

Learning from Each Other

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Often when finalizing an issue of *Science Editor*, I'll realize a theme has emerged organically. For this Fall 2020 issue, many of these articles focus on how we can learn from one another. In the case studies in this issue, readers will find authors sharing their experiences so others may follow in their success and avoid their missteps. Additional articles describe ways to share information and skills so that others can get the most out of the editing and peer review process.

In an article that does both, Marc Domingo and Simon Harris provide a blueprint for implementing transparent peer review (TPR) in "Transparent Peer Review—A Practical Solution to Implement Open Peer Review at Scale: A Case Study." For journals interested in TPR (i.e., publishing reviewer comments and author responses with an article), the authors provide a wealth of information and materials that can be applied to any TPR process if their exact workflow isn't right for your journal. One goal of TPR is to provide readers with every possible bit of information that may aid in reproducing the research findings. For many readers, they may be superfluous, but for some, a key detail in a peer review report may save a fellow researcher from following a misguided path that was addressed during peer review but not clear in the published article. Published peer review reports also provide valuable insights into the peer review process at a journal, informing potential submitters and reviewers of the standards and rigor of a journal's review process.

Because of its importance in the scientific enterprise, it's not uncommon for scientists to lament the dearth of formal peer review training. Exposing the review process via TPR helps, but there is no substitute for providing early career researchers with hands-on experience reviewing manuscripts. Although this can occur informally through mentoring in labs, it is important also to have initiatives such as the one described by Ruth Isaacson, Sarah Bay, and Megan McCarty at GENETICS in their recent article, "Supporting the Next Generation of Researchers: GENETICS Peer Review Training Program." The team at GENETICS recognizes that great reviewers need to be trained, and experienced editors and reviewers can help in this process. They have developed a comprehensive program providing this training to dozens of Genetics Society of America members each year and their article is a comprehensive framework for other journals and organizations to follow. High quality peer review relies on knowledgeable, engaged researchers, and reviewer training programs are essential to keeping a journal's collection of reviewers well stocked.

At its core, peer review is about sharing insights and information among peers so that researchers can learn from each other and move science forward. But that does not

quite happen organically most of the time. To achieve high-quality peer review, it typically takes high-quality editors and staff to facilitate it, as discussed in the profile of Jasmine Wallace, Peer Review Manager at the American Society for Microbiology, who spoke about her work in "Mastering the Art and Science of Peer Review." In her profile, Jasmine shares some of the skills and personal attributes she thinks are necessary for success in scientific editing and publishing and provides an optimistic outlook on the future of peer review. For more on peer review, be sure to read Barbara Meyers Ford's "Gatherings of an Infovore," filled with resources and information she has collected on the latest developments and controversies on this ever-changing subject.

Any discussion of sharing and learning from colleagues and experts in this 21st century must include social media, and two articles in this issue touch on how journals and editors can get the most from these platforms. As Geoffrey Shideler describes in his article "Evaluating Social Media Tools for Driving Journal Readership: A Case Study," when the American Water Works Association started a new journal, they wanted to share their articles widely and needed a strategy to do so effectively. They began with more traditional methods such as emailed tables of contents (eTOCs) and then moved to social media. However, by the time they started on this phase, dozens of articles had published and had never been promoted on social media by the journal or association. This delay is what makes this case study truly interesting: by separating publication, eTOCs, and social media promotion by months, they have distinct events they can use to measure article downloads. As seen in their example figure, a huge spike occurred just after sending eTOCs and then again after the social media posts. Because the social media posts occurred so long after initial publication, this #BirdBump (as Geoffrey calls it) is almost certainly the effect of social media and likely resulted in hundreds of readers finding these articles for the first time.

Another way we learn from each other is at meetings and webinars, such as the CSE's Annual Meeting, Fall Symposium, and regular webinars. Even when you are not presenting at a meeting, you can still share what you are learning as Jennifer Regala regales in her new column, "No Mo' FOMO: Using Social Media to Avoid Missing That Conference After All." Jennifer explores how social media, particularly live tweeting, can help us get the most out of all the amazing meetings and conferences occurring each month by excerpting and posting useful tidbits and insights. If you've ever followed a conference hashtag when you

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couldn't attend, Jennifer shares some helpful tips so you can return the favor and live tweet your next meeting.

Another avenue for sharing insights from a conference are Meeting Reports, such as those published in this issue from the CSE Annual Meeting in May 2020. First, our regular Keynote reporter, Peter Olson, recounts of Brian Nosek's "Keynote Address: Improving Openness and Reproducibility in Scholarly Communication." Dr. Nosek's Center for Open Science received this year's CSE Meritorious Achievement Award and their dedication to helping researchers, journals, and other stakeholders improve the transparency and share data and research freely and easily is outlined in his presentation. Next, Heather Blasco reports on the session, "Project Management Fundamentals for the Editorial Office," and the skills needed to implement complex projects at a journal or organization. Good project management skills are essential to an initiative's success because as session moderator Emma Shumeyko notes, "By breaking down a project into different phases, you can better put it into perspective, and force yourselves to establish goals from a 10,000-foot view." Lastly, Judy Conners reports from the session, "Open Access and Plan S: An International Comparison," assessing how Plan S and other open access initiatives are transforming the way journals are sharing and supporting research and data.

As an organization, CSE also strives to provide its members and the scientific publishing community with guidance through resources such as the "White Paper on Publication Ethics." In 2018, the CSE Editorial Policy Committee began updating the White Paper on a rolling basis, and Chair Kelly Hadsell and co-authors provide an overview of recent changes, including the roles and responsibilities of authors, editors, and sponsors, in their column, "Ethical Editor: Recent Updates to the CSE White Paper." The CSE Book Club is also a great way for members to share and learn while discussing an interesting book, as can be seen in Morgan Sorenson's review of the recent Book Club selection, "*American Sherlock: Murder, Forensics, and the Birth of American CSI*."

Finally, one of the reasons for sharing and learning from each other is to grow collectively, to better ourselves and society through our shared experiences and knowledge. But society and science have not always ensured that everyone

can benefit from these gains equally, many times actively excluding certain groups and demographics. Progress to reduce these disparities is slow-going, but there are steps that journals can take to further it. How editors, authors, and journals report on research participants can make a difference as described by Stacy Christiansen in her new *Style Bites* column on "Inclusive Language: Race and Ethnicity." Updating how demographics are reported using some of the thoughtful and sensitive language choices as recommended by recent updates to the AMA and other style guides not only improves the representation of historically underrepresented groups, but also improves the quality of the research itself, by forcing authors to be more descriptive and specific (for example, by discouraging meaningless demographics terms such as "Other"). Likewise, the CSE Board of Directors recently approved a similar update to *Scientific Style and Format*, encouraging authors to "Capitalize Racial and Ethnic Group Designations."

When viewed as a whole, the initiatives, projects, and recommendations shared in this issue of *Science Editor* help point the way to a more transparent, thoughtful, rigorous, social, and inclusive research and scientific publishing ecosystem.



Velodona togata, by Ewald Rübsamen. Included in the *Die Cephalopoden* written by Carl Chun (c. 1910) (Credit https://en.wikipedia.org/wiki/Ewald_Heinrich_R%C3%BCbsamen). Although the extent of its intelligence is debated, the nervous system of the octopus is comparatively large and complex, with some evidence that they are capable of learning (see, e.g., <https://www.scientificamerican.com/article/the-mind-of-an-octopus>)