say "please" and "thank you" help reinforce connectivity to your readers, authors, reviewers, board members, and office staff.

### Business Drivers: Bruce Polsky

Although business matters may not always be top of mind, nor should they trump issues of editorial quality and integrity, they should be driven by your journal's larger goals and objectives. To this point, Polsky discussed five principles that should inform your decision making as an editor:

1. Editors have a fiduciary duty to their journals to sustain them.
2. Customer satisfaction: Understand the needs of your customers (readers, authors, sponsors, physicians, patients, etc) and rank them based on importance.
3. If you edit an association-sponsored journal, recognize that your members are likely your journal's most important constituents. Your journal must be perceived as adding value to the membership equation.
4. Integrity = Independence. Notwithstanding the allegiance of journal editors to society journal owners and sponsors, editorial integrity and independence are paramount even when editorial content counters prevailing politics within the specialty society.
5. A strategic plan should govern decision making. If you are interested in achieving long-term objectives for your journal, sweat the details, formalize

*continued*

a plan, and then live by it. Your written plan and direction will pave the way for you to achieve your goals.

Polsky showed how financial support for biomed journals traces to three broad revenue sources: individuals, institutions, and industry. He also detailed the mechanics of the subscription model.

Among his observations, he shared that industry pays for eyeballs—updated circulation statements and demonstrated reader attention are vital. However your publications may be designed, whichever business models they may pursue, the importance of meeting reader needs should remain paramount to your enterprise, and will be the driver to revenues through all of your primary business channels.

## **Electronic Publications: Thomas Gerber**

Print journals are not dead, but that doesn't mean we can ignore our online components. Are our delivery methods driven by readership preference or economic pressures? It is undeniable that our future audiences are millennials who are less prone to systematic reading than previous generations and prefer electronic topical articles. How do we attract new readers and keep our long-standing readers happy? Gerber gave us some tips:

1. Keep content engaging—add video and personal messages from the editor and board members.
2. Match the print and online journals in terms of journal image and culture.
3. Give readers a reason to return to your site with weekly updates and online-only content.
4. Optimize the navigation of your site.
5. Make content discoverable and accessible from search engines such as Google.
6. Review critically at regular intervals.

With every new initiative, measure the outcomes of your actions so that you see the fruits of your labor and assess what worked and what didn't work.

## **Open Access Publications: Jody Hundley**

Hundley provided a very comprehensive presentation on open access. She started off by defining it: "Open access is the free, immediate, online availability of research articles, coupled with the rights to use these articles fully in the digital environment" ([www.sparc.arl.org/issues/open-access](http://www.sparc.arl.org/issues/open-access)).

Open access is different from free access. Free access means the articles are freely available to readers, but copyright remains with the publisher or society/association. Open access includes free access to papers (meaning that readers do not have to pay for access), but the copyright of the paper stays with the author. Authors sign a Creative Commons license, as offered by the journal or publisher.

Copyright assignment should be clearly indicated on the journal website. All authors, not just corresponding authors, must sign the copyright assignment.

Not all journals are open access. Is this the right path for your journal? Hundley offered important considerations:

1. How do I get started?
2. Does the association/society or publisher have a vested interest in retaining copyright?
3. Does the association/society or publisher have a vested interest in the fees received for page charges/color/extra word charges?
4. What type of license should our journal consider?
5. Should all articles use only a Creative Commons license, or can we have a hybrid model?
6. What does it mean to have a hybrid model?
7. How are permissions handled for open access journals?

## **Journal Office Operations: Jody Hundley**

Journals work with a variety of stakeholders: editors and editorial board members, authors, reviewers, readers, association/society, institution, and publisher. How do you operate within these parameters? The most important considerations are to respond in a timely manner to authors, reviewers, and editors; to publish the best available papers; to disseminate science quickly; and to work within agreed-on parameters set by your association/society.

To ensure you can sustain these goals, you should have a written procedures manual, clear job descriptions, cross-training to account for vacations, professional development, performance reviews, and periodic reporting to the society/editorial board.

## **Working with Publishers: Bruce Polsky**

Do you self-publish your journal? Do you work with a commercial publisher? What is the best option for your journal? Are you resource strapped? Do you have the expertise and infrastructure in-house to meet your publication goals?

Before answering these questions, Polsky encouraged us to take a step back and write the "story" of our own journals. How did the publication begin? What are its priorities? Which publishing models are best suited to your journal?

He then explored the pros and cons of working with publishers, the value of the resources and cost efficiencies they can bring to the relationship, plus the complications of working with partners. Among benefits, for instance, he pointed out the difficulty that small and unfiliated journals have in attempting to sell subscriptions to institutional customers today without the support of established publishers.

*(continued on page 87)*



# Emerging Standards: Data and Data Exchange in Scholarly Publishing

*Moderator:*

**Tony Alves**

Director, Product Management  
Aries Systems Corporation  
North Andover, Massachusetts

*Speakers:*

**Jay Henry**

Chief Marketing Officer  
Ringgold  
Beaverton, Oregon

**Amy Brand**

Vice President, Academic and Research  
Relations  
Digital Science  
Cambridge, Massachusetts

**Rachael Lammey**

Product Manager  
CrossRef  
Oxford, United Kingdom

**Helen Atkins**

Acting Publisher  
Public Library of Science  
San Francisco, California

*Reporter:*

**Jacob Kendall-Taylor**

Assistant Editorial Manager  
*Proceedings of the National Academy  
of Sciences*  
Washington, DC

Creating industry standards for manuscript data and capturing this information are major challenges for scientific publications. The speakers at this session discussed creating universal identifiers, standardizing contributions, accurately reporting funding sources, and giving authors the opportunity to include these data during the submission process.

Jay Henry of Ringgold began the session with an analogy of a forest representing data. Without clearly identifying unique entities

within the forest (trees), it's difficult to see the big picture in a seemingly never-ending collection of trees. Henry believes the first step in deriving useful knowledge about the forest is to apply unique identifiers to the trees (people, places, and things). For identifiers to be effective, they must be "governed, trusted, transparent, and contain appropriate metadata." Standard identifiers "disambiguate and enable linking, in other words, they provide a simple basis for data governance." Henry then discussed the International Standard Name Identifier (ISNI), which provides a unique identifier for named entities (people and places), and Ringgold's progress in mapping Ringgold data to ISNI and acting as an ISNI registration agency for ISNI members. At the end of the presentation, some of the challenges to creating a world of identifiable information were mentioned: "vastness, vagueness, uncertainty, inconsistency, and deceit."

Amy Brand addressed the importance of giving appropriate credit to scientists. She showed a graph from R-bloggers ([i2.wp.com/benjaminlmoore.files.wordpress.com/2014/04/plot\\_lm.png](http://i2.wp.com/benjaminlmoore.files.wordpress.com/2014/04/plot_lm.png)) that tracked different Public Library of Science (PLOS) publications and the average number of authors included on an author line. The number has increased steadily from 2006 to 2013. Later in her presentation, Brand discussed developing a standard contributor role taxonomy for publishers that would allow contributions to be more easily converted into metadata. Brand is part of the Project CRediT working group trying to develop 14 umbrella contributions that could apply to all fields of research. These contributions include: "conceptualization, methodology, software, validation, formal analysis, investigation, resources, data curation, writing-original draft, writing-review and editing, visualization, supervision, project administration, and funding acquisition." Publication service providers are starting to integrate these contributions into their systems and

would automatically deposit these data into CrossRef, which would send them to ORCID, where they would eventually appear in a contributions report. All of this work is being done to make sure that contributors to multiauthored works are more fairly credited for their contributions.

Rachael Lammey from CrossRef was next to present and discussed FundRef, which is "a standard way of reporting funding sources for published scholarly research." In February 2013, the Office of Science and Technology Policy published a memo requiring agencies with more than \$100 million in research and development expenditures to develop plans to make federally funded research freely available to the public within one year of publication. This adds a level of immediacy to the process of standardizing funding sources. To help bring together funders and publishers, FundRef was created. FundRef allows authors to input standardized information and grant numbers at submission, so that if the paper is accepted, this information is made available and published correctly. Currently, "FundRef is the only central database of acknowledgments from publications." To date, 41 publishers, 562,000 DOI deposits, and 9,522 funders are in the registry.

Helen Atkins from PLoS was the final presenter and discussed the input end of capturing the data. PLoS uses the Editorial Manager submission system and has made updates so that most of the data previously mentioned can be entered directly by authors or chosen from a pick-list. Currently, although the information is exported to the XML vendor, tagging and providing it to others and including the journal-hosting platform are the major challenges. FundRef, Ringgold data, author contributions, and author identification fields have all been added to their system. PLoS will need to upgrade to the Journal

*(continued on page 87)*



## Different Forms of Peer Review

### Speakers:

#### **Adam Etkin**

Founder and Manager Director  
PRE Peer Review Evaluation  
Needham, Massachusetts

#### **Jody Plank**

Rubriq Product Manager  
Research Square  
Durham, North Carolina

#### **Chi Van Dang**

Professor and Director, Abramson  
Cancer Center  
University of Pennsylvania  
Philadelphia, Pennsylvania

### Moderator:

#### **Julie Nash**

Senior Partner  
J&J Editorial  
Cary, North Carolina

### Reporter:

#### **Michael Di Natale**

Aries Systems Corporation  
North Andover, Massachusetts

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

Adam Etkin, of PRE Peer Review Evaluation, was the first speaker. He described the current state of peer review and the general criticisms arising from recent cases of fraud and bad science reaching publication, as well as concerns over the ability of individuals to “game” the existing system. PRE has developed a service called PRE-Val for sharing informa-

tion related to the peer review a submission has gone through and allowing publishers to present this analysis alongside the published submission. Etkin hopes this will help establish trust and transparency in the peer review process.

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

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

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

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

feedback and allow authors to make a great first impression at their top-choice journal.”

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

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

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

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

*(continued on page 92)*

## Best Practices in Preventing Authorship Problems

*Moderator:*

**Charon Pierson**

Editor-in-Chief

*Journal of the American Academy of Nurse Practitioners*

Gilbert, Arizona

*Speakers:*

**Annette Flanagin**

Executive Managing Editor, Vice

President, Editorial Operations

*JAMA* and *JAMA Network*

Chicago, Illinois

**Jennifer Mahar**

Executive Peer Review Manager

Origin Editorial

Leander, Texas

**Deborah Poff**

Editor, *Journal of Business Ethics*

Editor-in-Chief, *Journal of Academic Ethics*

Brandon University

Brandon, Manitoba, Canada

*Reporter:*

**Etta Kavanagh**

Editorial Manager

*Proceedings of the National Academy of Sciences*

Washington, DC

Authorship issues are a common problem facing journals in all areas of science. The three speakers in this session—Annette Flanagin, Jennifer Mahar, and Deborah Poff—represent the biomedical, physical, and social sciences and the humanities, respectively. The panel provided context on how these disciplines are handling authorship problems.


Flanagin spoke about authorship issues in the biomedical sciences. In biomedicine, the number of authors per paper has increased greatly over the past 50 years. Flanagin and colleagues' research has

shown that papers with more authors are cited more frequently. Authorship disputes may involve who should be an author, who should not be an author, and author order. She noted that authorship is academic currency. The International Committee of Medical Journal Editors (ICMJE) provides criteria for authorship (see [www.icmje.org](http://www.icmje.org)). Group author papers are becoming more common; however, many authors do not understand the ICMJE criteria and do not meet the criteria for authorship. To deal with these issues, the *Journal of the American Medical Association (JAMA) Network* journals require all authors to complete and submit an electronic authorship form, which details their contributions. The form can help authors determine who merits authorship on a paper. The detailed contributions are specified in the published article. Any requests for changes in authorship must come in a letter or email from all authors. "Ghost authors" (those who made contributions to the manuscript but are not listed as authors) and honorary authors (those listed as authors whose contributions do not actually merit authorship) remain problems in the field. Authorship is an important issue and more research is needed on the effects of current policies.

Jennifer Mahar and Origin Editorial work on 15 physics journals published by the American Institute of Physics. These journals receive 30,000 submissions a year, and papers have an average of 10 authors. Mahar noted that the physical sciences are behind the biomedical sciences in how they handle challenges such as authorship and conflicts of interest. The 15 American Institute of Physics journals were all handling authorship issues differently. Origin Editorial was able to establish a clear policy for all of the journals. Having a clear and transparent policy in place provides support for the editors and the editorial office when a dispute arises. Authorship disputes

take time, and having a policy in place can make handling them simpler. The most important change was to start notifying all authors of submission of the manuscript and of any change in authorship. Mahar recommended having a clear policy and workflow in writing that is available to authors and ensuring that all of your editors are familiar with the policy. She noted that it is much better to deal with these situations before publication.

Deborah Poff spoke about authorship and other ethical issues in the social sciences and humanities. The ways in which social sciences deal with ethical issues may differ from the manner in which other areas, including the life sciences, deal with such issues. Poff explained that some social scientists may think that ethical policies shouldn't apply to them. Further, they sometimes feel that their work is being constrained by ethical regulations and that these regulations far exceed any harm that the work may do. Some argue that issues such as plagiarism and redundant publication are not as problematic in certain disciplines as they are in other fields. Although social science papers tend to have fewer authors, there are still authorship disputes. Less empirically based fields can create unique publication ethics issues. Poff mentioned a researcher who published a paper under a pseudonym and then cited that paper in work published under his own name as support for his thesis.

Session moderator Charon Pierson, who is a member of the Committee on Publication Ethics (COPE) Council, spoke about COPE and the tools they provide for journals, such as the COPE forum, their database of ethics cases, and flow charts showing procedures for handling ethical issues. She noted that journals must have guidelines, and that if those guidelines don't address the ethical issues that arise, the guidelines need to be made more clear. 

## Starting New Open Access Journals

*Moderator:*

**Tamer El Bokl**

Managing Editor  
Canadian Science Publishing  
Ottawa, ON, Canada

*Speakers:*

**Patricia K Baskin**

Executive Editor  
*Neurology Journals*  
American Academy of Neurology  
Minneapolis, Minnesota

**Suzanne Kettley**

Director, Publishing Operations  
Canadian Science Publishing  
Ottawa, ON, Canada

**Cameron Macdonald**

Executive Director  
Canadian Science Publishing  
Ottawa, ON, Canada

*Reporter:*

**Peter J Olson**

Senior Copyediting Coordinator  
Dartmouth Journal Services/Sheridan  
Waterbury, Vermont

Regardless of the debate about open access (OA), one thing is certain: the OA journal is not going away anytime soon. Tamer El Bokl opened this session by stressing that its purpose was not to debate the concept of OA but to offer inspiration and guidance for organizations that are considering launching an OA journal. He then introduced three speakers who shared their success stories.

Patty Baskin offered several strategic tips that helped the American Academy of Neurology (AAN) launch two new OA journals within the last four years. As executive editor of the *Neurology* journals, Baskin said that a critical part of her strategy was to ensure that her goals were aligned with those of the AAN. In the end, those goals included 1) expanding readership, 2) filling a market niche for subspecialists, 3) achieving wider and faster dissemination

of content, and 4) taking advantage of electronic media, all of which could lead to increased membership. Despite aligning these goals, Baskin noted that she had to contend with anxiety among the AAN and authors alike and ask some hard questions about launching a new OA journal: How do you convince authors that it is not a “second-tier” publication? How do you solicit material for a journal with no impact factor? Will the brand be strengthened or diluted? How do you address legal issues such as copyright holding and a publisher agreement? And ultimately, will the new business model even work?


Baskin addressed some of these challenges by organizing editor retreats and operational meetings, asking key players to review the business plan, and conducting a competitive analysis against other journals with similar topics. She acknowledged a resistance from authors but said that a call for papers and the editors’ personal solicitations to colleagues helped kick-start submissions. Baskin also arranged a focus group at the AAN’s annual meeting to help identify areas for improvement, including educating authors about OA costs, assuring authors that their papers would be discoverable, and exploring potential member discounts.

Cameron Macdonald and Suzanne Kettley of Canadian Science Publishing (CSP) followed Baskin with a joint presentation of CSP’s experience launching several OA initiatives. As a small-market publisher with a broad range of general subject matter and, according to Macdonald, a bit of an identity crisis (“Are we a Canadian publisher or an international publisher?”), CSP faced its own challenges. However, a decline in subscriptions, a flat submissions rate, and the institution of OA requirements by Canadian funding agencies inspired action. To help authors meet the requirements of the funding agencies, CSP implemented a repository partnership with the University of Toronto to provide authors with an OA platform for sharing their accepted manu-

scripts. Additionally, after an independent CSP survey revealed that 83 percent of Canadian science researchers agreed with the concept of OA, CSP decided to deliver what those researchers wanted in the form of two new OA journals: *Arctic Science* and *FACETS*.

Kettley, who stressed the importance of selecting the right discipline for a new OA journal, said that CSP chose arctic science as a topic because it is one that is particularly relevant to Canada. A market research consultant validated these assessments by concluding that no other North American OA journals were fully devoted to arctic science, leading to wide support within the Canadian research community. Kettley also advocated choosing an editor-in-chief carefully and early, stating that this person should be an OA supporter and ambassador.

With the selection of a topic behind them, CSP had many decisions to make, including how to brand the journal, how to address various licensing issues, and how to shape their business model. The latter task involved setting the article-processing charge (which Kettley characterized as a balancing act to cover costs while remaining affordable to authors), integrating a payment system for authors, and realistically estimating the time needed to recoup their investment (which can be extensive, according to Kettley).

Kettley then spoke about *FACETS*, a multidisciplinary journal that has since launched in the fall of 2015, and described the benefits and challenges of such a journal. Like CSP itself, *FACETS* is an international journal but also a trusted Canadian solution, offering choice and support to the scientific community. She concluded by saying that it is the responsibility of journal publishers to support the scientific community, not only the other way around. This symbiotic relationship is critical if any journal is to thrive—so when an organization chooses to launch an OA journal, it must be one that will benefit the community. 

## Embracing the Constant Change in Media Relations

*Moderator:*

**Victoria Forlini**

Assistant Director  
American Geophysical Union  
Washington, DC

*Speakers:*

**Tom Champoux**

Director of Communications  
American Meteorological Society  
Boston, Massachusetts

**Preeti Malani**

Associate Editor, Media Relations Director  
JAMA/University of Michigan  
Ann Arbor, Michigan

**Daisy Barton**

Media Relations Manager  
*The Lancet*  
London, United Kingdom

*Reporter:*

**Tara Strome**

Assistant Managing Editor  
Milbank Memorial Fund  
New York, New York

The media landscape looks much different today than it did 20 years ago, presenting journals with both opportunities and challenges when communicating their scientific findings to a broad audience. This session touched on several different aspects of communicating research, including internal messaging, engaging journalists, and working with authors.


Tom Champoux began with a discussion of the recent efforts of the American Meteorological Society (AMS) to communicate to its members, the press, and the public at large. The AMS is a large society with both academic and practicing members, and Champoux discovered that only a small percentage of its members

were accessing journal content. Champoux and the AMS saw an opportunity to reach a wider audience through their practicing meteorologist members who deliver the weather news every day. To achieve this, they began an internal process of teaching staff that the science they publish is important and relevant to the whole organization. Many members had no idea that their journal content was being cited in the media. To address this lack of awareness, the staff redesigned their website to highlight science stories in the news in addition to their journal content. Champoux stressed that it is important to frame information in a way that makes it accessible to the general public and to provide key takeaways—what you want people to know and what you want them to do with that information.

Preeti Malani, associate editor and media relations director for JAMA, spoke about how to engage journalists. Journalists are busy and savvy, and the easier you can make things for them, the more likely they will be to cover your journal content. JAMA works hard to provide information to journalists, and although they have many resources to work with, the lessons Malani provided are useful to journals of any size. One strategy to reach journalists is to make content available to them pre-embargo, including PDFs, press releases, links, videos of author interviews, images, and scripted news stories. It is important to clearly spell out the embargo policy and make it easy to find. JAMA does this through a media portal on their website that authorized journalists are able to access and with email alerts about new content. Other strategies include interacting with journalists on Twitter—tweeting links to news coverage and retweeting journalists' tweets—and through the Association of Health Care Journalists, which has an annual conference as well as engaged local chapters. Altmetric is a useful indicator of

early media pickup. Many bloggers have large, targeted followings, and Altmetrics is a good tool for finding those bloggers so that you can engage them.

Daisy Barton, media relations manager for *The Lancet*, explained that authors are under increasing pressure to promote their work as demonstrated by the Research Excellence Framework, the system for assessing the quality of research in the United Kingdom that requires researchers to demonstrate “impact.” The inclusion of impact has made authors think about public engagement from the early stages of their research. Publishers should be working with authors to take advantage of media opportunities, including engaging with traditional journalists as well as using social media platforms to reach wider and more connected groups. Barton also suggested taking advantage of publishing technology to aid your outreach efforts. Elsevier, for example, has created an online platform for their research community called Elsevier Connect, where they publish engaging stories about Elsevier articles, as well as provide information for researchers on how to do outreach. It is important to consider any potential risks in promoting research, especially for controversial subjects. Outreach is almost always a good idea as it is a way to control the message, but it is also important to work with authors so they are prepared for tough questions as well as conflict-of-interest requests.

The difficulty faced by smaller journals with fewer resources was brought up during the discussion, and the panelists suggested reaching out to authors' institutions and funders as a solution. Staff at those institutions will often write press releases and may have author interviews. The tips and success stories provided by the speakers prove that there has never been a better time to share research with the public. 



# Copyright Best Practices: From Traditional Transfers to Liberal Licenses

*Moderator:*

**Amanda Ferguson**

Institute of Food Technologists  
Chicago, Illinois

*Speakers:*

**Carolyn Brown**

Publishing Consultant  
Ottawa, Ontario, Canada

**Tracey DePellegrin**

Executive Editor  
Genetics Society of America  
Bethesda, Maryland

**Christopher McKenzie**

Vice President, Global Intellectual Property  
John Wiley & Sons, Inc  
Hoboken, New Jersey

*Reporter:*

**Darren Early**

Senior Director, Journal Editorial and Production Operations  
American Society for Nutrition  
Bethesda, Maryland

The session's first speaker, Carolyn Brown, indicated that the open access (OA) movement did not originally touch on rights; instead, it was only about reader access. OA has evolved to include authors' and users' rights, which Brown referred to as "open copyright." Under traditional international copyright conventions (at least for scientific journals), copyright rests with the author and is transferred first to the publisher and then to the user. Authors are allowed to retain some rights (e.g., reproducing figures and tables from the article in other publications).

Some publishers have moved to a license-to-publish model, whereby authors retain copyright but publishers are allowed to publish, republish, reproduce, and disseminate the work; the only restriction

on authors is that they cannot republish the article in another journal. Many publishers, however, continue to use the traditional copyright-transfer model. OA journals and publishers adopt a third model (OA/open copyright), in which the author retains copyright and grants users a Creative Commons (CC) license, and the publisher may or may not have a license agreement with the author. Confusion often exists between authors' and users' rights. Authors retain copyright or more limited rights specified in copyright transfer agreements (CTAs). Users typically only have the rights to read the article and make photocopies for research purposes. The CC licenses allow authors to grant extensive rights, including the right to distribute directly to users without going through the publisher. CC licenses have four components: attribution, share-alike, non-commercial, and no derivatives. Brown ended her presentation by asking whether all authors should sign the copyright or license form. Answering the question requires considering principles (e.g., all parties to a contract should sign it) and practical matters (e.g., manuscripts sometimes have many authors).

Tracey DePellegrin stated that the Genetics Society of America publishes two journals with distinct missions and author groups. *Genetics* is a mature journal using the copyright-transfer model, whereas *G3: Genes | Genomes | Genetics* is a newer OA journal using the most liberal OA license (CC-BY 3.0). For *Genetics*, the corresponding author used to sign the CTA on behalf of all authors, and authors were not allowed to deposit articles in institutional repositories or distribute articles. She explained, though, that these restrictions were not policed and that authors were sharing their articles anyway. She also pointed out that the language in the CTA was not easy to understand. To clarify authors' rights and choices, *Genetics* moved to a license-to-

publish model, which has saved editorial office time (fewer questions about permissions) and allowed authors to retain control. *Genetics* also now requires all authors to sign the license. *G3* uses the CC-BY license for all articles. DePellegrin recommended that publishers read the legal code on the CC website. She noted that there are some problems even with the liberal CC-BY license. For example, authors can deposit articles in institutional repositories but may not deposit the right version, and corrections to the published article may not be reflected in the institutional repository version.

Christopher McKenzie began his presentation by stating that Wiley's standard CTA stipulates allowed uses for the submitted, accepted, and final published versions. For submitted and accepted versions, authors may post to personal websites and institutional repositories and share with colleagues; for the final version, authors may send copies to colleagues, reuse in other publications, and post privately for teaching purposes. Christopher indicated that it was desirable but not always feasible or necessary for all authors to sign the CTA. Copyright violations typically consist of misappropriation of content, posting on open/semi-open websites, and unauthorized republication (books). Remedies include the Digital Millennium Copyright Act notice-and-takedown rules, cease-and-desist orders, litigation, and statutory damages. Print fraud may consist of counterfeits (books), unauthorized scanning, and instances in which someone uses aliases to purchase subscriptions at the individual or member rate and then sell them for a profit to institutions at a discounted institutional rate. Electronic fraud typically consists of IP overlaps and unauthorized sharing and massive or dispersed downloading. In attempting to mitigate copyright

*(continued on page 94)*

## The Next Generation of Researchers

*Moderator:*

**Angela D Cochran**

Director of Journals  
American Society of Civil Engineers  
Reston, Virginia

*Speakers:*

**Jamie L Vernon**

Editor-in-Chief,  
*American Scientist*, Sigma Xi  
Research Triangle Park, North Carolina

**Frederick Fenter**

Executive Editor  
Frontiers  
Lausanne, Switzerland

**Alexandre (Sacha) Noukhovitch**

Executive Director, Editor-in-Chief  
*STEM Fellowship Journal*  
Toronto, Ontario

*Reporter:*

**Colleen M Sauber**

Mayo Clinic  
Rochester, Minnesota

Collectively, the panelists recounted their science publishing work with children from eight years old to the high teens. They told of impressive youngsters with characteristics distinct to their age group, and session participants left with high hopes for the next generation of researchers.

In 2014, Sigma Xi, The Scientific Research Society, launched *Chronicle of the New Researcher* ([www.chronicleofthenewresearcher.org](http://www.chronicleofthenewresearcher.org)), a refereed journal of research papers written by students. Editor-in-Chief Jamie L Vernon wants the young authors to be taken seriously by the research community, and for students to view the journal as a go-to publication to showcase their work.

Sigma Xi recruits its members to engage with high school students and precollege researchers about science for an educational experience beyond traditional peer review. Vernon said he recently scouted for

authors at the Intel International Science and Engineering Fair. “We work with a consortium of specialized STEM [science, technology, engineering, and math] schools,” he explained. “Really, every time someone hears about it, they know about a kid they want to recommend, so it becomes word of mouth.”

“For me, this project is about strengthening the science enterprise,” reported Vernon. Additional efforts help to teach young students how to formulate their science and gain understanding of the publication process.


Another youth-directed publication is *STEM Fellowship Journal* ([journal.stemfellowship.org](http://journal.stemfellowship.org)), which launched the week before CSE’s conference. It engages high school and undergraduate students, connecting them with and encouraging science learning, Sasha Noukhovitch explained. The journal accepts submissions from authors around the world, publishing both team-written and individually authored manuscripts.

“What defines high school is that [the student’s] life experience is equally based on reality and digital reality,” he said. “For them, it is simply reality, even though they are coming into the work with life experience equally based on two realities.” Noukhovitch addressed big data in his organization’s connection with students. Comparing adults generally with teenagers, he said, “we are strangers in the world of big data, but not high school students! They are naturals, and they have their own techniques to be big-data scientists.”

Vernon agreed, saying that his publication’s young researchers have two primary characteristics: fearlessness and social awareness. “You can challenge them as much as you want, and they will work hard and find an answer.” Their social awareness combines with the desire to have an “impact on society.” Climate change and its effects are an obvious example, he said. “They will connect their science to the impact.”

*Frontiers for Young Minds* ([www.kids.frontiersin.org](http://www.kids.frontiersin.org)), an initiative of Frontiers, the open-access publisher based at the Swiss Federal Institute of Technology in Lausanne, launched in 2014, seven years after the first of the Frontiers journals. This effort essentially targets children around the age of 12 years. A nonprofit, peer-reviewed, online-only science publication, it is formatted as a scholarly journal of research papers reviewed by students. Its website describes its readership: “Young people serve not only as the target audience, but also as critical participants in the review of manuscripts written by expert researchers.” Executive Editor Frederick Fenter explained that when Frontiers publishes an article, “we invite the author to rewrite this article so a 12-year-old reader can understand it. The 12-year-olds of the world are the reviewers; they are asked to tell the scientists what they need to do to make their article understandable.” The first step toward this involvement is for the children or their class to contact the publication, which now has a waiting list.

“A lot of the kids who have done individual reviews have a parent or relative who are their mentor,” Fenter noted. The idea is to focus on “an age when notions of the scientific method become immediately available. It is a sensibility that becomes more developed around the age of 12 or so.” He added, “a lot of kids think of science as a pursuit far beyond their reach. They leave [this journal experience] with the impression that being a scientist is something they can do, too.”

After the session, Noukhovitch commented further on the reality of today’s children. “They can visualize magnetic fields like we can see day-to-day objects. They understand four and five dimensions like we do two- and three-dimensional objects. They will be normalized through education, but this ability will make itself evident at some point.” 

## Data Availability Policies: How Do We Check for Compliance?

Moderator:

**Helen Atkins**

Director, Publishing Services  
Public Library of Science  
San Francisco, California

Speakers:

**Rebecca Barr**

Manager, Copy Editors  
Nature Research Journals  
Nature Publishing  
New York, New York

**Cathy Stack**

Deputy Editor, Statistics  
*Annals of Internal Medicine*  
American College of Physicians  
Philadelphia, Pennsylvania

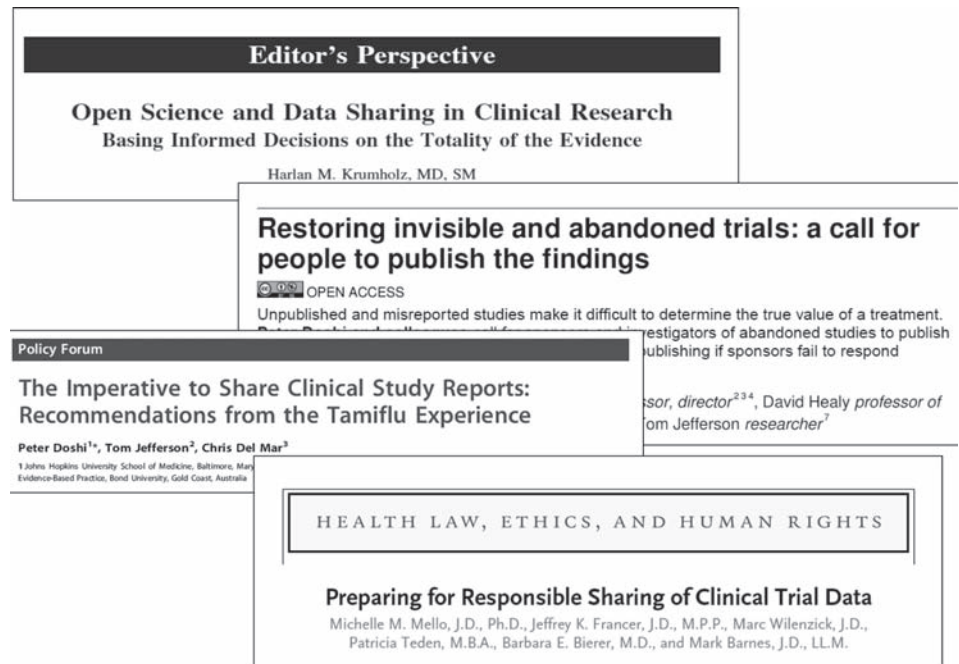
Reporter:

**Barbara Biemeck**

Publishing Services Manager  
Dartmouth Journal Services/Sheridan  
Waterbury, Vermont

Big data is big business these days in scientific, technical, and medical publishing. At least that's the idea. It's increasingly referred to and built upon in the articles we publish. More and more journals are setting policies that require authors to make their data available. Some are doing so right at the start, from the beginning of the peer review process. Others are requiring that authors make the data publicly available before publication.

How are publishers dealing with data availability issues on a day-to-day basis? This session explored what some publishers have discovered about author compliance with their journals' policies and what the editorial/production offices have to do to ensure that compliance. The speakers all agreed there is a growing demand for transparency, and they addressed aspects of change from what's in progress to current policies about data sharing, guiding principles, and recommendations for the future.



Cathy Stack, of the *Annals of Internal Medicine*, pointed out both the benefits and risks of open data. Although we stand to gain improved transparency, reproducibility, the advancement of research, and better patient care, we also risk, for example, compromise of patient privacy, misuse of data and data misinterpretation. She cited some findings of the Committee on Strategies for Responsible Sharing of Clinical Trial Data—fall 2013, formed by the Institute of Medicine, which, in 2015, published its recommendations for sharing clinical trial data ([iom.nationalacademies.org/Reports/2015/Sharing-Clinical-Trial-Data.aspx](http://iom.nationalacademies.org/Reports/2015/Sharing-Clinical-Trial-Data.aspx)). How we ensure compliance with data availability can depend on whether researchers and authors are making data available at or before publication. The pros and cons lists are long. Publishers' tools for sharing include editorial policy but also incentives (credits, acknowledgments) and venues such as databases and repositories. According to Rebecca Barr, of *Nature Research Journals*, many issues—ranging from not-yet-released data records to fail-

ure to deposit needed data at all—surface as late as the copyediting stage. Would it help to obtain the data at peer review stage? In a mandatory data-deposition environment, we will eventually drown in data. She noted that “implementation matters—is your data worthy of deposition?”

Helen Atkins, of the Public Library of Science, pointed to her organization's policy, revised in March 2014, that now requires authors to make all data available before publishing (with some exceptions, mostly for privacy involving experimental subjects, for example). Authors must provide a “data availability statement.” Before that time, it was hard to find the data underlying research papers—the data might be lacking in descriptive metadata, or authors simply did not provide it; data not stored centrally was another big challenge. Atkins reported that while enforcement of the new policy initially took a lot of staff time, over the past year, author compliance and understanding have improved.

(continued on page 94)

# Disclosures of Potential Conflicts of Interest: Authors and Beyond

Moderator:

**Shari Leventhal**

Managing Editor

*Clinical Journal of the American Society of Nephrology*

Washington, DC

Speakers:

**Christine Laine**

Editor-in-Chief

*Annals of Internal Medicine*

Philadelphia, Pennsylvania

**Gary Curhan**

Editor-in-Chief

*Clinical Journal of the American Society of Nephrology*

Brigham and Women's Hospital

Boston, Massachusetts

**Heather H Pierce**

Senior Director

Association of American Medical Colleges, Science Policy Regulatory Counsel

Washington, DC

Reporter:

**Kathryn Murphy DeTura**

Assistant Editorial Manager

*Proceedings of the National Academy of Sciences*

Washington, DC

The last presenter at the session "Disclosures of Potential Conflicts of Interest: Authors and Beyond," Heather Pierce, was speaking of the secure online disclosure system Convey (created by the Association of American Medical Colleges) when she said, "If I seem biased in thinking this could change the small world we live in, you're right." Pierce and fellow speakers Gary Curhan and Christine Laine addressed the importance of disclosing conflicts of interest, and each had suggestions for resources that authors

and journals can use to collect and share this information.

Laine opened the session with a review of conflicts of interest. She noted that references to the phrase were uncommon before 1992, when articles on the topic "exploded." Subsequent research showed evidence that authors' employers could influence their results, and journal editors began requesting information about authors' financial dealings as well as non-financial relationships such as friendships and academic competitions.

"Our concern is the overall risk for bias, rather than a specific case," Laine clarified. "The existence of a conflict does not imply an individual relationship is improper, just that the possibility exists that it could become problematic." The speakers emphasized the use of the word "disclosure" rather than "conflict," as a journal's goal should be to identify any potential association before it becomes a conflict. As Laine summarized, "the lack of disclosure can cause a variety of problems."

The International Committee of Medical Journals Editors (ICMJE) has spent several years developing conflict-of-interest policies. In 2009, they created a standard form for disclosures, which has since been revised and is currently in use at hundreds of journals. The process of disclosing potential conflicts can be frustrating for authors, and Laine suggested that use of the ICMJE's form could save time for all parties. The ICMJE form can also be used by medical professionals to compare their personal records with those listed in the federal Open Payments system.

At the *Clinical Journal of the American Society of Nephrology* (CJASN), Gary Curhan and his colleagues use the ICMJE form to collect a list of disclosures before appointing editors. The journal then updates the form annually for each editor. Editorial Board member disclosures are also collected and updated annually.

Scanned copies of the editors' forms and the Editorial Board member disclosures are then posted on the CJASN website. Curhan noted that this process can be time consuming and that the ICMJE form is not expressly designed for this purpose. However, he added, "authors are routinely asked for disclosures at the time of manuscript submission, while editors and reviewers are the ones who decide what gets published." Curhan concluded that disclosure information should be collected from decision makers and shared, but there is a need to find better methods for collecting and validating this information.

In 2013, an Institute of Medicine-convened working group approached the Association of American Medical Colleges about creating a more effective system for reporting disclosures. "One individual discloses probably 160 times a year, on a different form each time," said Heather Pierce, "usually ten minutes before the form is due and with information remembered off the top of his head." Under these circumstances, forms could be completed inconsistently, creating negative consequences for the author and the journal. Pierce explained that Convey is intended to be a secure, centralized data repository that simplifies the process.


Authors will be able to create profiles in Convey to collect information about their financial interests. They can then use that information to create tailored disclosures that capture the information required by a journal or other organization, such as in the ICMJE form. Individuals will always have control over what information is sent to a journal or organization, Pierce said, "and no matter who they are disclosing to, they will go through a process that looks familiar each time." Pierce also noted that the database will not be source verified, so it will still be the responsibility of the discloser to disclose accurately.



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The team at Convey is hopeful that the system will be available beginning in the fall of 2015. They plan free access for individuals, but institutions will be charged an annual subscription rate. Initially, the system will only be available to subscribing

institutions in the United States, though authors from anywhere in the world will be able to create personal profiles. “If you think ‘this wouldn’t work for me,’ we want to hear that,” Pierce said in closing. “This is an ideal time to be involved, whether

you subscribe now, or later, or never.” If you have questions or would like to provide feedback to AAMC about Convey or the disclosure process, please contact Heather Pierce at [hpierce@aamc.org](mailto:hpierce@aamc.org) or [convey@aamc.org](mailto:convey@aamc.org). 

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His concluding recommendation was to consider conducting a request for proposals. Understand, however, that you are able to determine the parameters of your publisher relationship. And you should only sign an agreement if the relationship meets or exceeds your expectations.

### **Social Media: Thomas Gerber**

Before embarking on a social media strategy for your journal, decide on your objectives and be open to reviewing these objectives regularly (every 3 months). Gerber reminded us that if we want our journals to be relevant 10 years down the road, we must step up to the “social media plate.”

Through various media, you can promote your articles. Select the right paper to disseminate. The article should be practical and applicable to your audience. Establish a YouTube channel to host your video content such as author interviews. Remember to create a personal, introductory video message for your readers. Social media is about being social and connecting with readers. Twitter and Facebook are different ways to connect—find out what your read-

ers are using and go there. The quality of your followers is more important than the quantity.

Each social media tool should have its own strategy. Don’t repurpose material to all tools—you risk overloading the same followers with the same information.

### **Metrics: William Lanier**

How do you know whether you have a great journal and whether new initiatives are having the intended effect at your journal? Know your baseline metrics before and after an intervention.


Metrics should focus on those issues you can control (e.g., time to first decision, time from acceptance to publication) and that have meaning for your journal’s wellbeing. Excessive, non-actionable metrics are a distraction and waste of time. Use metrics to chart your progress and compare your journal with other journals in your own sphere.

There are many tools you can use to assess the growth of your journal, including impact factor (based on citations resulting from articles published in the 2 previous years); 5-year impact factor (like impact factor but

based on articles published in the 5 previous years); Eigenfactor (considers all citations and weighs them based on the importance of the citing journals; doubles as the number of articles published per journal doubles); and article influence score (Eigenfactor corrected for the number of articles; functionally a “weighted” impact factor).

Great metrics come with great content. Use your board to recruit great content and approach potential authors. Be their cheerleaders! Go to relevant association meetings and conferences and invite authors. Prepare a “brag sheet” with your metrics and strengths, have your business card in hand, and approach potential authors.

Your board members are also good journal ambassadors—provide them with talking points. Get younger scientists and professionals involved in the journal—these younger authors are future ambassadors. Our two-day short course ended with open discussions on peer review and journal “war stories.”

It was enlightening to hear other journal editors with similar stories and solutions. 


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Article Tag Suite before all of the information can be tagged.

Each of these presenters discussed a different perspective regarding data in today’s scientific journals. From universal identi-

fiers to standardized contributions that will more fairly describe work completed to systems that serve as depositories for funding information and finally the submission system that will serve as the access point

for authors to enter their information, attendees of this session were educated on data issues that we as publishing professionals will be working through for years to come. 

## Assessing a Journal's Impact: Article-Level Metrics and Our Editorial Responsibility

*Moderator:*

**Carissa Gilman**

Managing Editor

*Cancer*

American Cancer Society

Atlanta, Georgia

*Speakers:*

**Kerry Kroffe**

Senior Editorial Manager

*PLoS ONE*

Public Library of Science

San Francisco, California

**Christine Casey**

Editor

*Morbidity and Mortality Weekly Reports  
Serials*

Centers for Disease Control and  
Prevention

Atlanta, Georgia

**Christina Mills**

Managing and Scientific Editor

*MEDICC Review*

Oakland, California

*Reporter:*

**Geoffrey S Shideler**

Assistant Editor

*Bulletin of Marine Science*

University of Miami

Miami, Florida

For many decades, researchers and librarians have been evaluating a journal's impact by counting citations. However, simply counting citations has recently been deemed an insufficient metric to evaluate a journal's total impact, and the publishing community has begun exploring alternatives.

Carissa Gilman introduced this session by explaining how the topic of journal impact became a special interest of hers. A few months ago, *Cancer* began displaying the Altmetrics score of articles on its website. She was interested in exploring


how other journals were using these data, but this led her and some colleagues to engage in a philosophical discussion of sorts: namely, "What is the social responsibility of a scientific journal to measure the impact of the science it publishes?"

Kerry Kroffe was first to contribute to this discussion by sharing what *PLoS ONE* has been championing. He began with a popular quote to challenge the way we think about journal impact: "Not everything that can be counted counts, and not everything that counts can be counted." With this in mind, he introduced the concept of "altmetrics," a way of measuring a journal's impact that does not aggregate a journal's activity to one metric. Including approximately 20 data sources, *PLoS ONE* examines many sources of activity at the article level, including social media. The impact factor is slow to be released, and a benefit of these alternative metrics is that they can be updated daily. He then introduced a suite of online tools that *PLoS* makes available to allow anyone to investigate the impact of any article published in *PLoS* journals. Entitled "ALM Reports," this tool has the potential to change the way contributors and end users are able to evaluate impact.

Next, Christine Casey described how *Morbidity and Mortality Weekly Reports Serials* has taken an entirely different approach to evaluating journal impact. Casey encouraged editors to think beyond bibliometrics. She began by reminding the audience that scholarly communication emerged from personal correspondence and that modern scientific publishing retains similar attributes and purposes. Specifically, editors have many roles and responsibilities, such as disseminating content, archiving literature, quality controlling the "best" information, and influencing the field. To assess the impact of its work, the Centers for Disease Control and Prevention has adapted an Institute of Medicine "narrative frame-

work" that has five domains: disseminating science, creating awareness, catalyzing action, effecting change, and shaping the future. Using a case study about guidelines for field triage of injured patients, Casey highlighted how a journal can have more impact through encouraging repurposing of published content, working with stakeholders, and following up on the application of the research. Although the framework is well suited for scholarly content that is highly applied, Casey suggested it could be appropriate for a traditional research-oriented article as well.

Last, Christina Mills discussed the idea of an evaluation framework for social impact. Posing the question "Do we have a social responsibility and how do we measure it?" Mills described how *MEDICC Review* aims to contribute to health equity. She asked the audience to consider how journals can get beyond the high-level statements about impact and actually evaluate it. One suggestion was to select articles that a journal thinks might have social impact and follow up with the authors, helping connect them to appropriate decision makers. She admitted that it is easier for publishers to look up their bibliometrics but challenged the audience to think critically about what publishers can control: what they publish, who they publish, how they work with authors (especially of rejected submissions), how articles are ultimately published, and what a journal does after an article is published. She invited CSE members to collaborate in developing an evaluation framework.

Though more traditional methods of measuring journal impact certainly have utility, the common theme of this session was to think beyond those metrics to evaluate what we can do as a publishing community to maximize the impact our published articles have on our communities and scientific fields. 

## Peer Review Ethics: Do Journals Need to Ensure that Reviewers Behave Ethically?

*Moderator:*

**Anne Coghill**

Manager, Peer Review Operations  
American Chemical Society  
Washington, DC

*Speakers:*

**Carol Carr**

Managing Editor  
*Organic Letters*  
Philadelphia, Pennsylvania

**Ivan Oransky**

Co-Founder  
Retraction Watch  
New York, New York

**Darren B Taichman**

Executive Deputy Editor  
*Annals of Internal Medicine*  
Philadelphia, Pennsylvania

*Reporter:*

**Kate Horgan**

Aries Systems Corporation  
North Andover, Massachusetts


Over the past several years, ethical issues surrounding peer review standards have made headlines as more cases of fraudulent or unethical peer review surfaced. The session “Peer Review Ethics: Do Journals Need to Ensure that Reviewers Behave Ethically?” covered a broad range of current discussions surrounding ethical peer review. Darren B Taichman, Executive Deputy Editor of *Annals of Internal Medicine*, began the session by breaking down the types of fraudulent peer review into two distinct categories: the sensational and the common. The sensational examples tend to garner the most headlines but also tend to be rare. An example of this would be when authors masquerade as reviewers in order to submit favorable reviews of their paper and

ensure publication. Although covered less often in the media, Taichman believes that the common forms of unethical peer review can be just as damaging. Examples of this include instances when a reviewer delays the peer-review process to the detriment of the paper under review to strengthen his or her own chances, competing research being published, or a failure on the part of the reviewer to disclose a potential conflict of interest. “We should be laying out expectations for colleagues when performing a peer review,” said Taichman. Clear expectations can help reviewers maintain ethical standards while completing their reviews.

Ivan Oransky, co-founder of Retraction Watch, spoke about the need to not only examine reviewer ethics but also to examine the ethical standards of journal editors. Oransky used the recent issue surrounding papers published by Hyung-In Moon—a South Korean plant-compound researcher—to illustrate the role some editors may play in unethical peer review. Moon had 28 papers published in the journals of one publisher. The submission process requested the author to suggest reviewers who would be appropriate to review his work. Moon suggested a reviewer but entered his own email address for that of the suggested reviewer. The editor subsequently invited the suggested reviewer and Moon submitted glowing reviews within 24 hours. Twenty-eight papers were published before the journal discovered the pattern of almost instant reviewing and became suspicious. Had the editors taken the time to vet the suggested reviewer, they would have seen that the email address associated with the potential reviewer was a Gmail email account and not associated with a specific institution.

Oransky referenced several options for combating unethical behavior, including postpublication peer review. He also noted

that one prominent scientist, David Vaux of the Walter and Elizabeth Hall Institute of Medical Research, has suggested triple-blind peer review in which the identities of all parties—authors, editors, and reviewers—are blinded from one another. Ultimately, Oransky suggests that editors must consider their role in the current climate of peer review. “Everyone is going to behave badly, by the way; editors can behave badly too. The indirect pressure you can put peer reviewers under can have an effect on reviewers’ behavior.”

Carol Carr spoke about her experience with *Organic Letters* and its policies for peer review. She began by highlighting how difficult it is to police ethical behavior. “It is really tempting fate to think that we can ensure all reviewers are behaving ethically. It’s like ensuring your kids won’t have a meltdown in the supermarket,” said Carr. Given the laughter in the audience, most seemed to agree with this sentiment. With that in mind, Carr focused most of her discussion on what journals can do to maintain their reviewer pool and ensure that their potential reviewers are the most appropriate people to review their journal’s content. She highlighted the importance of monitoring an individual reviewer’s statistics to see if any patterns in their reviews might point to bias. For example, do they always accept or reject the papers they review? If so, this can be an indicator that this particular reviewer has a bias for or against a particular topic and might not be assessing the paper with an open mind. She also recommended that editors check affiliations and reconcile those against the email addresses listed in the reviewer record. Finally, although it can be helpful to consider an author’s suggestions for potential reviewers for a particular paper, she emphasized that it’s important to not rely solely on them. 

## Assessing and Monitoring the Health of an STM Journal

*Moderator:*

**Ken Heideman**

Director of Publications  
American Meteorological Society  
Boston, Massachusetts

*Speakers:*

**Brooks Hanson**

Director of Publications  
American Geophysical Union  
Washington, DC

**Margaret Perkins**

Director of Manuscript Editing  
*New England Journal of Medicine*  
Boston, Massachusetts

**Julie Steffen**

Director of Publishing  
American Astronomical Society  
Tucson, Arizona

*Reporter:*

**Judy Connors**

Associate Director, Editorial Services  
Drug Information Association  
Horsham, Pennsylvania

How do we know that a journal is “healthy” or “successful”? By looking at its subscription base? Financial performance? Journal impact factor? By counting the number of submissions? Or is success best measured by a combination of metrics? Where do subjective factors such as the quality of peer review figure into an overall assessment of a journal’s impact?

In an interesting session dealing with how to best monitor the health of an STM journal, moderator Ken Heideman, Director of Publications, American Meteorological Society, led a panel of experts at the recent CSE meeting in Philadelphia.

Heideman opened the discussion by noting that a journal’s health is assessed differently by each type of stakeholder, including

authors, editors, publishers, and reviewers. “Assessing journal health by looking at the impact factor only is like assessing general personal health by looking only at your cholesterol level; it just doesn’t work that way.”

The panel, which consisted of Brooks Hanson, Director of Publications, American Geophysical Union; Margaret Perkins, Director of Manuscript Editing, *New England Journal of Medicine* (NEJM); and Julie Steffen, Director of Publishing, American Astronomical Society, discussed perspectives on journal metrics and the ways their organizations choose to determine success. All agreed that metrics evaluation, based on the community that each journal serves, largely affects a “success” measurement.

“Know your stakeholders and their needs” was the message emphasized by Hanson, who believes that reader feedback complements such measures as impact factor, number of submissions, and readership surveys in assessing the health of their portfolio.

“There is inertia in the status quo,” Hanson said. “You need to have current data to guide and assess status quo, opportunities, and experimentation.” He suggests collecting the following information to fully understand stakeholder needs: author surveys (after publication or rejection); competitor benchmarking (what are your competitors doing?); reader surveys; researcher surveys (is your journal contributing to their field?); and reviewer surveys (for suggestions on innovation in the peer review process). He also recommends analyzing meetings and conferences, and understanding the direction in which your field is heading.


Margaret Perkins, who posed the basic question “Why monitor?” agrees with Hanson but takes data collection for NEJM a bit further, incorporating into their analy-

sis other metrics, such as acceptance rate, turnaround times, website traffic, news coverage, and social-media activity.

Author feedback is also very important to NEJM. “Recognizing that the road from submission to publication requires a good deal of effort on the part of our authors,” Perkins said. They write to the authors to solicit feedback on their submission, review, and production experience in order to best continue in their mission of advancing medical knowledge and improving care. Another survey area of interest involves understanding what factors help authors make publishing decisions—for example, reputation, quality, quality of peer review, turnaround time—and asking authors to rank these in order of importance.

The American Astronomical Society is a relatively small organization whose global journals moved to electronic publishing in 1995; Steffen faced the challenge of rendering detailed math content online, while streamlining production of their two journals, to enhance the value and utility of the society’s publications. “It was a huge change,” Steffen reflects on the mid 1990s innovation in their publication strategy. “Twenty years ago, we decided online would be the version of record and so we worked towards that.”

For the next phase of that transition, they appointed a task force, solicited community feedback, produced a white paper on what could be done next in electronic publishing, consolidated journal peer review operations, and developed a plan for rebranding. After a successful transition, the society’s journals remain leaders in the field.

All panelists agreed that regardless of size, stature, or standing of a scientific publication, the challenges in today’s publication environment are universal when it comes to innovating while maintaining the integrity of the science. 



# Journal Training Wheels: Building a Pipeline of Future Authors, Reviewers, and Editors

*Moderator:*

**Mary K Billingsley**

Managing Editor

*Journal of the American Academy of  
Child and Adolescent Psychiatry*  
Washington, DC

*Speakers:*

**Kathy Pieper**

Managing Editor

*Neurology*

Rochester, New York

**Jason Roberts**

Executive Editor

*Headache*

Plymouth, Massachusetts

**Michelle S Horner**

Editor-in-Chief, *Journal of the American  
Academy of Child and Adolescent  
Psychiatry Connect*

Assistant Professor of Psychiatry and  
Behavioral Sciences, Johns Hopkins  
University School of Medicine  
Baltimore, Maryland

*Reporter:*

**John Hammersley**

Co-founder and CEO

Overleaf

London, United Kingdom

How do we train authors and early career researchers with the skills they need to be effective reviewers and editors? In this intense session full of practical advice and tips, we were privileged to hear from three speakers who have all set up training programs doing exactly that.

Our first speaker, Kathy Pieper, has been at the journal *Neurology* for 16 years. Along with the Resident and Fellow Section editors, she has been mentoring neurology trainees since the training program's inception in 2004. The program provides a forum for new researchers to publish

articles and helps them learn the ins and outs of peer review.

Launched online only (to keep costs low), this section began with a few submission subcategories: Education Research, Career Choices, and Residency Training. They now have 15 article types and have added new interactive offerings. One current key initiative is the "Call for Authors" section, which lists suggested article topics. Users can check out interesting topics, and interested submitters have six weeks (plus grace) to submit. If there is no submission by this time, the topic opens back up. "Mystery cases"—where a teaser of the case is shared on social media before they are published—help encourage interaction, and "e-Pearls"—just 85 words—encourage new authors to get involved.

The program has seen rapid growth in the last decade and now has more than 500 unsolicited submissions per year. In 2014, they published 150 articles, up from 10 (heavily solicited) articles in the first year. What makes for a successful initiative? Pieper introduced three key themes, which were also prominent throughout all three speakers' talks:

1. **Provide a positive and open environment:** Those who join the program usually want to offer ideas in a safe environment.
1. **Keep focus and momentum through regular calls:** For this, it is important that everyone is comfortable with the technologies being used.
1. **Build transferrable skills that researchers can take forward:** This helps them to continue to contribute beyond the end of the program.

Jason Roberts described the "article review club" training program he set up with the journal *Headache*, which is now

in its fourth year. Two society members lead a Skype call twice a month, and each time they focus on a different element of the review process. They then look at examples—Roberts sends them six papers, and the group picks one to be the live case they work on. The review they produce is used by the journal as an extra review.

When they start out, the trainees are very critical: "It's like a shark tank—papers get ripped to shreds!" as Roberts describes it, and this has been fed back into the teaching sessions. Discussing ethics is important; for example, this is often the first time the trainees have seen a confidentiality agreement, which they have to sign before they can participate in the program.

Overall this initiative has been "tremendous in fostering relationships with early career researchers" Roberts concluded; the society is similarly excited by how this develops the active member who will continue to contribute in years to come.

Promoting the development of transferrable skills was a key reason behind the launch of the *Journal of the American Academy of Child and Adolescent Psychiatry (JAACAP) Connect*, the online extension of JAACAP that focuses on practical translational and skills-building articles. Michelle Horner described the dual mentorship model that has been a core part of the program's success: in addition to a "content mentor", the trainee's "editorial mentor" is a friend and guide who works closely with authors every step of the way, ensuring that they "never worry alone".

Ensuring the trainees have a positive experience makes them more likely to refer others, and it all starts with a phone call to find out what they're passionate

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## Ethics Clinic: Failure to Produce Data

*Moderator and Speaker:*

**Debra Parrish**

Founder

Parrish Law Offices

Pittsburgh, Pennsylvania

*Reporter:*

**Ruth Einstein**

Senior Production Manager

Wolters Kluwer

Baltimore, Maryland

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


In the first scenario, an editor of a journal received allegations of misconduct related to a published article. When the editor contacted the author group, it became clear that the coauthors never reviewed the raw

data, and the author responsible for the data wouldn't share because he alleged it was secured from a confidential source. Upon further inquiry, the editor discovered that the affiliated university found research misconduct in two other articles coauthored by the same person and has determined his body of work is suspect based on a pattern of conduct and lack of evidence that data existed in multiple instances. When coauthors of some of the older published articles, some published 15 years earlier, were asked to produce anything that would support the existence of the original data or the collaboration, they protested, citing the length of time since the publication.

In parsing through this scenario, members of the group I was in said that they would want to assess the journal's current policy on data sharing and accessibility, as well as the policy in place at the time the article was published to determine whether the author was in breach of either. We found that among the group, the journals represented had varying policies on data sharing, but everyone felt that if there were allegations of misconduct or fraudulent findings, the authors should be expected to produce the research data used. Debra Parrish, the moderator, shared with us that legally, the statute of limitations on research misconduct is six years from the point of last use. Beyond that, the majority of my discussion group agreed that they would follow the institution's lead in this case and likely publish an Expression of Concern (EOC) to identify the possible misconduct and ongoing inquiry. We also discussed that the Committee on Publication Ethics (COPE) expectation of EOCs is that these are resulting in a retraction of the referenced article(s) or of the EOC once the inquiry has completed, but what we heard from the

experience of the group was that many have seen institutions drag out inquiries for years and never conclude in decisive findings.


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

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

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According to Dang, participation rates for optional open policies have been positive. By the numbers, 95 percent of eLife authors choose to have their decision

letter and responses published along with their submission, 23 percent of reviewers agree to share their names with authors, and 80 percent of reviewers agree to share

their names with another journal in the event of a rejection if passed onto another journal. 

# Self-Publishing or Contract Publishing: Understanding the Advantages and Disadvantages

*Moderator:*

**Donald McClain**

Head of Business Development  
Crimson Interactive  
Valley Cottage, New York

*Speakers:*

**Cara Kaufman**

Managing Partner  
Kaufman Wills Fusting and Company  
Baltimore, Maryland

**Ann Murphy**

President, CEO, and Publisher  
AlphaMed Press  
Durham, North Carolina

**Judie F Lieu**

Senior Director of Innovation  
The Gerontological Society of America  
Washington, DC

*Absentee Speaker:*

**Audra Cox**

Managing Editor  
American Society for Investigative  
Pathology  
Bethesda, Maryland

*Reporter:*

**Andrea R Wagner**

Editorial Assistant  
American Academy of Neurology  
Minneapolis, Minnesota

Editors increasingly find themselves at the crossroads of self-publishing (SP) and contract publishing (CP). With strong incentives on each side, choosing one or the other can be a difficult decision. To illustrate the advantages and disadvantages of each avenue, Cara Kaufman began the presentations with an overview of an eight-journal interview of editors on SP versus CP. The interview results highlighted the

trending shift within the last 10 years toward CP, which reduces financial risk, increases global institutional reach, and allows societies to focus more on journal development rather than publication intricacies. However, sticking with SP may also support continued financial success, help retain publisher control over multiple aspects of their journals, and allow in-house publishing infrastructure to remain, with resulting synergies. These reasons, combined with CP's potential for the lack of flexibility and transparency, as well as potentially difficult software integration, make SP beneficial for some societies.

Kaufman emphasized the importance of compatibility of culture and vision between society and publisher, which develops through constant communication. "Ensure your publications get the best attention and ideas," she said, stressing that face-to-face communication is key. Likewise, a point-person within the society who understands publishing is important to a good partnership. Kaufman noted that the majority of interviewed editors were happy with their decision to switch to CP.

From the perspective of an editor overseeing some journals using CP and some using SP, Ann Murphy presented the benefits and challenges societies may face when transitioning to CP. Murphy's reasons for moving one journal over to CP aligned with previously noted benefits. Turning over customer service to a publisher provided time savings, increased global reach and exposure, and improved revenues.

But a few unforeseen challenges surfaced, including less personal service, which resulted in communication problems, as well as substantially increased response times due to a lack of a dedicated service team at the publishing house. "The biggest challenges," Murphy said, "were a loss of flexibility and control," also noting an

initial branding issue with the publisher. Nevertheless, the benefits of cost and time savings have encouraged Murphy to consider bringing all of her society's journals under the CP umbrella.

Judie Lieu, senior director of innovation at the Gerontological Society of America, also has experienced the transition to CP, noting benefits of higher circulation, readership, and impact factor, along with increased numbers of submissions. In fact, the Gerontological Society of America was pleased enough with the CP results to renew the society's contract with Oxford University Press (OUP). Lieu emphasized that the key to good relations with a contract publisher is frequent and productive communication. "An aggressive schedule helps quickly overcome gaps and increases developmental opportunities, keeping our society at top of mind with OUP," said Lieu. Using a range of communication strategies from weekly calls to annual face-to-face meetings, the society keeps the publisher accountable through extensive involvement.

Speaker Audra Cox was not able to attend, so Kaufman stepped in to talk about the American Society for Investigative Pathology's (ASIP) decision to switch to CP. Many factors were taken into account, including peer-review systems and in-house versus outsourced copyediting. Since the transition, ASIP has been pleased with the control the editors have maintained, although the publisher's alternative software platform did create initial difficulties. Kaufman emphasized that societies should advocate for the system they want and are comfortable with, as most publishers will try to tailor their services to a society's wants and needs. ASIP also maintains a high degree of oversight, making sure style guides match between offices, and

# Annual Meeting Reports


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reviewing proofs after outsourced copy-editing and composition. Kaufman reiterated the significance of communication, saying, “Understand the nuances of your publisher’s workflow as they understand

yours.” Constructive complaints must be shared, but societies should remain open to the publisher’s ideas.

Whether deciding on a publisher or currently working with one, constant com-


munication is key, allowing the publisher to hear and address client needs. Both SP and CP have advantages and disadvantages, and one path may not be ideal for a particular publication. 

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violation risks, Wiley undertakes several steps including (in escalating seriousness) investigation (very important because of the need for accurate records), negotiation, threats, partnerships with peer publishers

in group actions, litigation, and criminal prosecution. McKenzie concluded by noting that the CTA is critical as proof that the publisher is the authorized repository of the version of record. When versions

are not under the publisher’s control, corrections and retractions may be missing, with potentially serious implications such as dosage or chemical formula errors. 

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### **What to Expect in the Future?**

These speakers agreed that content cannot be repurposed if data sources are not shared. Beyond policy changes, the solutions will result from industry standards,

public data repositories, data descriptors, formal credits, accession codes, and community support.

Stack pointed again to the Institute of Medicine and its January 2015 recommenda-

tions: “Biomedical journals have an important role to play in advancing the creation of an environment in which sharing of clinical trial data is a standard and an expectation for publication in the scientific literature.” 


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about; Horner emphasized this early interaction as a key first step. Naturally, some trainees rise to the top, and JAACAP Connect provides opportunities for these authors to do more, including mentoring experiences for guest editors and editorial board positions, which further helps to build the pipeline.

No two trainees have the same level of experience or expertise when they start, however, and Horner closed the session with a clear piece of advice: find out what your trainees need help with and use this to improve your program. It will pay off in the long run, as these three successful programs have all demonstrated that.

### **Program Links and Contact Information**

- **Neurology Resident & Fellow Section:**  
[www.neurology.org/site/feature/index.xhtml](http://www.neurology.org/site/feature/index.xhtml)  
Contact: [kpieper@neurology.org](mailto:kpieper@neurology.org)
- **JAACAP Connect:** [www.jaacap.com/content/connect](http://www.jaacap.com/content/connect)  
Contact: [connect@jaacap.org](mailto:connect@jaacap.org) 



## The Five-Step Authorship Framework Developed by the Medical Publishing Insights and Practices (MPIP) Initiative

*Moderator:*

**Patricia K Baskin**

Executive Editor

Neurology Journals

Minneapolis, Minnesota

*Speaker:*

**LaVerne Mooney**

Director, Publications Management/

Team Leader, External Medical

Communications

Pfizer, Inc

New York, New York

*Reporter:*

**Srećko Gajović**

Editor-in-Chief, *Croatian Medical Journal*

Professor, University of Zagreb School

of Medicine

Zagreb, Croatia

One of the key challenges in publishing industry-sponsored research is improving transparency and trust. To address the best practices related to the dissemination of results from industry-sponsored trials and to raise the standards in medical publishing, the Medical Publishing Insights and Practices (MPIP) Initiative ([www.mpip-initiative.org](http://www.mpip-initiative.org)) was founded in 2008. MPIP was briefly introduced by the moderator of the session, Patricia Baskin. Current industry members include Amgen, AstraZeneca, Biogen, Bristol-Myers Squibb, GlaxoSmithKline, Janssen Research & Development LLC, Merck, Pfizer, and Takeda. More than 75 senior editors of worldwide biomedical journals have participated in MPIP activities.

The session speaker was LaVerne Mooney, representative of Pfizer in the MPIP, and one of the coauthors of the recent publication in *BMC Medicine* addressing the five-step authorship framework.<sup>1</sup> She referred to “Ten Recommendations for Closing the Credibility Gap in Reporting Industry-Sponsored Clinical Research”, created by

the initiative.<sup>2</sup> One recommendation was to improve disclosure of authorship contributions and writing assistance and continue education on best publication practices to end ghostwriting and guest authorship.


To address this recommendation, MPIP identified the authorship challenges arising from the current guidelines and converted them into seven authorship case scenarios. These served as the basis for a survey distributed to journal editors, clinical investigators, publication professionals and medical writers. The final sample consisted of 498 respondents fairly representing the four groups. The major questions determining the case scenarios were

1. Does patient recruitment count as a substantial contribution?
2. Can an author be added after drafting has begun?
3. Can an author remove his or her name from recognition?
4. How should contributions from a medical writer be recognized?
5. How should external contracted work be evaluated for authorship?
6. What can be done when an author does not provide final approval?
7. What happens when a contributor leaves before trial completion?

As a result of the survey analysis, a five-step authorship framework was created. The first four steps should be done before inviting authors and before manuscript writing begins, and the final step once the writing of the manuscript begins. The five steps are

1. Establish an authorship working group of core trial contributors as close as possible to trial start.
2. Determine, in the context of the International Committee of Medical Journal Editors (ICMJE) authorship criteria and the specific trial, which authorship contributions are “substantial”.

3. Implement a process to track and document contributions.
4. Assess documented contributions to invite authors (e.g., protocol development, enrollment, meetings, author–editor management, etc).
5. Ensure that invited authors meet remaining ICMJE authorship criteria.

Each of the MPIP Steering Committee member companies is in the process of implementing these best-practice recommendations. Further collaborations with additional organizations are developed to drive outreach and education. MPIP continues to build awareness of industry tools for authorship and gather additional feedback on the framework. The subsequent discussions concerned the real-world application of the MPIP process to manuscripts from pharmaceutical trials. The framework is used to aid in the consistent application and interpretation of authorship criteria (e.g., ICMJE). Also, the framework is flexible and can be applied to other authorship criteria used by journals that have not adopted the ICMJE guidelines. In conclusion, everybody agreed that in all cases, the best strategy related to authorship issues is to define everything in advance. 

### References

1. Marušić A, Hren D, Mansi B, Lineberry N, Bhattacharya A, Garrity M, Clark J, Gesell T, Glasser S, Gonzalez J, Hustad C, Lannon MM, Mooney LA, Peña T. Five-step authorship framework to improve transparency in disclosing contributors to industry-sponsored clinical publications. *BMC Med*. 2014;12(1):197.
2. Mansi BA, Clark J, David FS, Gesell TM, Glasser S, Gonzalez J, Haller DG, Laine C, Miller CL, Mooney LA, Zecevic M. Ten recommendations for closing the credibility gap in reporting industry-sponsored clinical research: a joint journal and pharmaceutical industry perspective. *Mayo Clin Proc*. 2012;87(5):424–429.

## Recognition for Reviewers

*Moderator:*

**Charles Trowbridge**

Assistant Director, Peer Review  
Operations  
American Chemical Society  
Washington, DC

*Speakers:*

**Josh Dahl**

Head of Publishing and Associations  
Thomson Reuters  
Charlottesville, Virginia

**Jody Plank**

Product Manager, Presubmission Peer  
Review  
Rubriq Research Square  
Durham, North Carolina

**Andrew Preston**

Cofounder  
Publons  
Wellington, New Zealand

*Reporter:*

**Christina Nelson**

Peer Review Manager  
*The Journal of Bone and Joint Surgery, Inc*  
Needham, Massachusetts

Although comprising a core element of scholarly publishing, reviewers are often viewed as the unsung, invisible heroes of the realm. This session presented a number of approaches that companies are using to provide greater recognition to these individuals. In a landscape that is increasingly trending toward transparency in all aspects of publishing, the speakers also touched on the complications that this ideal introduces for maintaining the integrity of the review process.

The act of inviting an individual to review a manuscript is in itself a form of


recognition. As Josh Dahl explained, this is the first step in acknowledging that a person is an expert in the field. To that end, it is necessary to invite the most appropriate reviewers for a given manuscript. Dahl shared how ScholarOne is assisting journals with the problem of finding appropriate reviewers through the use of their online Reviewer Locator tool. This system facilitates the reviewer-invitation process by using a honed algorithm to find and suggest the best reviewers for a given manuscript. Since its introduction in February 2014, the invitation-acceptance rate was 36%, compared with 38% when reviewers were invited by traditional means. The tool also allows journals to discover new reviewers in order to augment their reviewer database.

The value of these submitted reviews is then emphasized by Rubriq's mission to provide an independent peer review service for its users. Jody Plank described Rubriq's website as a way to identify a paper's strengths and weaknesses before submission, thereby enabling an author to create a scientifically sound "first impression" to a journal upon submission. Rubriq provides a double-blind peer review service with a standard of three reviewers per paper. These reviewers are paid \$100 per review, with a stipulated turnaround time of four to five days. Research on their reviewer pool has shown that these individuals value the non-financial aspects of this process, such as the learning experience and opportunity to help authors. However, although Rubriq offers alternative incentives such as a donation to charity or a submission credit, the majority of reviewers still opt for the financial honorarium.

Rubriq also provides its reviewers recognition via certificates attesting to the

completion of a review. This has been an inexpensive and popular method of appreciation, particularly among international reviewers. Additionally, a less tangible benefit that Rubriq offers their reviewers is an improved user experience by way of its custom scorecard system. This straightforward and streamlined form for inputting reviews has resulted in chiefly positive feedback from their reviewers.

Andrew Preston concluded the session with an explanation of how Publons works to provide outward credit for peer review while maintaining the integrity and confidentiality of the process. Publons aims to speed the scientific process by collecting reviews and turning them into measurable research output. Reviewers can take public credit for their specific reviews as well as track their output and performance over time. These data can then be exported as a measure of career progress. In tandem, Publons also recognizes their best reviewers on a quarterly basis by providing non-financial incentives that have been donated by publishers (e.g., a credit toward a publication fee). Efforts are made to honor embargo policies and individual journals' wishes to remain anonymous. Journal participation is encouraged but not required; the system is user driven, and postpublication, reviewers are able to list the titles of the papers that they reviewed without author permission.

All three presenters described how their companies and products are helping to recognize and reward reviewers in formats that extend beyond the standard practice of a published list of names in a journal each year. Although peer review is constantly evolving, their continued progress represents the hope of advancing toward a publishing future when integrity is rewarded while confidentiality is maintained. 

# Understanding Impact: The Journal Impact Factor and Beyond

*Moderator:*

**Tracey DePellegrin**

Executive Editor

Genetics Society of America

Bethesda, Maryland

*Speakers:*

**Joelle Masciulli**

Head of Content Strategy

Thomson Reuters

Philadelphia, Pennsylvania

**Betsy Donohue**

Vice President, Publisher

Business Development

Digital Science

West Chester, Pennsylvania

**Adam Etkin**

Founder and Managing Director

PRE Peer Review Evaluation

Needham, Massachusetts

*Reporter:*

**Jill Jackson**

Editorial Administrator

*Annals of Internal Medicine*

American College of Physicians

Philadelphia, Pennsylvania


The release of impact factors each year helps journals assess their ranking and influence in the scholarly arena. Journals should examine their impact beyond citations. This session provided an overview of methods used to track the impact of journal articles, including but not limited to the impact factor, which reflects the citations to an article.

Joelle Masciulli, Head of Content Strategy at Thomson Reuters explained how publish-

ers use Web of Science (WOS) beyond the calculation of the impact factor. Publishers use WOS and Incites to understand their landscape, plan accordingly, identify experts, and manage information. Publishers also use WOS to increase visibility and monitor their competitors. She emphasized the rigorous building of the WOS database that includes page-to-page reading of journals, an editorial board, and a commitment to consistency and awareness. The Journal Citation Reports published annually by Thomson Reuters promises increased visibility, transparency, and easy access in the next release.

Betsy Donohue, Vice President of Digital Science, spoke about the changing landscape in research and how we can no longer measure by the impact factor alone. She noted that there are 44,000 citations of scholarly articles per day. Therefore, it is important for publishers to look at the outreach of an article past traditional citations. Donohue believes the impact factor, which reflects the citations to an article, can be a “lagging indicator” and may not tell the whole story. Altmetric is a data science company that tracks attention to an article. Altmetrics show the societal impact of scholarly publications through news sites, blogs, social media, and Wikipedia and can be used to complement citations. Altmetrics can help publishers understand and report the attention an article receives. They can also help identify hot topics, demonstrate innovations, and measure the success of published articles. Funders and institutions can see the broader impact of their work. Specific examples of how publishers are using Altmetric data are available at [www.altmetric.com/blog/publishers-making-altmetrics-work-for-you/](http://www.altmetric.com/blog/publishers-making-altmetrics-work-for-you/).

Adam Etkin, Founder and Managing Director of PRE, discussed how impact is more than just metrics, particularly for people in different roles. Authors, readers, and librarians all have various needs and require diverse tools when assessing impact. He asked, “How and why do we evaluate impact and metrics?” He used the well-known example of quantity versus quality. A paper that receives many citations or media attention is not necessarily a good paper. It may be getting attention for negative reasons. PRE, Peer Review Evaluation, is an independent third-party verification of the peer review process. Their flagship service, PRE-val, confirms that a paper has gone through review in the manner that the journal said it would. The PRE badge also displays additional data related to the peer review process, such as the roles of those involved in the review process, rounds of review, plagiarism screening, and more. The journal is given flexibility as to the level of transparency. Some journals elect to display the reviewer name and comments, but this is entirely up to the publisher. The PRE services are unique in that they provide information quickly and give the reader knowledge about the prepublication process. Etkin stated, “when talking about impact, take everything into consideration, including peer review, and not just numbers.”

Each speaker highlighted important aspects in evaluating the influence of a scholarly publication. The impact of a journal article is no longer limited to scientific citations but now includes many other factors, including social media, news outlets, and the peer review process. 

## The Authorship of Deceased Scientists and Their Posthumous Responsibilities

**Jaime A Teixeira da Silva and  
Judit Dobránszki**

"You cannot escape the responsibility of tomorrow by evading it today."

Abraham Lincoln

### Abstract

There is one thing that we can all be certain of, whether scientists or not, and that is death. The legacy of a deceased scientist thus lies not only with his or her work but with his or her name. Even after death, scientists' ideas and efforts are continuously promulgated and used by others. In death, the scientists and their ideas are remembered, and the legacy of their names and work continues. How to deal with the death of an author is a complex topic, and not one that many wish to address publicly, most likely because the image of death plays into the realm of socially- and religiously-associated emotions. So it is understandable if this opinion piece evokes some emotional responses. However, in recent years, how to treat authorship by deceased scientists has become a minor recurrent topic in science publishing, and is thus a topic that merits greater discussion—despite its uncomfortable nature—simply because there are matters related to death, and the boundary between death and the scientist's living work, that need to be addressed. This opinion paper aims to address two themes related to deceased scientists: 1) who will assume the authorship roles and responsibilities after the death of an author (i.e., posthumously); and 2) how should errors in the literature be corrected and what responsibilities coauthors or affiliations associated with deceased scientists should assume.

**Key Words:** authorship; corresponding author; death; posthumous publications; postmortem publications; responsibilities

### Authorship Contribution and Responsibility: How Are Deceased Authors Addressed?

The authorship guidelines of the International Committee of Medical Journal Editors (ICMJE), which are widely used in science publishing, including by mainstream science, technology, and medicine (STM) publishers, include four clauses:<sup>1</sup> "1) Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND 2) Drafting the work or revising it critically for important intellectual content; AND 3) Final approval of the version to be published; AND 4) Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved."

The authorship guidelines of seven STM publishers, namely, Elsevier Science ([www.elsevier.com](http://www.elsevier.com)), John Wiley and Sons ([eu.wiley.com/WileyCDA/](http://eu.wiley.com/WileyCDA/)), Nature Publishing Group ([www.nature.com](http://www.nature.com)), Oxford University Press ([global.oup.com](http://global.oup.com)), Springer-Nature ([www.springer.com](http://www.springer.com)), Taylor and Francis Group ([taylorandfrancisgroup.com](http://taylorandfrancisgroup.com)), and Walter De Gruyter ([www.degruyter.com](http://www.degruyter.com)), many of which follow the ICMJE authorship definitions, or close derivatives of it, do not specifically address the issue of deceased authors, even though they clearly state that all coauthors must have seen and approved the final, submitted version of the paper and have to be responsible for the work.<sup>2</sup>

It is abundantly evident, in a very practical sense, that a deceased scientist cannot fulfill all of the ICMJE requirements, including approval of the final version, and responsibilities as required by the publishers' guidelines. And it is for this reason that we have written this opinion piece, to provide a wider perspective and allow for greater discussion on this topic. This paper in fact

contends that the importance of recognizing deceased scientists as authors has not been carefully considered, despite the long history of scientific publishing, even by leading STM publishers. Critics who may claim that this assessment is not necessary and that such problems can be resolved reasonably easily by an editor-in-chief or editorial board would do well to examine the case studies highlighted here and to better understand that clear and defined guidelines are required so that postmortem cases related to a published paper or scientific publication can be resolved as smoothly as possible.

### The Argument for Deceased Scientists as Authors

Supporters of this argument say that a deceased scientist should be a valid author listed on a paper submitted or published posthumously. At least 78% of respondents to an online survey conducted at Retraction Watch<sup>3</sup> indicated that a researcher who was involved in a research project but died before the manuscript was drafted should be a valid author. Proponents of this position argue that a scientist who has made a valid contribution to the intellectual base or structure of the paper—namely, ideas on the experimental design, feedback on the experiment, having completed parts of the experiment itself, or even having contributed to earlier versions of a paper—before dying, would be sufficient to merit authorship. Because writing a paper and seeing it published can take place years after the actual experiment was completed and because of the lengthy delays sometimes caused by an imperfect traditional peer review process,<sup>4</sup> death is not a reason to exclude a scientist as a coauthor, even one who has only partially fulfilled responsibilities 1 and 2 of the ICMJE clauses, provided that all other coauthors have collectively approved authorship. Certainly, this seems to be the case of Dipak Das,<sup>5</sup> Thomas M Behr,<sup>6</sup> and Hartmug Beug.<sup>7</sup>



*continued*

### **The Counterargument for Acknowledgment of Deceased Scientists**

The counterargument from those who favor deceased scientists as acknowledged entities rather than as valid coauthors of a scientific paper is based on the fact that they do not satisfy criteria 3 and 4 of the ICMJE authorship clauses. Thus, technically, they cannot automatically be considered authors. Members of this camp would also argue that a deceased scientist cannot review, and thus approve, what has been submitted (criterion 3 of the ICMJE clauses for authorship) or eventually published, which is a requirement that frequently accompanies submission to a journal by the STM publishers listed earlier and is found in clauses related to ethics declarations and copyright forms. They also cannot proofread the final published paper, respond to critics of the paper or to queries related to it in postpublication peer review, or assume the responsibility in clause 4 of the ICMJE clauses. Defenders of this argument may assert that data or other aspects of the paper could be manipulated in the absence of the screening by the deceased scientist. However, in this case, surely the living authors would be fully responsible for the submitted manuscript's content, including the responsibility associated with manipulated data or other aspects of academic foul play. There is also the argument that the names of deceased scientists could be fraudulently manipulated as a "fame" factor in false authorship (i.e., including them as guest authors) or even on editorial boards to feign legitimacy.

### **Author Position**

Assuming that a deceased author is considered a valid author, the issue of author position within the group can be tricky. This is because the "weight" of the contribution of each author is usually not easy—and may be impossible—to quantify. Thus, in multiauthored papers, does one insert a deceased author in the final position (traditionally reserved for the senior scientist or principal investigator), the first or sec-

ond position, or the penultimate position? Ultimately, it is the authors who decide on the constitution of a team, and thus, in the extraordinary case of a deceased author, we recommend that this decision be made by the group of authors, who best know that individual and his or her contribution. Such a decision should not be made by a journal or publisher distant from the reality of that individual's contribution to the research or to the paper.

### **Attempts at Resolution**

Because all scientists alive today will one day no longer be with us, the issue needs to be clearly resolved,<sup>8</sup> as assuming responsibility posthumously has not yet even been widely discussed, much less agreed upon by the community.

Several attempts have been made to resolve the topic. The *Journal of American Chemical Society* states:<sup>9</sup> "Deceased persons who meet the criteria for inclusion as coauthors should be so included, with an Author Information note indicating the date of death." The same *Journal of American Chemical Society* document does not, however, indicate that it follows the ICMJE criteria for authorship. Similar solutions were made by the Cochrane Community:<sup>10</sup> "As a general guideline, where an author made a substantial contribution to a protocol or review (sufficient to warrant authorship) but died before publication, and the coauthors feel it is appropriate to include the deceased author on the by-line, then editorial teams could permit inclusion of the author on the by-line until the review is updated." The *British Medical Journals* state:<sup>11</sup> "Deceased persons deemed appropriate as authors should be included with a death dagger (†) next to the author's name, and a footnote stating that the author is deceased and giving the date of their death". The Council of Science Editors declares clearly:<sup>12</sup> "For cases in which a coauthor dies or is incapacitated during the writing, submission, or peer-review process, coauthors should obtain disclosure and copyright documentation from a familial or legal proxy". On

the Online Ethics Center (OEC) website is a proposal for resolving the case of authorship of a deceased scientist who participated in the conceptualization and planning of the research work and was already deceased by the time the paper had been submitted but whose contribution was deemed to be more than adequate to merit authorship.<sup>13</sup> This proposal appears to override the four requirements of the current ICMJE definitions of authorship, although it is unclear (i.e., it is difficult to determine) how widely the Online Ethics Center's guidelines are used. Finally, the Committee on Publication Ethics (COPE) stated:<sup>14</sup> "The case of deceased or incapacitated authors is more straightforward and the Forum would suggest a statement from the corresponding author attesting that to the best of his/her knowledge, the deceased/incapacitated individual met the definition of authorship, and all the other authors agree. In such cases, authorship is given and so the individual remains as an author."


The two most logical ways of resolving authorship of deceased scientists are by addressing the rules and conditions for inclusion of a deceased scientist in the instructions for authors (IFAs) and by indicating the death of the scientist in the paper's footnote, following notarized consent. At first, the publisher and its journal(s) have the responsibility of adding a clause to the IFAs that specifically addresses the authorship of scientists whose death occurs before, during, or after the submission of a manuscript. Moreover, within the broader context of postpublication peer review, the IFAs should also discuss who assumes the responsibilities of the corresponding author if the corresponding author is deceased or dies at some point between the experimental phase and article submission, revision, or publication. The second way to address this pragmatically is by including a footnote, byline, or section separate to or part of the acknowledgments that addresses the circumstance surrounding the death of a coauthor. Such a background would also relieve the concern about who will take over the responsibilities

*continued*

associated with the published paper that includes a deceased scientist. For these two potential solutions to work there must be 1) coordinated commitment by the remaining authors to deal responsibly with any post-mortem queries related to the manuscript following acceptance or publication and 2) a platform provided by the publisher within the manuscript and supporting information that describes this situation. The intersection between these two requirements would be a signed document by the remaining authors providing a written guarantee of their remaining responsibilities. To our knowledge, no such document exists yet.

A sector of the scientific community may consider the cause of death to be irrelevant or beyond the scope of ethical consideration associated with authorship-related responsibilities. Thus, the possibility of not including details about the cause of death should exist. In all cases, when a paper is submitted that already includes a deceased scientist as an author, the cover letter or note to the editor or journal upon submission should note the death and preferably provide an explanation as to why that individual is included as a coauthor. If a coauthor should die during peer review or the publication process, then that individual would have already been a valid author at submission, in theory, provided that relevant declarations and guarantees were given to the journal. Thus, the only outstanding decision that needs to be made in the latter case is how to address postmortem responsibilities for the content (intellectual and factual) of the published paper. In such a case, we propose that the deceased author's institution automatically assume all responsibilities regarding public queries or concerns related to that paper. In the absence of a response by the institution, the publisher should have the right to then correct the literature as an erratum, expression of concern, or retraction. Finally, the inclusion of deceased researchers as editors on editorial boards, such as the case of Roger Brumback,<sup>15</sup> also merits further discussion.

## Conclusion

As scientists and as humans, we will one day all encounter death. In science publishing, this topic has not been clearly addressed, possibly for the most obvious reason: sensitivity to the topic. Yet there are cases in which the fact that an author is deceased and, therefore, cannot be accountable for what has been published, is problematic, leaving the problems in a state of impasse. To avoid further cases in the future, it is worth expanding the debate to address the topic, taking into account both sides of the discussion, each with valid and valuable perspectives. The legacy of scientists lies with their names and is one of the greatest motivations behind their efforts to publish. Thus, the use of a name postmortem is sensitive and complicated, as is the responsibility of an individual for errors in the literature postmortem. Guidelines about how editors, journals, and publishers deal with deceased scientists need to be drafted, particularly for the seven STM publishers who mostly claim to follow the ICMJE guidelines for authorship. 

## References

1. International Committee of Medical Journal Editors (ICMJE). Defining the role of authors and contributors. [www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html](http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html) [accessed on 21 January 2016].
2. Teixeira da Silva JA, Dobránszki J. How authorship is defined by multiple publishing organizations and publishers. *Accountability in Research: Policies and Quality Assurance*. 2016;23(2):97–122.
3. Retraction Watch. Ask Retraction Watch: How should deceased colleagues be credited in papers? [retractionwatch.com/2013/09/24/ask-retraction-watch-how-should-deceased-colleagues-be-credited-in-papers/](http://retractionwatch.com/2013/09/24/ask-retraction-watch-how-should-deceased-colleagues-be-credited-in-papers/) [accessed on 21 January 2016].
4. Teixeira da Silva JA, Dobránszki J. Problems with traditional science publishing and finding a wider niche for post-publication peer review. *Accountability in Research: Policies and Quality Assurance*. 2015;22(1):22–40.
5. Retraction Watch. Late resveratrol researcher Dipak Das manages to revise and publish paper from the grave. [retractionwatch.com/2014/04/03/late-resveratrol-researcher-dipak-das-manages-to-revise-and-publish-paper-from-the-grave/](http://retractionwatch.com/2014/04/03/late-resveratrol-researcher-dipak-das-manages-to-revise-and-publish-paper-from-the-grave/) and [retractionwatch.com/category/by-author/dipak-das/](http://retractionwatch.com/category/by-author/dipak-das/) [accessed on 21 January 2016].
6. Retraction Watch. Study by deceased award-winning cancer researcher retracted because some patients were “invented”. [retractionwatch.com/2015/04/09/study-by-deceased-award-winning-cancer-researcher-retracted-because-some-patients-were-invented/#more-27151](http://retractionwatch.com/2015/04/09/study-by-deceased-award-winning-cancer-researcher-retracted-because-some-patients-were-invented/#more-27151) [accessed on 21 January 2016].
7. PubPeer. [pubpeer.com/publications/C7F170516DEF4D86E240472DAF1DCD](http://pubpeer.com/publications/C7F170516DEF4D86E240472DAF1DCD) (comments section). [accessed on 21 January 2016].
8. Nijman V. Authorship: Call for clear policy on deceased authors. *Nature*. 2012;488:281.
9. *Journal of American Chemical Society (JACS)*. Notice to authors of JACS manuscripts. [pubs.acs.org/paragonplus/submission/jacsat/jacsat\\_authguide.pdf](http://pubs.acs.org/paragonplus/submission/jacsat/jacsat_authguide.pdf) [accessed on 21 January 2016].
10. Cochrane Community. Authorship and contributorship. Deceased authors. [community.cochrane.org/editorial-and-publishing-policy-resource/authorship-and-contributorship#deceased-author](http://community.cochrane.org/editorial-and-publishing-policy-resource/authorship-and-contributorship#deceased-author) [accessed on 21 January 2016].
11. *British Medical Journal (BMJ)*. Authorship. Deceased authors. [journals.bmj.com/site/authors/editorial-policies.xhtml#authorship](http://journals.bmj.com/site/authors/editorial-policies.xhtml#authorship) [accessed on 21 January 2016].
12. Council of Science Editors. White Paper on Publication Ethics. 2.2 Authorship and authorship responsibilities. [www.councilscienceeditors.org/resource-library/editorial-policies/white-paper-on-publication-ethics/2-2-authorship-and-authorship-responsibilities/](http://www.councilscienceeditors.org/resource-library/editorial-policies/white-paper-on-publication-ethics/2-2-authorship-and-authorship-responsibilities/) [accessed on 21 January 2016].
13. Online Ethics Center (OEC). “The Deceased Author” Online Ethics Center for Engineering. National Academy of Engineering. [www.online-ethics.org/Resources/Cases/deceased.aspx](http://www.online-ethics.org/Resources/Cases/deceased.aspx) [accessed on 21 January 2016].
14. Committee on Publication Ethics (COPE). Coauthor fails to respond to request to confirm coauthorship. [publicationethics.org/case/coauthor-fails-respond-request-confirm-coauthorship](http://publicationethics.org/case/coauthor-fails-respond-request-confirm-coauthorship) [accessed on 21 January 2016].
15. Beall J. Predatory journal lists murdered doctor as its editor-in-chief. [scholarlyoa.com/2015/07/07/predatory-journal-lists-murdered-doctor-as-its-editor-in-chief/](http://scholarlyoa.com/2015/07/07/predatory-journal-lists-murdered-doctor-as-its-editor-in-chief/) [accessed on 21 January 2016].

# Using Your Own Words: Cultural Contexts of Unintentional Plagiarism

**Michelle Yeoman**

In one particularly humorous *Calvin and Hobbes* comic strip, Calvin is confronted with the following instruction: “Explain Newton’s First Law of Motion in your own words.” At first dismayed, Calvin brightens and answers with a string of made-up words: “Yakka foobmog. Grug pubbawup zink wattoom gazork. Chumble spuzz.” Beaming widely, he says, “I love loopholes.”

Of course, the hilarity of this comic is that Calvin followed his teacher’s instructions literally—he invented his own words. If one considers that language consists of shared words with contextual meaning, instructing someone to use his or her own words to communicate seems nonsensical. We must use others’ words; otherwise, we’d be unable to communicate. It’s how we piece these words together that makes our writing creative and original.

But piecing together words creatively and originally can be daunting for non-native English speakers for whom English is a second (or third or fourth) language, especially those whose cultures do not emphasize authorship and intellectual property. Even an author who is notified that he or she has plagiarized may have trouble understanding the rationale behind the accusation. How, then, to explain a fairly complex topic like plagiarism to authors who have different cultural backgrounds?

One strategy is to become more adept in the author’s cultural context. To do that, we’ll begin by discussing how communication practices differ among cultures. Next, editors and educators share their best practices for communicating effectively with authors.

## Communication Within Cultures

In the late 1970s, anthropologist Edward T Hall introduced the terms *high-context* and *low-context* cultures to describe intrinsic differences in cultural communication.<sup>1</sup> Although that framework is now considered archaic and simplistic,<sup>2</sup> it’s still a helpful paradigm for understanding communication among different cultures.

Low-context cultures value communication that is direct, explicit, and to the point. They also tend to be individualist—a cultural model developed by anthropologist Geert Hofstede.<sup>3</sup> Individualist cultures place the needs and desires of the individual above those of the group; they also tend to be somewhat consumerist in emphasizing tasks and products more than relationships. Originality, creativity, and conformity to rules are desirable traits in an individualist culture, as is punctuality. Countries considered to have low-context cultures include Germany, Switzerland, and the United States.<sup>4</sup>

High-context cultures tend to rely on shared social contexts; communication may be indirect, depending on situational contexts and nonverbal cues to convey information.<sup>1</sup> High-context cultures also tend to be collectivist, placing group harmony over individual needs.<sup>3</sup> Teamwork, relationships, and family values are emphasized; concepts of time tend to be nonlinear; and rules are not strictly adhered to.<sup>1</sup> Group harmony and relationships are more important than tasks and products.<sup>3</sup> Countries considered to have high-context cultures include Japan, China, and Greece.<sup>4</sup>

High-context and low-context cultures tend to differ in their web design preferences,<sup>2</sup> which can affect readers’ comprehension of online instructions for authors. Web pages in low-context cultures tend to be linear and have large amounts of text; readers access information easily by scrolling down a page. In high-context cultures, web pages feature animations and layers; readers must expend effort to find information by clicking on tabs and layers.

How might such cultural contexts affect perceptions of author attribution? High-context cultures, with their emphasis on teamwork and group harmony, may be unfamiliar with attribution standards that identify individual authors. Low-context cultures, with their emphasis on individuals and products, may not understand why some cultures treat intellectual property peripherally. According to Barbara Gastel, professor at Texas A&M

University, “in some collectivist cultures, for example in Southeast Asia, maintaining group harmony tends to be more important than adhering strictly to criteria for authorship credit. Indeed, the U.S. attention to issues of authorship may be viewed in part as reflecting an individualistic culture emphasizing personal achievement and adherence to rules.”<sup>5</sup>

## Top 10 Tips for Editors

So what’s the ethical, culturally sensitive editor to do when confronted with plagiarism? Attribution norms may differ among communities, but editors should maintain ethical publication standards that are appropriate for their journals (refer to the Committee on Publication Ethics [COPE] for guidelines<sup>6</sup>). Following are some editors’ and educators’ best practices for communicating effectively with authors.

### 1. Keep it simple.

The topic of plagiarism is complicated, but instructions for authors should not be. Use short, clear sentences, and make your expectations explicit, such as whether direct quotations are allowed. Consider providing author instructions in multiple languages.

### 2. Say it with pictures.

Donald Samulack, president of Cactus Communications, recently gave a keynote address on publication ethics at the Institute of Electrical and Electronics Engineers conference in Scotland. He recommends using a variety of media—including infographics, videos, and slide shows—to educate authors on ethical publication.<sup>7</sup>

### 3. Design with layers.

Another consideration is web design. Because high-context cultures prefer web pages with interactivity and layers,<sup>5</sup> pages with author instructions that are linear and text heavy may not be effective for a diverse audience. Consider that viewer engagement decreases the likelihood that viewers will breeze past long lines of text.

## *continued*

### **4. Move your guidelines.**

Known by many as “the plagiarism lady”, Rebecca Moore Howard is a professor of writing and rhetoric at Syracuse University. She suggests placing guidelines on ethical publication standards higher up in instructions for authors. “Author guidelines need to highlight the questions of authorship and intellectual property,” she stated. If ethical guidelines are higher up in the instructions, authors are less likely to miss vital information.

### **5. Enlist your reviewers.**

If inadequate paraphrasing seems to be a trend, consider selecting peer reviewers who are experts in the field’s literature, suggests Moore Howard. Such peer reviewers can identify inadequate paraphrasing that might be missed by plagiarism-detecting software programs, such as Turnitin and iThenticate, which typically detect verbatim wording.

### **6. Embrace the complex.**

Plagiarism and intellectual property are complicated ethical topics, and attempts to simplify them may lead to confusion and distrust. Instead, validate authors’ frustrations while enforcing established publication standards. “I think it’s helpful to say this is the way attribution is done here and now,” says Susan Blum, professor in the Department of Anthropology at the University of Notre Dame. “[Affirming] that there could be other approaches might help people hear it better.”

### **7. Lay off the blame.**

Blum recommends that editors and peer reviewers use an educative tone when communicating ethical standards, rather than a tone that’s judgmental or moralistic.

### **8. Make no assumptions.**

Don’t assume that native English-language scholars fully understand plagiarism, warns Howard Browman, a principal research sci-

entist at the Norwegian Institute of Marine Research. Browman has received numerous articles from authors in the United States and the United Kingdom who breach publication ethics by self-plagiarizing, duplicating publications, and failing to cite government and institution sources.

### **9. Allow their own words.**

William Stevenson, an editor and writer for the biomedical editing service Enago, suggests allowing authors to rewrite troublesome passages in their native language: “Sometimes a good strategy is to tell the authors to write the affected text in their own language and then get it translated into English. The editors can then edit the translated text.”<sup>8</sup>

### **10. Ask for questions.**

According to Gastel, authors from high-context cultures may be reluctant to query editors even if the author instructions are unclear.<sup>5</sup> Questioning an editor may be considered a sign of disrespect. She suggests alerting authors that questions are not disrespectful but instead ensure integrity of a publication.


Editors can also direct authors to these informative online resources:

- AuthorAID is a nonprofit organization devoted to helping researchers in developing countries publish their work in English-language journals. Authors can find a wealth of educational materials in AuthorAID’s online resource library: [www.authoraid.info/en/resources/?topic=Publication+ethics+and+etiquette](http://www.authoraid.info/en/resources/?topic=Publication+ethics+and+etiquette).
- An editing and publication support services company, Editage posts educational articles on scientific writing and publication ethics for authors on its website: [www.editage.com/insights/plagiarism#](http://www.editage.com/insights/plagiarism#).
- Enago, an English editing and proofreading service for authors for whom English is a second language, publishes informa-

tive articles related to plagiarism for both authors and editors: [www.enago.com/blog/?s=plagiarism](http://www.enago.com/blog/?s=plagiarism).

- Although it is targeted mainly at American undergraduate students, this plagiarism tutorial from the Indiana University Bloomington School of Education can benefit researchers as well: [www.indiana.edu/~istd/test.html](http://www.indiana.edu/~istd/test.html).

## **Acknowledgments**

Sincere thanks to Susan Bloom and Rebecca Moore Howard for phone interviews, Donald Samulack and Howard Browman for email communications, Barbara Gastel for sharing her unpublished work and reviewing a draft of this article, and the wonderful CSE listserv community. 

## **References**

1. Hall ET. *Beyond culture*. Garden City (NY): Anchor Press; 1976.
2. Wurtz E. Intercultural communication on web sites: a cross-cultural analysis of web sites from high-context cultures and low-context cultures. *J Comput-Mediat Comm*. 2005;11(1):274–299.
3. Hofstede G. Dimensionalizing culture: The Hofstede model in context. *ORPC*. 2011;2(1).
4. Samovar L, Porter R, McDaniel E. *Communication between cultures*. Belmont (CA): Wadsworth/Cengage Learning; 2010.
5. Gastel B. Cross-cultural issues in the ethics of biomedical publication. Unpublished manuscript; 1997.
6. Committee on Publication Ethics. Code of conduct and best practice guidelines for journal editors. [publicationethics.org/files/Code%20of%20Conduct\\_2.pdf](http://publicationethics.org/files/Code%20of%20Conduct_2.pdf) [accessed on 14 September 2015].
7. Samulack D. Tips and strategies—observations from the field. Presented at: CSE annual meeting; 2–5 May 2014; San Antonio, Texas.
8. Stevenson W. Role of an editor in combating plagiarism by ESL authors [blog]. Enago blog. 1 December 2011. [www.enago.com/blog/role-of-an-editor-in-combating-plagiarism-by-esl-authors/](http://www.enago.com/blog/role-of-an-editor-in-combating-plagiarism-by-esl-authors/) [accessed on 15 September 2015].



# AuthorAID and Editors: Collaborating to Assist Authors in Developing Countries

## Barbara Gastel

A psychiatry researcher in Somalia wishes to publish his findings but is uncertain how to proceed. Through the AuthorAID website, he learns to write and publish journal articles. Within two years, he has multiple papers accepted, including some in major journals in his field.

A demographer in Kenya wants to improve her writing skills. She obtains an AuthorAID mentor, who provides guidance in accessing literature, analyzing data, interpreting results, crafting papers, and responding to reviewers' comments. The result: journal publications.

A physicist attending an AuthorAID workshop in Nepal gains insight that empowers him to confer with a journal editor about a requested revision. The physicist goes on to lead AuthorAID workshops himself and to receive an AuthorAID travel grant to speak at an international conference.

An Ethiopian researcher has two papers accepted, and their acceptance is contingent on editorial revision. He seeks assistance from AuthorAID, which helps him to find suitable science editors among its pool of volunteers. Both papers are soon published.

These true vignettes illustrate some types of assistance that are available from AuthorAID ([www.authoraid.info](http://www.authoraid.info)), a project mainly to help researchers in developing countries to write about and publish their work. Editors have played integral roles in developing and implementing this multifaceted project. And as AuthorAID approaches its second decade, opportunities for editors to serve it and be served by it continue to grow.

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BARBARA GASTEL, a professor at Texas A&M University and an INASP associate, has been a major participant in AuthorAID since its inception.

## Editorial Origins

The AuthorAID initiative originated with Phyllis Freeman and Anthony Robbins, editors of the *Journal of Public Health Policy*. In a 2006 editorial,<sup>1</sup> Freeman and Robbins wrote that even before their editorship, they had "conceived AuthorAID, a global program to provide . . . editing help to authors from developing countries". Freeman and Robbins noted that developing-country researchers faced major challenges in writing scientific papers publishable in the international literature. They observed that such researchers lacked access to author's editors to help them to refine their writing before submission. And they recognized that the Internet, increasingly available in developing countries, offered an opportunity to provide wide assistance.<sup>2</sup> Thus, they proposed AuthorAID, which they envisioned as helping developing-country authors worldwide mainly through individualized aid online.

Freeman and Robbins took their idea to groups, including the Council of Science Editors (CSE),<sup>3</sup> that had shown a commitment to related goals. Among these groups was the International Network for the Availability of Scientific Publications (which has since broadened its scope and become known primarily as INASP). After a planning meeting in March 2007, INASP implemented AuthorAID as a carefully monitored 3-year pilot project that would include workshops, mentoring, a resource library, and a blog. The pilot project went well,<sup>4</sup> and AuthorAID has continued to develop and grow. INASP funding for AuthorAID has come mainly from the Swedish International Development Cooperation Agency (Sida) and the UK Department for International Development (DFID).

Since the beginning, AuthorAID has had a productive working relationship with CSE. Sessions at CSE annual meetings have included updates on AuthorAID,<sup>5-8</sup> *Science Editor* has contained information on AuthorAID mentoring,<sup>9-10</sup> and CSE

members have served AuthorAID as mentors and in other roles.

INASP's AuthorAID project team, which contains INASP staff members and others, has strong editorial roots. Julie Walker, of INASP, who directs AuthorAID, previously worked in publishing. Project-team members other than INASP staff include a past recipient of a CSE scholarship for developing-country editors, a former head of educational services at a major editing company, and the first editor of *Science Editor*.

Volunteers, many of whom are editors, are crucial to the AuthorAID effort. Most notably, editors and researchers from a variety of countries are AuthorAID mentors. Other volunteers write guest posts for the AuthorAID blog, provide or suggest materials for the AuthorAID resource library, translate AuthorAID materials into their native languages, or help by publicizing AuthorAID to those who might benefit from it. Volunteers are an integral part of the AuthorAID community, and the contributions of volunteers are warmly welcomed and highly valued.

## AuthorAID Components

AuthorAID has evolved to encompass much more than the editing initially envisioned by Freeman and Robbins. Current components of AuthorAID include on-site and online instruction; one-on-one mentoring; a blog, resource library, and email discussion list; and small grants.<sup>11</sup> Those interconnected aspects are summarized below, with emphasis on editorial involvement.

### On-site and Online Instruction

Workshops and courses on research communication are major components of AuthorAID. As well as providing guidance, they help to publicize AuthorAID to those who can use its offerings, such as mentoring and online resources. The workshops and courses also provide opportunities for the instructors to discern needs of the

## *continued*

AuthorAID target population and to test and refine instructional materials.

Countries in which members of the AuthorAID project team have facilitated one or more face-to-face workshops include Bangladesh, Colombia, Ethiopia, Ghana, Kenya, Nepal, Nicaragua, Pakistan, Rwanda, Sri Lanka, Tanzania, and Vietnam. The workshops—sometimes held in partnership with publishers, professional societies, or nongovernment organizations—generally last 2 to 5 days and have one or more local cofacilitators. The local cofacilitators, who commonly are journal editors, often go on to give workshops of their own. Likewise, the workshops often have train-the-trainer components, and attendees are encouraged to share what they learn. Presentations and other materials from the workshops are placed in the AuthorAID resource library to serve a broader audience.

Increasingly, AuthorAID instruction has been occurring online. AuthorAID's first online course was pilot tested in 2011 at the National University of Rwanda.<sup>12</sup> Since then, there have been multiple offerings of AuthorAID online courses, which use the Moodle platform. AuthorAID's main online offering is a 5-week course based on the face-to-face AuthorAID workshop in research writing. Other offerings have included a Spanish-language version of that course, a course on writing grant proposals, and an intensive 10-week course in which participants receive feedback on successive sections of a scientific paper. Whereas initially the online course in research writing was limited to a small group, the offering in mid-2015 had 367 participants, chosen from over 1,200 applicants,<sup>13</sup> and the offering in late 2015 had over 1,000 participants.

### ***Mentoring***

Since early in AuthorAID, prospective mentors and mentees have been able to register through the AuthorAID website and seek each other. Researchers and editors can serve as mentors. Items on which mentorship can be provided include using appropriate research methods, performing data analysis, choosing appropriate journals for manuscript submission, writing

journal articles, understanding the peer-review process, responding to reviewers' comments, preparing presentations and posters, writing grant proposals, and otherwise communicating about research.

A challenge throughout has been to meet the high demand for mentorship. As of late 2015, of the roughly 11,000 people registered on the AuthorAID website, about 6,800 had indicated an interest in seeking mentors, but fewer than 300 were offering to be mentors. Helping to increase the pool of mentors, both by volunteering themselves and by publicizing calls for mentors, is one way that editors can contribute to AuthorAID.

### ***Online-Community Materials***

AuthorAID includes a blog, a resource library, and an email discussion list. The blog, which debuted in 2007, includes at least one main post per week and a tip of the week. Increasing proportions of posts are by editors or others in developing countries. Posts appear simultaneously in English and Spanish.

As of late 2015, the AuthorAID resource library contained about 700 items. About 500 were in English; the others (largely translations of AuthorAID materials) were in Arabic, Chinese, French, Persian, Portuguese, Spanish, or Vietnamese. The resources include presentations, articles, Web links, and more. In addition to items on writing and publishing journal articles, the resource library contains items on topics ranging from preparing oral and poster presentations, to writing grant proposals, to editing and proofreading.

AuthorAID has had an email discussion list since 2009. The often-lively discussion includes not only responses to registrants' questions but also comments on scenarios posed by an AuthorAID project team member. Registrants for this list can view its archives.

### ***Small Grants and Embedding***

Since 2011, AuthorAID has provided small grants to candidates in developing countries. These highly competitive grants have been mainly for giving workshops on

research communication and for travel to conferences where recipients will present research. Recently AuthorAID began to provide other grants, for example, to give online courses. Some workshops supported by AuthorAID grants have been facilitated by editors. And AuthorAID now offers travel-grant recipients editorial comments on drafts of their presentations.

The workshop grants contribute to AuthorAID's progress in having researchers and editors in developing countries take over, adapt, and assimilate its activities, thus embedding them locally and promoting their sustainability. In addition to providing these grants, AuthorAID has been working intensively in selected countries—initially including Ghana, Sri Lanka, Tanzania, and Vietnam—to develop embedding. Support in that regard has included train-the-trainer workshops and funding of local activities. It also has included funding for leaders of embedding efforts to attend a research-writing course<sup>14</sup> that can strengthen their knowledge and serve in part as a prototype.

### **AuthorAID and Science Editors: Chances for Further Collaboration**

From the beginning, AuthorAID and science editors have conferred and collaborated. Now that AuthorAID has largely matured, it has more to offer editors. And now that AuthorAID and the demand for its services have grown, it has more call than ever for what the editorial community can provide.

What can AuthorAID provide to editors? By serving authors, it can facilitate the editor's task. Educating authors in developing countries—and authors elsewhere, who also can access the AuthorAID website—can result in more suitable submissions. Comments from AuthorAID mentors, either before journal submission or after a journal says that a paper needs more work, also can improve submissions. Some materials on the AuthorAID website can help in training new editors or keeping them current on editing and publication. The websites of some journals identify AuthorAID as a resource for authors. Hopefully more will do so.


## continued

How can editors help AuthorAID? Most of all, AuthorAID needs more mentors. We encourage more editors to volunteer in this role and to encourage editorial board members and journal readers to do so. Persons in or near retirement may be especially well suited for the role<sup>15</sup> in keeping with early observations by Freeman and Robbins.<sup>2</sup> Providing such mentorship also can be excellent experience for editors and others early in their careers. In addition, editors can contribute by suggesting items for the AuthorAID resource library, translating AuthorAID materials or identifying others to do so, writing guest blog posts, answering questions posed on the AuthorAID discussion list, and providing ideas for further developing AuthorAID. We also welcome additional chances to partner with others (such as publishers, editing services, and professional societies) to deliver workshops, to fund grants, or otherwise to promote high quality in research publication. Potential mentors should register through the AuthorAID website, and individuals or groups willing to help in other ways can contact us at [authoraid@inasp.info](mailto:authoraid@inasp.info).

Over the last decade, AuthorAID has evolved from an appealing concept to a sizable project that helps researchers in developing countries to communicate their work internationally. Yet much of the demand

is still unmet, and much of AuthorAID's potential remains to be fulfilled. We look forward to the continuing collaboration of science editors in future years.

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## References

- Freeman P, Robbins A. The publishing gap between rich and poor: the focus of AuthorAID. *Journal of Public Health Policy*. 2006;27(2):196–203.
- Freeman P, Robbins A. Closing the “publishing gap” between rich and poor. *SciDev.Net*. 2 September 2005. [www.scidev.net/global/capacity-building/opinion/closing-the-publishing-gap-between-rich-and-poor.html](http://www.scidev.net/global/capacity-building/opinion/closing-the-publishing-gap-between-rich-and-poor.html). [accessed on 7 November 2015].
- Ameh E. Scientific authorship and editing in the developing world. *Science Editor*. 2005;28(5):152.
- Hanley T. AuthorAID: Evaluation of pilot phase, 2007–2009. [www.inasp.info/uploads/filer\\_public/2013/04/09/authoraid\\_evaluation\\_2007-2009.pdf](http://www.inasp.info/uploads/filer_public/2013/04/09/authoraid_evaluation_2007-2009.pdf) [accessed on 12 November 2015].
- Ameh E. The role of science journals in promoting capacity development in the developing world (follow-up of 2006 meetings on creating and supporting sustainable societies). *Science Editor*. 2008;31(1):5–6.
- Shoreish N. AuthorAID Task Force. *Science Editor*. 2008;31(5):153.
- Yun O. Science editing goes global: CSE international scholars, Editor Link, and AuthorAID. *Science Editor*. 2009;32(6):184.
- Cerejo C. International boundaries, publishing barriers: empowering authors in newly industrialized and developing countries. *Science Editor*. 2013;36(3):84.
- Walker J. Mentoring opens doors around the world. *Science Editor*. 2011;34(3):84–85.
- Deming S. Between author and editor. *Science Editor*. 2011;34(4):e27–e28.
- Gastel B. AuthorAID: an international service and chance to serve. *Medical Writing*. 2013;22(4):284–287.
- Murugesan R. Promising outcomes of an online course in research writing at a Rwandan university. *European Science Editing*. 2012;38(3):60–64.
- West D. Worldwide research writing takes off with INASP's biggest ever online course. 11 June 2015. [www.authoraid.info/en/news/details/914](http://www.authoraid.info/en/news/details/914) [accessed on 7 November 2015].
- Intensive course in research writing. [vetmed.tamu.edu/vibs/stjr/intensive-course-in-research-writing](http://vetmed.tamu.edu/vibs/stjr/intensive-course-in-research-writing) [accessed on 7 November 2015].
- Gastel B. “Staying active” after retirement: consider mentorship. *The Scientist*. 11 August 2015. [www.the-scientist.com/?articles.view/articleNo/43722/title/Opinion---Staying-Active--after-Retirement--Consider-Mentorship](http://www.the-scientist.com/?articles.view/articleNo/43722/title/Opinion---Staying-Active--after-Retirement--Consider-Mentorship) [accessed on 7 November 2015].

# Need to Know What's Going On with an Article DOI? The Wait Is Over

**Anna Tolwinski**



Anna Tolwinski

Researchers, publishers, funders, and other consumers of research have always been interested in how the content they write, publish, and fund is distributed and used. The stakes are often high, as reputation is built upon such information. Traditionally, we have estimated reach and use by looking at reference citations, both in a given article's reference list and in the references to that article.

### **A New Tool to Serve an Old Need**

Over the last decade, scholarly content increasingly has been discussed beyond the traditional academic space. It has become common to find conversations about scholarly content in places such as blogs, Reddit, and Wikipedia. Now, with the web-fueled growth in scholarly communications, the scholarly community is also interested to find out how many times an article DOI has been shared, clicked on, or bookmarked. The intention to measure

this information is included in what many refer to when "altmetrics" is discussed.

In light of this need, CrossRef, the organization that facilitates scholarly citation linking and DOI metadata infrastructure, has been experimenting with various tools to gather data about the instances in which a DOI is clicked on in nontraditional spaces. In 2014, with the help of a group of publishers interested in collecting and distributing this data, we initiated a pilot of a new service. Based on interest in this pilot, and on the value of lessons learned, CrossRef's board approved the new service, called DOI Event Tracker (DET), to move toward launch. You can read about how it all got started and its grounding in the PLOS ALM software here: [crossref.org/2014/02](http://crossref.org/2014/02).

### **How Will It Work?**

The DET will register a wide variety of reach and use events, such as bookmarks, comments, social shares, citations, and links to other research entities, from a growing list of online sources. It will aggregate these events, and make the data available via an API (application programming interface). The data will be openly available so that they can be freely audited. The DET data about those publications can be accessed even if a journal is moved to another publisher. As such, they will provide a single point of access to a wide variety of data from multiple sources (which will change over time) rather than requiring each individual publisher to manage the data.

### **Will CrossRef Provide the Metrics?**

No, CrossRef is not providing metrics; the DET service will simply register the raw data without providing any additional add-on services such as analysis. However, users of the data, such as researchers, publishers, metrics providers, funders, and

hosting providers, will be free to do their own analyses. As always, they are able to build their own services on top of the data CrossRef provides and to choose how it will be displayed.

### **Which Specific Sources Will the Event Data Come From?**

As of September 2015, we have permission to track DOI events on the following platforms: CiteULike, DataCite, EuropePMC Database Citations, Facebook, Mendeley, Reddit, Research Blogging, ScienceSeeker, Wikipedia, and Wordpress. Publishers can also act as sources by publishing and distributing DOI event data via the DET when an event occurs on their platform. There is then scope to add sources as new ones emerge or to remove sources if they become inactive. You can already see some of the work that CrossRef has done with our 8th largest referrer of DOIs, Wikipedia, to build a real-time stream of DOIs being cited (and uncited) in Wikipedia articles across the world by getting a glimpse here: [events.labs.crossref.org/events/types/WikipediaCitation](http://events.labs.crossref.org/events/types/WikipediaCitation).

### **Will It Be Useful to Editors?**

The DET can be a useful tool to help editors attract authors by offering data on their audience's research interests and showing the reach of their journal beyond mere reference citations. It will also allow editors to track the dissemination of published articles to discover where they are being discussed, bookmarked, and linked to. This will help editors to answer questions such as "Is usage growing over time?" and "Which articles or subject areas are seeing more usage than others?"

Data from the DET can provide valuable information, which an editor can take into account when making decisions about journal coverage, direction, and

*(continued on page 108)*

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# Is Everything “Broken”?\*

Stephen B Heard



Stephen B Heard

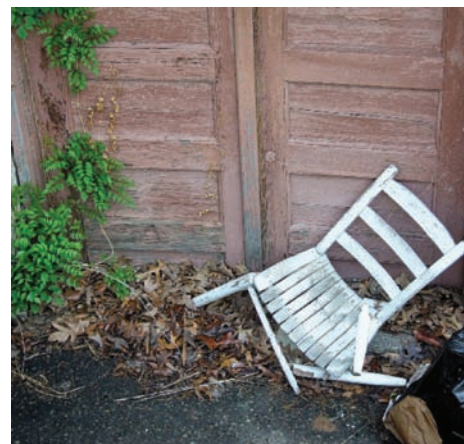
No, it isn't, of course, but you'd sure think it is if you chat around the water cooler, pay attention to Twitter, or read blogs or Nature News. Publishing is broken. Tenure is broken. Peer review is broken. Academia is broken. Reassuringly (I guess), at FiveThirtyEight Christie Aschwanden recently posted a long essay arguing that science *isn't* broken.<sup>1</sup> It's an excellent and persuasive read, but the fact that it exists at all is pretty good evidence that a lot of people think science is broken. It's not just science, either: Google will return lots of hits for “politics is broken”, “health care is broken”, “the music industry is broken”, and

many more. What a broken world, we tell each other, we're living in!

Why is our discourse so rich in “X is broken”? I think there are two simple reasons, and they're the same two reasons that bad news dominates the lay media (Nick Kristof makes this point well<sup>2</sup>). First, it's easy to write a piece about how horrible something is. Examples of fraudulent papers, deadwood faculty members, and delayed peer reviews are easy to find, because we all love to pass them on when we find them, and moral outrage is easy to muster (after all, these things are indeed bad when they occur). Second, we love to hear or read stories about how horrible something is. Speaking for myself, anyway, a story about a fraudulent paper, a deadwood faculty member, or a delayed peer review leaves me feeling good about myself that I don't do those things, and deliciously scandalized that other people do. That's why blog posts (for instance) that decry an injustice or point out a systems failure rack up thousands of page views. It just isn't as much fun to write, or read, about how the way we do things works pretty well, most of the time. Most papers aren't fraudulent, most tenured faculty work hard, most peer reviews are on time<sup>3</sup> and helpful.<sup>4</sup> But what's the fun in that?

Now, I'm not a complete Pollyanna. Science has had enormous success, and it's great fun<sup>5</sup> to do<sup>6</sup>—but plenty of things about it can still be improved. Science isn't broken, but parts of it are dented, chipped, or only roughly hewn, and we shouldn't ignore that. We are far from finished diversifying the community of scientists and removing biases (conscious and unconscious) that affect how we see each other. There are legitimate debates around whether or not we're overproducing and underpaying graduate students and postdocs. There are problems with our funding models for science, especially for so-called “basic” or “curiosity-driven” research. These issues, and more, deserve our serious attention.

So I'm not suggesting that you shouldn't read the next pronouncement that “*Thing X is Broken*”. It's always useful to have a



Chair (cropped). Photo credit: Zen Sutherland via Flickr.com, CC BY-NC-SA 2.0.

problem (real or perceived) on your radar. But when you do read that next pronouncement, ask yourself three questions. First, *is this really a problem at all?* Second, if so, *how big a problem is it?* And third, and most important, *do we really need to toss out X and start over, or is there something small I can do to help solve the problem?* Perhaps you can take on an extra peer review, or submit your next one more promptly. Perhaps you can mentor an extra underrepresented student. Perhaps you can give a radio interview about the importance of research funding. Despairing that things are “broken” makes us unlikely to take these actions—but I think it's precisely such incremental but important steps, when they're taken by each of us and by all of us, that pull science forward.

\*© Stephen B Heard, October 13, 2015. Reprinted with permission from Scientist Sees Squirrel ([scientistseessquirrel.wordpress.com/](http://scientistseessquirrel.wordpress.com/)). Stephen B Heard is professor of biology at the University of New Brunswick, in Fredericton, NB, Canada. He's an evolutionary ecologist whose research interests revolve around interactions between insects and plants. Among other things, his lab studies host-associated genetic differentiation in plant-feeding insects, the population and community ecology of insects in forests, and the ecological forces controlling speciation rates. Follow him on Twitter: @StephenBHeard.

1. [fivethirtyeight.com/features/science-isnt-broken/](http://fivethirtyeight.com/features/science-isnt-broken/)
2. [www.nytimes.com/2015/10/01/opinion/nicholas-kristof-the-most-important-thing-and-its-almost-a-secret.html?action=click&pgtype=Homepage&module=opinion-c-col-left-region&region=opinion-c-col-left-region&WT.nav=opinion-c-col-left-region&\\_r=0](http://www.nytimes.com/2015/10/01/opinion/nicholas-kristof-the-most-important-thing-and-its-almost-a-secret.html?action=click&pgtype=Homepage&module=opinion-c-col-left-region&region=opinion-c-col-left-region&WT.nav=opinion-c-col-left-region&_r=0)
3. [scientistseessquirrel.wordpress.com/2015/08/31/how-long-should-peer-review-take/](http://scientistseessquirrel.wordpress.com/2015/08/31/how-long-should-peer-review-take/)
4. [scientistseessquirrel.wordpress.com/2015/05/05/are-reviewers-crazy-or-are-they-saints/](http://scientistseessquirrel.wordpress.com/2015/05/05/are-reviewers-crazy-or-are-they-saints/)
5. [scientistseessquirrel.wordpress.com/2015/04/09/on-expressing-our-joy-as-scientists/](http://scientistseessquirrel.wordpress.com/2015/04/09/on-expressing-our-joy-as-scientists/)
6. [scientistseessquirrel.wordpress.com/2015/03/18/i-have-the-best-job-on-the-entire-planet/](http://scientistseessquirrel.wordpress.com/2015/03/18/i-have-the-best-job-on-the-entire-planet/)

*continued*

## **Commentary on “Is Everything Broken?” (by Stephen B Heard)**

**Tracey A DePellegrin**

Starting in this issue, *Science Editor* will provide you with relevant reads and ICYMIs (In Case You Missed It) around topics scientists are talking about. The landscape includes funding, peer review, public access, reproducibility, data sharing, visibility, the sociology of science, and more. To that end, *Science Editor* will cover blog posts, articles, white papers, and other tidbits you may want to peruse. And because many if not most of you are already tuned in to what’s going on with your scientist constituents, please email me with suggestions for material to cover ([tracey.depellegrin@thegsajournals.org](mailto:depellegrin@thegsajournals.org)).

Why discuss these issues in a forum for scholarly publishing? Because we owe it to our constituents to understand their most

pressing concerns that overlap with ours. Having a more full view will not only help us to serve our authors, editors, reviewers, boards, customers, and others but will ensure that we don’t live in an echo chamber.


In this issue, we reprint the post “Is Everything Broken?” by Stephen B Heard, originally published in October 2015 on his blog *Scientist Sees Squirrel*. Heard is an evolutionary ecologist and entomologist at the University of New Brunswick. He’s also the author of *The Scientist’s Guide to Writing*, a book to be published in April 2016 by Princeton University Press.

In his blog post, Heard tackles the seldom-discussed topic: the echo chamber of doom and its discontents. He wonders aloud and asks readers to challenge themselves, too, whether [simply insert issue of choice here!] is truly as beyond repair as what we’re hearing—particularly via social media or from a handful of sources (albeit loud ones)? He urges us to take a rational

approach to evaluating information presented in the context of emotional drama.

Without explicitly saying so, Heard warns against a tactical use of language to invent a crisis—or at least to escalate problems or simmering complaints into crises—often using strategies of a few anecdotes, hyperbole, some (select) facts, and lots (and lots) of social media and blog posts. As scientific editors and communicators, we avoid using words to tilt reality. But as readers, we know all too well the frequency of such strategies. It’s worthwhile to consider what our role is in encouraging discussion rather than panic.

To that end, “the sky is falling” mantra aside, even if things really are a bit bent (or even broken), Heard asks, isn’t there something you (with the emphasis on *you*) can actually do besides commiserate or complain?

I urge you to read “Is Everything Broken?” and check out the rest of Heard’s writing at *Scientist Sees Squirrel* ([scientistseessquirrel.wordpress.com](http://scientistseessquirrel.wordpress.com)). 

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*continued (from page 106)*

development. Such real-time, or near real-time, information on DOI usage could provide information that helps editors make their decisions faster, with more information.


### **What Will It Cost?**

There will be two service tiers. In the first tier, users will be able to access the event data via a free version of the API. In the

second tier, CrossRef will offer additional features to the free API, such as guaranteed uptime and support response times, bulk downloads, and fast delivery speeds, governed by a fee-based service level agreement (SLA). The second tier is offered so that organizations that want to build services on top of the DET data can ensure high speed and reliability for use that fits their more advanced needs. More informa-

tion on the specifics of the SLA service will be made available in 2016.

### **Register for More Information**

If you would like stay informed about the 2016 launch of the DOI Event Tracker and the DET SLA service, you can register your interest at: [docs.google.com/forms/d/1pOnL6500eFebismbHMLAJINxVFqvDFMMkupZualmNo/viewform](https://docs.google.com/forms/d/1pOnL6500eFebismbHMLAJINxVFqvDFMMkupZualmNo/viewform). 

# Ethical Editor: Office of Research Integrity Sanctions for Research Misconduct

**Ezekiel Hurst**  
Parrish Law Offices

After an institution finds a researcher guilty of research misconduct, the institution typically imposes sanctions that range from a letter of reprimand to termination. If the research was federally funded, the institution sends its report to the relevant federal agency, which may impose additional sanctions. The following examines some of the sanctions imposed by the Office of Research Integrity (ORI) and notes the following trends:

1. The requirement of certification of the authenticity of research and the imposition of supervision requirements are the most common sanctions;
2. The harshest sanction, debarment from receiving any federal funds, is most commonly applied against researchers who do not participate in the misconduct investigation; and
3. Recent sanctions are less severe compared with those meted out over the past two decades.

Each of these trends is discussed more fully below.

## **Certification and Supervision Restrictions**

To avoid being debarred, most accused researchers ("Respondents") enter into a Voluntary Settlement or Voluntary Exclusion Agreement with ORI that includes the acceptance of certain federal sanctions. The most common federal sanctions associated with a research misconduct finding are certification and supervision. A certification sanction requires the individual and/or institutional representative to certify the research is authentic. A supervision sanction requires the researcher to be supervised by another researcher within the institution. From 2010 to 2015, ORI imposed 62 sanctions on 61 Respondents. Forty-one of those sanctions

were either certification or supervision restrictions or about two-thirds. However, in the previous five years (2005–2009), only 18 of the total 58 sanctions were categorized under either certification or supervision restrictions (i.e., approximately one-third).

## **Debarment and Respondents Who Avoid Settlements**

Debarment is the harshest punishment that ORI can impose on an individual. The sanction of debarment is premised on a finding that a researcher is not presently fit to be a steward of federal funds. Debarment from receiving federal funds is government wide. Not only can the individual not receive research dollars, but he or she cannot receive student loans, federally-backed mortgages, or reimbursement for medical services provided to individuals covered by a governmental payer. ORI has imposed the debarment sanction for periods that range between two years and life.

Debarment is not imposed on individuals who enter a settlement agreement through which they agree not to seek federal funding. Debarment typically occurs when the researcher does not participate in the investigation—most commonly because he or she has left the country. An exception is the case of Paul Kornak who received a lifetime debarment. ORI indicated it was imposing such a harsh sanction "to protect the public interest overall. Given the scope of his criminal conviction, his longstanding pattern of criminal behavior, and his total disregard for the safety and well-being of human subjects, Mr. Kornak's responsibility to engage in transactions with the federal government cannot be assured at any time in the future." Since 2010, ORI has imposed debarment only eight times—all resulting from the Respondent's failure to participate in the investigation. In the previous six years (2004–2009), 16 debarments were imposed.

As previously noted, the number of supervisions and certifications has increased, while

the number of debarment sanctions has decreased by approximately half. Some of this trend may be a function of the fact that more Respondents are entering into settlements with ORI. Most agreements between ORI and the Respondent involve only the certification or supervision requirements.

## **Exclusions Versus Debarments**

When a researcher does not enter an agreement with ORI, he or she is entitled to request a hearing. The time to prepare a case for hearing protracts the ORI review process, is a significant use of ORI's legal resources, and generally is more expensive for the Respondent. Accordingly, it is likely that many of the ORI cases that have not been resolved over an extended period involve more serious proposed sanctions.

The duration of the exclusion period offered through a Voluntary Exclusion Agreement (VEA) is comparable with debarments imposed. If a Respondent is cooperative and enters into an agreement quickly and without questions, the duration of the exclusion is generally two or three years. If a Respondent initially contests the ORI findings but later enters a VEA, the exclusion period generally is longer. For example, Evan Dreyer originally contested the findings but later decided to enter into an exclusion agreement, presumably to be able to receive Medicare and Medicaid reimbursement for medical services he provided. He agreed to not seek federal research dollars for ten years to avoid being debarred from all federal funding for the same time period, if not longer. Although Dreyer ultimately accepted a 10-year period, the most common period of exclusion is three years (i.e., 84 of the 106, or approximately four-fifths of the exclusion settlements were sanctioned for duration of three years). Thus, it appears that accepting a VEA later increases the exclusion length.

Since 2010, ORI has offered, and Respondents have accepted, VEAs only

*(continued on page 113)*

# *Ethical Editor: Research Misconduct. Notifying Journals about Retractions and Corrections*

## **Debra M Parrish**

A critical issue in many research-misconduct cases involving publications is when to provide notice to an editor or publisher that an allegation of misconduct has been made regarding a published article. Options include

1. When some, all, or the most senior authors determine that the article must be corrected or retracted, regardless of whether the problem derives from misconduct or error;
2. When the institution completes the misconduct investigation; or
3. When the relevant federal or national agency makes a finding of research misconduct.

U.S. federal regulations require that an institution not reveal the identity of the respondent (the accused researcher) and complainant during a research misconduct investigation except to those who have a need to know (42 C.F.R. §93.108). The Federal Office of Research Integrity (ORI) does not deem a journal editor to be a party with “a need to know” about a research misconduct allegation. Accordingly, these confidentiality regulations often are cited as a reason for not providing early notice to an editor of an allegation of misconduct or a flawed publication.

## **Waiting for a Federal Finding**

In the United States, the vast majority of research-misconduct investigations conclude with a settlement agreement between ORI and the accused scientist. The agreement identifies the nature of the misconduct, the affected publication(s), and a requirement that the accused researcher notify the journal of a required correction or retraction. Shortly after this agreement is reached, ORI issues a notice in the Federal Register that identifies those pub-

lications associated with a federal research-misconduct finding and the individual researcher responsible for the correction or retraction. When notice to a journal follows such public notice, journals may cite to the Federal Register notice as basis for a retraction or correction.

Several disadvantages exist when journals depend on a federal misconduct finding to take action. First, ORI’s notices do not identify publications that the institutional investigation determined were flawed but are not associated with a federal research-misconduct finding. ORI does not convert all institutional findings of misconduct to a federal finding for a variety of reasons, some of which are solely based on ORI’s resource limits. Second, a substantial delay typically exists between the time an allegation of misconduct is made and a federal finding is made. Significant delays exist even between the time an institution submits its investigation report to ORI and ORI makes a concomitant federal finding. During ORI’s review, other researchers may build, or attempt to build, on the flawed publications, and patents may be blocked or compromised by the publications. Perhaps for these reasons, approximately two-thirds of the publications associated with a research-misconduct finding are already retracted or corrected by the time ORI makes its research-misconduct finding.


## **Authors Providing Notice**

Nothing in the misconduct regulations precludes authors from providing a journal notice that a paper requires correction or retraction—the authors simply cannot disclose the identities of the accused researcher or the complainant. Many authors, however, want any retraction or correction to clearly identify the author whose conduct led to the correction or retraction, and typically, the accused author resists such

notice. If all the authors at least agree that a correction is warranted, they may still be concerned about the identification of additional problems during the investigation that will preclude correction and require retraction of the article. The inability of authors to agree on a correction or retraction notice to journals typically frustrates prompt publisher notification of a problematic publication.

## **Institutions Providing Notice**

At the conclusion of an institutional research misconduct investigation, many institutions require an accused researcher to notify journals of publications that must be corrected or retracted, regardless of whether the institution makes a finding of research misconduct. Most journals that follow the Committee on Publication Ethics (COPE) guidelines will retract an article after an institutional research-misconduct finding regardless of whether a secondary federal research misconduct finding is made. Such an approach recognizes the primacy of institutional responsibility for investigating such cases, recognizes the lack of a national regulatory body in many countries to make a secondary finding, and avoids the delays in correcting the literature that appear endemic to a federal misconduct finding. However, institutions have different definitions of research misconduct, and many respondents raise questions regarding the competence of institutions to conduct investigations.

Most articles that are the subject of research misconduct, investigations are retracted or corrected before a federal research misconduct is made. It appears that notice to a journal typically follows an institutional research-misconduct investigation. Journals, institutions, and authors should consider their larger obligations to the scientific community to promptly correct the literature. 



# Member Profile: Lindsey Buscher

Stacy Christiansen



Lindsey Buscher

Lindsey Buscher, assistant research editor with the History of Cartography Project at the University of Wisconsin–Madison and managing editor of *Science Editor*, is mapping her course through the wilds of technical publishing and credits CSE as a primary navigation tool.

Lindsey began her adventure at the University of Kansas, earning a bachelor's degree in English with a minor in Italian. On becoming one of the first graduates of the newly developed Technical Communications Certificate Program at the University of Kansas, she knew that she wanted to go into publishing, and she found an opening as an assistant managing editor at Allen Press in Lawrence, Kansas. Not long after, Lindsey was promoted to managing editor. She also passed the Board of Editors in the Life Sciences examination in 2010.

While at Allen Press, Lindsey learned about CSE. She joined the Publications Committee and the Membership Committee. In 2011, CSE began accepting applications for project manager of the eighth edition of the style manual, *Scientific Style and Format*. Lindsey was hired and worked on the style manual (while still

full-time with Allen Press) for three years until the manual was published in May 2014.

Within a week of the style manual's release, Lindsey and her husband had a baby boy; three months later, the family relocated to Madison, Wisconsin. Around the same time, Lindsey learned about the newly created position of managing editor of *Science Editor*. It seemed like a perfect fit because she could work part-time from home and also stay involved with CSE.

Almost a year later, she started looking for full-time work and happened upon an opening at the University of Wisconsin with the History of Cartography Project. Lindsey discovered that the University of Chicago Press had published the first four volumes of the project and would be doing the fifth as well. She had worked with the Press on the CSE style manual, so she made use of her network and applied for the position of assistant research editor. "Without question, I have CSE to thank for my current position," she says. In this position, she factchecks all references and entries submitted to this encyclopedic volume. She also coordinates all editorial aspects, from submission through editing and translating.

When asked what advice she might give to those interested in or just starting out in a scientific or technical editing career, she stresses that finding a professional organization to get involved with is key. She admits to being a little apprehensive at first about attending a large international organization meeting. But on attending her first CSE meeting in 2008, "I was hooked," she says. Tim Cross, a colleague from Allen Press, asked Lindsey to join the Membership Committee, which he then chaired. "One thing led to another, and before I knew it, going to the annual meetings wasn't an uncomfortable or terrifying experience," she says; "it was the highlight of every year I was able to go—and still is!"

"Building my network was nearly effortless—all I had to do was say yes to joining a committee, yes to helping with a project here, help to put together an event there, and just like that, I was part of this community of amazing and welcoming people who shared my interests and passions," notes Lindsey. "I am now the chair of the Membership Committee, and I am probably one of the biggest cheerleaders of the organization simply because it has aided me in finding such a fantastic career path to follow, and I am 100% confident that it will continue to serve me for years to come. I realize how clichéd this sounds, but I have also learned that you really do get out of it what you put into it."

When not working on the cartography project or getting the next issue of *Science Editor* ready, Lindsey enjoys knitting, learning how to sew, and reading to her son. And she has discovered a few of the outdoor activities that Madison offers: hiking, kayaking, and biking. "I am also the official assistant to the homebrewer (my husband), and we belong to the Madison Homebrewers and Tasters Guild, which is a lot of fun and involves another great group of people. I even managed to marry two of my hobbies when I started knitting 'sweaters' to go around the brewing carboys to keep the light out and to keep them at the proper temperature for fermentation and conditioning during the cold Wisconsin winters!"

Lindsey enjoys learning about font history, typography, and typesetting and is currently reading *Bringing Up Bébé: One American Mother Discovers the Wisdom of French Parenting*, by Pamela Druckerman. "I'm (quite impatiently) waiting for new seasons of *Sherlock* and *Game of Thrones*," she adds.

Regardless of where her next adventures lie, it is clear that Lindsey will continue to use CSE and the network she has built as a compass to help guide the way. 🗺️

## Gatherings of an Infovore\*

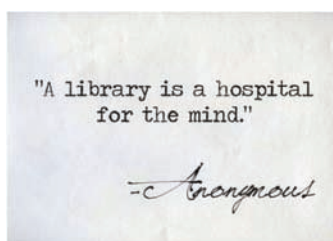
Barbara Meyers Ford



Libraries are important to all of us involved in publishing in general, and scholarly and scientific publishing specifically, for several reasons. Their resources are often the first stop for researchers and scholars when starting a new project and a frequent source of additional information throughout. Without library book buyers and journal subscribers, many a worthy set of research results would not be accessible to as large of an audience as an author would hope. And without the library, many a worthy book or journal might not even be in existence at all given that more rather than fewer academic publishers have become financially dependent on institutions. Libraries have taken on many new roles of late as well. Some are partnering with university presses to develop new journals and other publications. Still others administer platforms for electronic publishing and might even be considered publishing operations in their own right. In this column, I've collected some quotes

\*A person who indulges in and desires information gathering and interpretation. The term was introduced in 2006 by neuroscientists Irving Biederman and Edward Vessel.

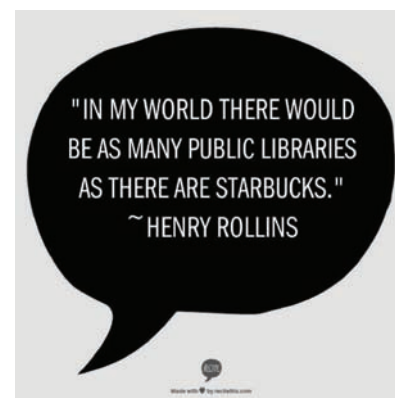
that provide you with a view of research libraries in the twenty-first century as seen by leaders in the field. The first is a view from two decades ago; the others have come about in the present day with one of those looking quite far into the future.



### 20 Years Ago

"The Idea of the Library in the Twenty-First Century" is the title of a Janet Doe Lecture by Nina Matheson, director emerita of the Welch Medical Library at Johns Hopkins University published in 1995. Her primary focus was on the concept of knowledge, about which she wrote: "There is no way to get an orderly display of knowledge in any specific domain. There are only little peepholes to some portion of the elephant known as a discipline." Building on Peter Drucker's concept of "knowledge capitalism," Matheson predicted that "knowledge in the next era is a capital resource. The talent and ability to apply knowledge to create knowledge and to organize it for useful purposes will be fundamental to the survival and growth of organizations as well as individuals." She further reviewed the differences among publishing to provide entertainment versus that eventually housed in scholarly, scientific, research, or professional libraries. Matheson's penultimate comments relating to the title of her lecture were: "The idea of the library is no longer the mausoleum of dead genius as it had been in the nineteenth century. In the twenty-first century, the idea of the library will be a knowledge server, an encyclopedic source of knowledge, the encryption of what is known of civilization, culture, and the organization of the universe. In the twenty-first century... [t]hese knowledge sources, some of which will still be called libraries, must be

dedicated to information and to knowledge; their storage, acquisition, dissemination; and their management over all time. These knowledge sources must be specialized in both function and scope, and they must be the intellectual responsibility of those responsible for creating knowledge."



### Present Day

#### Blurring Lines

Two librarians, one publisher, and one library service vendor came together at the 2013 Charleston Library Conference. Their panel was titled "Content, Services, and Space: The Future of the Library as Lines Blur" (published as a Purdue e-Pub [dx.doi.org/10.5703/1288284315235](https://doi.org/10.5703/1288284315235)). I share with you here one thought from each presenter.

Rick Anderson, associate dean for Scholarly Resources and Collections, University of Utah Libraries

"Libraries are starting to become publishers. This is happening in a couple of ways: first, an increasing number of libraries are beginning to actually publish journals that are based on content in their institutional repositories. ... It is also true that ... they are digitizing and making publicly available rare and unique resources that would otherwise have never been made available to the general public. ... Right now we have got somewhere between 20 and 30 university presses that are located in their campus libraries."

## continued

Stephen Rind-Tutt, president, Alexander Street Press

"We have an enormous amount of creation going on in our society, and much of it does not fit in books and journals, yet librarians have all of the skill sets necessary to really make value and really to help society."

Nancy Gibbs, head, Acquisitions Department, Duke University Libraries

"My blurring line seems to be discovery of new content outside of the library catalog that I would like to purchase, but how do I provide for those models [the next step after traditional PDA], and what do I do when I am trying to purchase it?"

Heather Staines, vice president, Publisher Development, SIPX, Inc.

"Working with a number of university presses, one of the interesting things associated with this that I see is actually the library and the press both being put into the IT department at universities where that was not the case even just a few years back."

### *Libraries as Publishers*

Charles Watkinson, director at the University of Michigan Press and associate university librarian for Publishing at the University of Michigan Library, posted to his blog in January 2015 ([charleswatkinson.blogspot.com/](http://charleswatkinson.blogspot.com/)) "Three Challenges of Pubrianship." He wrote about a movement toward having university presses reporting to the university library and "... also a trend toward increasing integration of the two entities. Physical collocation of staff with both library and press backgrounds, joint strategic planning exercises, and shared support infrastructure..." He defends his neologism with the following: "As libraries move to engage with the inputs as well as outputs of scholarship,



Artist Katie Paterson's project starts with a forest and ends—a century later—with books. (Photo credit: Matt Gibson/Shutterstock)

and as publishers migrate from processing content to also providing the tools through which it is created, our joint capacity to serve the needs of scholars at all stages of their professional lives grows exponentially. The new pubriarians, whether they arrive in their roles through press/library collaboration or the organic growth of library publishing, may be at the forefront of creating such solutions. And that's an opportunity worth minting a new word for."

### *Current Project = Future Library*

This is probably one of the most fascinating library-related items I have ever found. A patroness, one Katie Paterson, a Scottish artist, is the force behind a fantastic publishing→library artwork project that won't be completed until 2114. Here is the description given on the project's website:

*Scottish artist Katie Paterson has launched a 100-year artwork—Future Library—Framtidsbiblioteket—for the city of Oslo*

*in Norway. The prizewinning author, poet, essayist, and literary critic Margaret Atwood has been named as the first writer to contribute to the project. The multi-award winning British novelist David Mitchell follows as 2015's author.*

*A thousand trees have been planted in Nordmarka, a forest just outside Oslo, which will supply paper for a special anthology of books to be printed in one hundred years' time. Between now and then, one writer every year will contribute a text, with the writings held in trust, unpublished, until 2114. Tending the forest and ensuring its preservation for the 100-year duration of the artwork finds a conceptual counterpoint in the invitation extended to each writer: to conceive and produce a work in the hopes of finding a receptive reader in an unknown future.*

You can go to [www.futurelibrary.no](http://www.futurelibrary.no) to learn all the details, read Atwood's and Mitchell's thoughts about the project along with other relevant essays, and even watch a video or two about the Future Library. 📖

## continued (from page 109)

13 times. In the previous five years (2005–2009), 24 VEAs were entered. Similar to the decrease in debarment sanctions in recent years, exclusion agreements have decreased by approximately half.

### Conclusion

It appears more researchers are entering Voluntary Settlement Agreements with ORI, and the majority of those have simply a supervision or certification requirement. In

the past five years, approximately two-thirds of the Respondents entered such agreements. Since 2010, only 21 researchers have been excluded or debarred from receiving federal funding. 📖

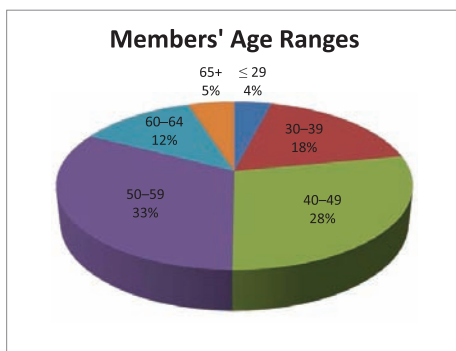
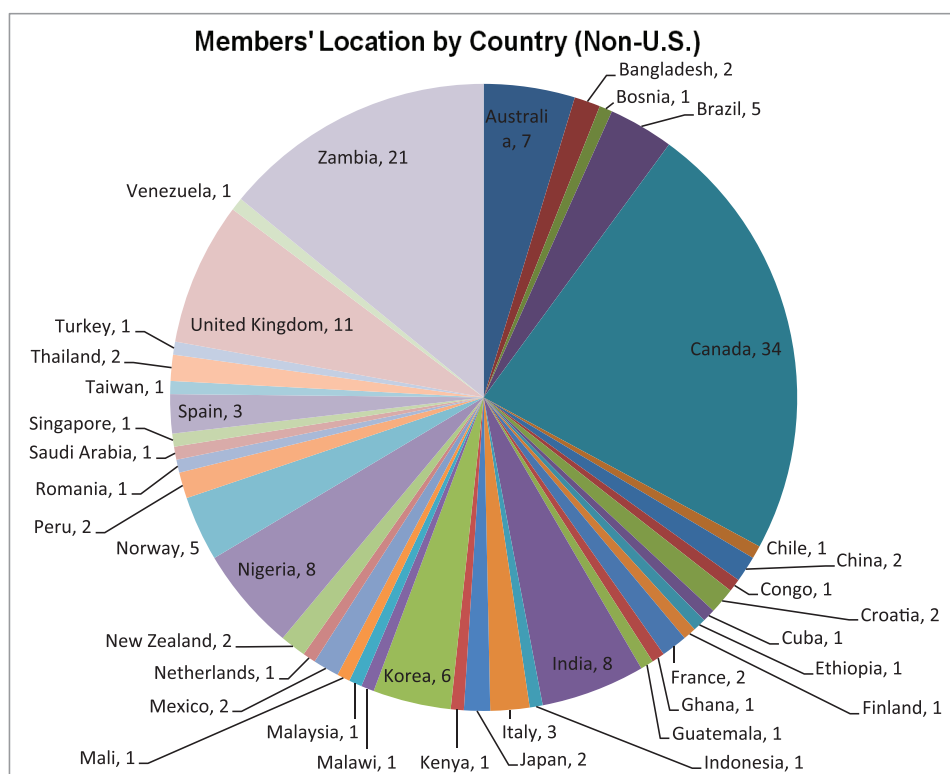
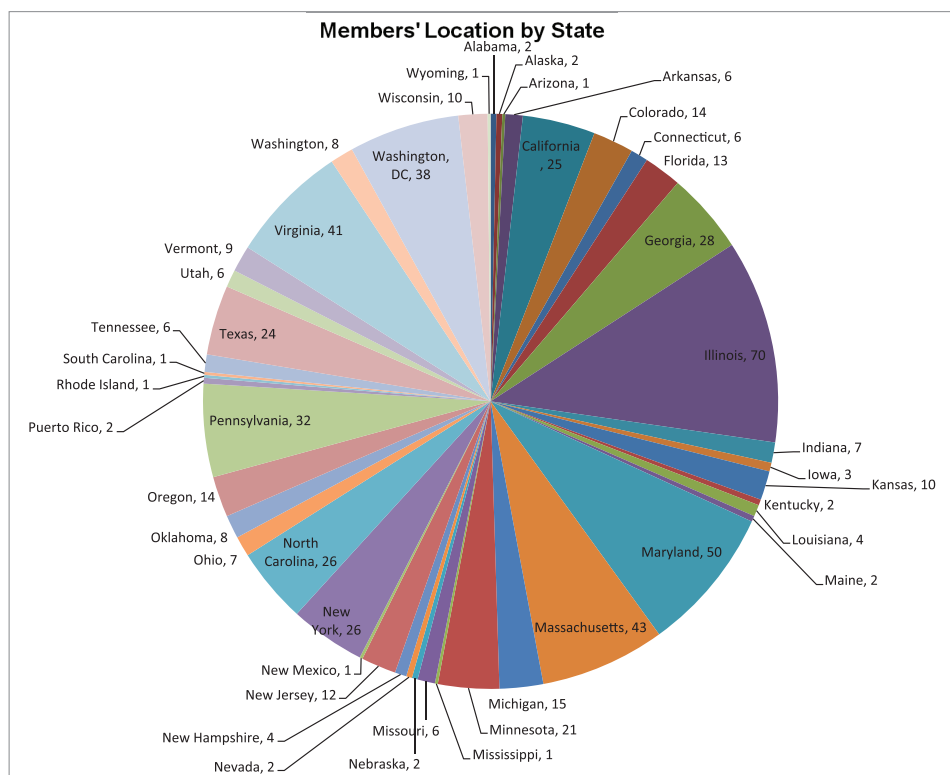


# Membership DemoGraphics

## Lindsey Buscher

Every once in a while it's a good idea to take a look at the state of your organization, and if you are part of a scholarly society, evaluate your membership demographics. In the interest of sharing such details about our own CSE membership, please enjoy some pie charts depicting various demographics. One interesting tidbit to note is that although 80% of our members live in the United States, we have members from 41 different countries!

The data for the Members' Age Ranges, Members' Primary Fields of Publication, and Members' Primary Roles charts are taken from the member registration questionnaire, but are not required fields, so these numbers are only representative of those who submitted the data. As you can see, it is important for us to collect these data so that we know to whom we should cater our educational opportunities such as webinars and annual meeting short courses and sessions. For example, we have more members in the medicine and health journal field (51%) than all other fields combined, but we don't want to leave out any other fields when considering topics for meeting sessions. We also don't want to create a lineup of webinars specifically tailored to the needs of manuscript editors or managing editors because our members inhabit such a wide range of roles. It's also important to consider that many of our members who are senior, associate, and chief editors are likely practitioners within their fields and may be less familiar with the nuts and bolts of proofreading and

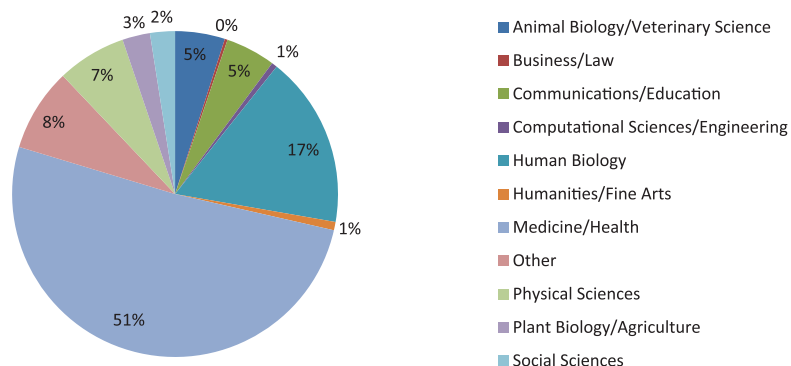




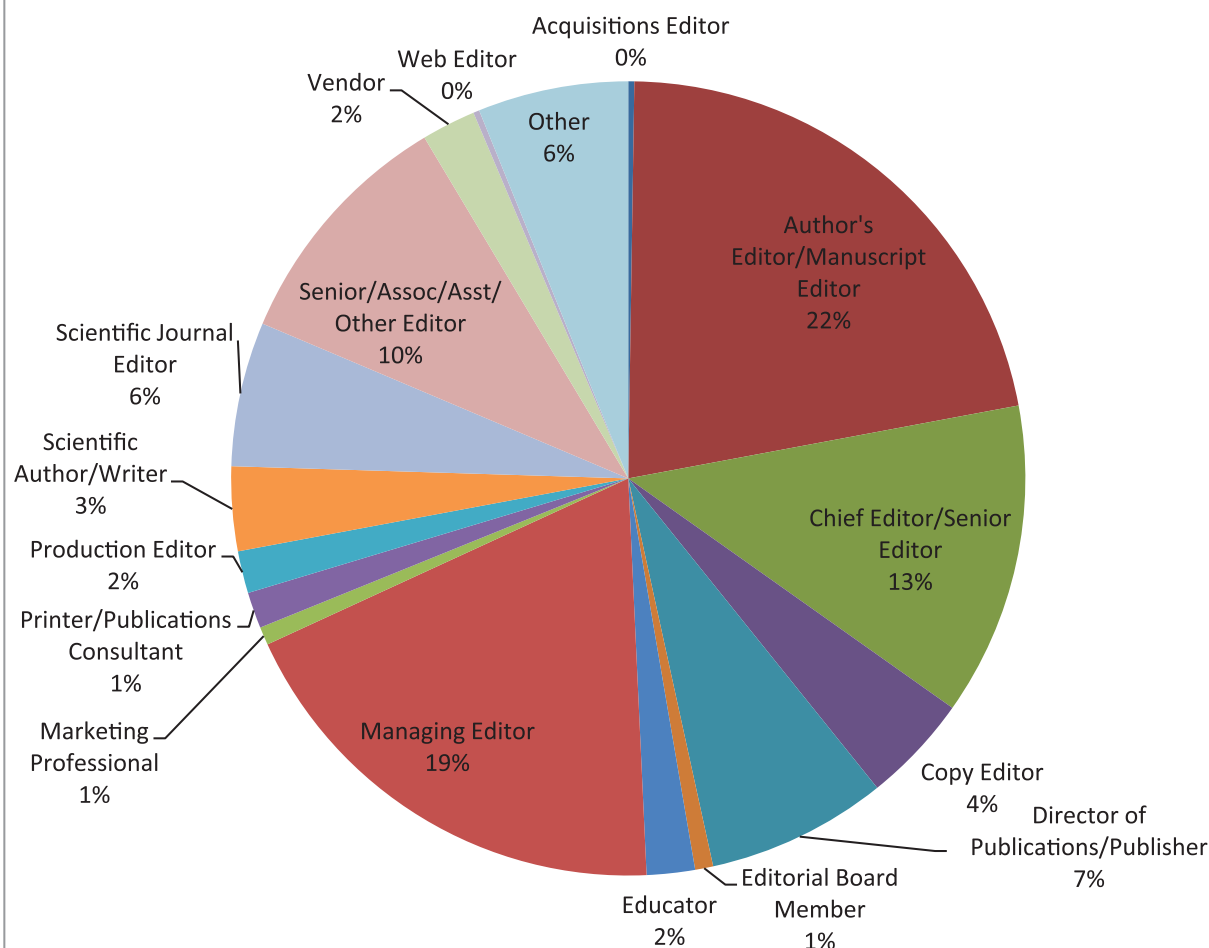
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style sheets or the overall publication process. In some cases, they may be interested in learning more about those areas, or if they are new to their role, they may want to learn more about how to perform their assigned duties and figure out how they fit into the bigger picture. We want to be able to take all of these factors into consideration so that we know how best to serve you, our members. So when we send out questionnaires or ask for this type of information on registration forms, even though it may not be required, please consider filling them out so that we can gather and analyze the data, continue to grow, and be the best organization for professionals in the scholarly publishing industry that we can be. 🏛️

### Members' Primary Fields of Publication



### Members' Primary Roles



# Calendar

2016

- 7 February **BELS (Board of Editors in the Life Sciences) examination.** Mumbai India. Registration deadline is 17 January. [www.bels.org](http://www.bels.org).
- 11–15 February **American Association for the Advancement of Science annual meeting.** Washington DC. [www.aaas.org](http://www.aaas.org).
- 12 March **BELS (Board of Editors in the Life Sciences) examination.** Manila Philippines. Registration deadline is 15 January. [www.bels.org](http://www.bels.org).
- 12 March **BELS (Board of Editors in the Life Sciences) examination.** Houston TX. Registration deadline is 20 February. [www.bels.org](http://www.bels.org).
- 21 March **American Medical Writers Association Medical Writing Certification examination.** Kissimmee FL. Registration deadline is 15 February. [www.amwa.org/mwc\\_exam](http://www.amwa.org/mwc_exam).
- 16–19 April **Association of Clinical Research Professionals annual conference.** Atlanta GA. [www.acrpnet.org](http://www.acrpnet.org).
- 14–17 May **Council of Science Editors annual meeting.** Grand Hyatt Denver, Denver CO. Contact: CSE: 10200 W 44th Ave, Ste 304, Wheat Ridge CO 80033; (720)881-6046; [www.CouncilScienceEditors.org](http://www.CouncilScienceEditors.org).
- 15 May **BELS (Board of Editors in the Life Sciences) examination.** Denver CO. Registration deadline is 24 April. [www.bels.org](http://www.bels.org).
- 15–18 May **Society for Technical Communication.** Anaheim CA. [www.stc.org](http://www.stc.org).
- 1–3 June **Society for Scholarly Publishing annual meeting.** Vancouver BC. [www.sspnet.org](http://www.sspnet.org).
- 10 June **BELS (Board of Editors in the Life Sciences) examination.** Strasbourg France. Registration deadline is 20 May. [www.bels.org](http://www.bels.org).
- 10–12 June **European Association of Science Editors conference.** Strasbourg France. [www.ease.org/huk](http://www.ease.org/huk).
- 15–18 June **American Society for Indexing annual conference.** Chicago IL. [www.asindexing.org](http://www.asindexing.org).
- 26–30 June **Drug Information Association annual meeting.** Philadelphia PA. [www.diahome.org](http://www.diahome.org).
- 5 October **American Medical Writers Association Medical Writing Certification examination.** Denver CO. Registration deadline is TBD. [www.amwa.org/mwc\\_exam](http://www.amwa.org/mwc_exam).
- 5 October **BELS (Board of Editors in the Life Sciences) examination.** Denver CO. Registration deadline is 14 September. [www.bels.org](http://www.bels.org).
- 6–8 October **American Medical Writers Association annual meeting.** Denver CO. [www.amwa.org](http://www.amwa.org).
- 11–15 November **Association of American Medical Colleges annual meeting.** Seattle WA. [www.aamc.org](http://www.aamc.org).

## Information for Contributors

- *Science Editor* welcomes contributions describing research and current practices in editorial processes, publication ethics, policy, business models, and other items relevant to CSE members and journal readers.
- Please submit manuscripts online at [www.editorialmanager.com/se](http://www.editorialmanager.com/se).
- Submit material in the style recommended by *Scientific Style and Format*, with references in the order of citation.
- Submitted materials are subject to editing by the appropriate editors and copyeditor.

Email editorial or presubmission inquiries, suggestions, or comments to Tracey A DePellegrin, Editor-in-Chief, [td2p@andrew.cmu.edu](mailto:td2p@andrew.cmu.edu) or [tracey.depellegrin@thegsajournals.org](mailto:tracey.depellegrin@thegsajournals.org).

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- Peer Review Focus Issue
- New Website and Print Redesign

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