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Editors moving forward: stick to academic basics, maximize transparency and respect, and enforce the rules

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Summary. Despite all that is taking place in STEM (Science, Technology, Engineering and Medicine) publishing, it is undisputable that editors remain the most important gate-keepers of the process. In this paper, we explore why editors need to continue to stick to basic editorial principles and use new digital technologies only to fortify the content, but not to substitute for its quality. To achieve this, in an age of multiple checks and balances, editors have to be carefully vetted and held as accountable as the authors that they screen. Short-cuts could have very negative and unintended consequences for that journal. A journal that suffers reputational damage might struggle to recover trust in its readership, and thus, at the risk of sounding cliched, it is better to prevent reputational damage than to cure it. The only way to avoid this is for editors to evolve and adapt to an increasingly critical post-publication movement that is demanding more transparency and accountability from the scientific base and from society, especially where research is publicly funded.

Key words. Change and evolution, coordination, peer review, quality control, social media scrutiny.

I direttori delle riviste vanno avanti: attenersi ai principi accademici, adottare trasparenza e rispetto e applicare le regole.

Summary. Nonostante i cambiamenti in corso nell'ambito delle pubblicazioni scientifiche (STEM - scienza, tecnologia, ingegneria e medicina), è indubbio che i direttori delle riviste restano i più importanti custodi del processo editoriale. In questo articolo vengono analizzati i motivi per cui i direttori delle riviste devono continuare ad attenersi ai principi editoriali fondamentali e a utilizzare le nuove tecnologie digitali solo per dare forza al contenuto, ma non per sostituirlo nella sua qualità. Per raggiungere questo obiettivo, in un'epoca caratterizzata da controlli ed equilibri, i direttori delle riviste devono essere attentamente sorvegliati e ritenuti responsabili tanto quanto gli autori che essi stessi valutano. Qualunque scorciatoia potrebbe avere conseguenze negative e inaspettate per quella rivista che non si attenesse a tali regole, che vedrebbe intaccata la propria reputazione e che dovrebbe faticare per recuperare la fiducia dei propri lettori. Quindi, a rischio di sembrare scontati, è meglio prevenire il danno alla reputazione piuttosto che curarlo. L'unico modo per evitarlo è che i direttori delle riviste si adattino a un crescente movimento sempre più critico, che richiede maggiore trasparenza e responsabilità da parte di chi contribuisce a costruire la base delle conoscenze scientifiche e dalla società, specialmente laddove la ricerca è finanziata pubblicamente.

Parole chiave. Cambiamento ed evoluzione, controllo di qualità, coordinamento, peer review, valutazione dei social media.

Editors' roles, then and now

The primary function of a journal editor is that of a gatekeeper of academic publishing, even in the new digital media age. This is because gatekeepers, as the name implies, serve to verify and control, through appropriate vetting processes, what comes into a journal, and what gets processed before release to the public[1]. Academics may argue what has changed if the basic role of an editor remains the same? In fact, so much has changed over the last 5-10 years, from paper-based peer-review and editing by pen through online submission systems, to networking, communication, promoting journals and attracting new potential authors to journals via social media, all of which directly influence the need for editors to develop new skills and approaches, expanding their roles while maintaining responsibility[2,3]. Indeed, basic necessary skills, such as expertise and having experience in a specific field of science, a solid publication record and apt qualifications and roles, such as effective communication with members of the publishing triad (authors, reviewers and publisher), will ensure that transparency, objectivity and the highest scientific standard during the entire publication process will remain the same[4], or improve. Recently, however, new skills and challenges are needed, in addition to basic ones, due to the development of digital technologies in the publishing area and due to the widened use of social media in science communication[5,6], i.e., editors need to become "Twitter-savvy"[7].

In this rapid evolution of the humanities and STEM (Science, Technology, Engineering and Medicine) publishing landscape, editors need to be trained before they assume their position on an editor board. A basic standard for the majority of traditional STEM journals, even today, is that editors must be properly

vetted, and their profiles must be examined beyond research or publishing experience[8] and trained before they are recruited as editors[9]. Are editors capable of making tough ethical decisions, or do they leave these decisions exclusively to the editor-in-chief (EIC)? Although editors generally have broad academic autonomy as to what is accepted in their journals, legal and marketing-related issues generally fall outside of this academic scope, narrowing their editorial independence[10,11*].

One of the critical tasks of publishers is to respect, promote and protect editorial independence by supporting business plans and by mutual and regular communication between the parties of the publishing triad, thereby ensuring the intellectual value of their journals[12]. Another critical task involves the development and application of clear and transparent editorial policies that correspond with the guidelines of different ethical bodies, such as COPE (Committee on Publication Ethics)[13], WAME (World Association of Medical Editors)[14], CSE (Council of Science Editors)[11], and others[15,16].

An editor's research and publishing history should be carefully researched, an unpalatable duty, to prepare them for the social media age[16]. Ethical blemishes such as retractions as a result of data manipulation, duplication, or actual or perceived ethical infractions that could undermine the journal's reputation, such as cronyism or actual or perceived conflicts of interest[1,12,16], should result in the removal of an editor, unless the journal and publisher believe that the skill sets of that editor, and their ability to address past infractions, far outweigh any negative image-related damage caused by that history. The same principle applies at the post-vetting stage. If at any time any validated concerns are raised by the peer pool or public about the ethical robustness of an editor, then generally, that editor should be relieved of their position and duties. A journal that is seen as taking swift action to remedy a reputational crisis will be seen as righting its ills, thereby repositioning itself on the path to recovery of academia's trust. A classic case that evolved in 2014 is the Serbian open access (OA) journal, *Archives of Biological Sciences*, which removed its entire editor board, including the EIC, after it was found that the journal had engaged in financial corruption and cronyism, replacing it with a carefully vetted new editor board and new EIC, who promptly began to clean up its erroneous literature by issuing several dozen retractions within weeks after the editorial transition[17].

Similar to authors, editors have now entered the age of real-time criticism, which is possible with even just a single Tweet. A non-scientific example is the crash of Milo Yiannopoulos, a conservative outspoken British gay critic of left-wing ideologies, who lost a book deal and his position as editor at Breitbart, when a 16-year old teen ousted him on Twitter by revealing his ethical inconsistencies in a YouTube video[18]. In the world of STEM publishing, a salient example was the 2017 crash in the public trust of Veruscript, and closure of its controversial *Journal of Intelligence and Terrorism Studies*, which Veruscript claimed to have been falsely accused of links with spying[19]. Then there is the mini French revolution attempted by a science watchdog[20], Leonid Schneider, in the take down of the Centre National de la Recherche Scientifique (CNRS) Interim President, Anne Peyroche, via a coordinated Pubpeer-, blog- and Twitter-based campaign[21-23]. A mass resignation of editors from Springer Nature's *Journal of Molecular Medicine* as a result of the publisher's disregard of the editors' opinion regarding the choice of a new editor in 2017 may have tainted its 150-year old reputation[24]. This indicates that there are ample cases at the fringe between academic publishing and social media (Twitter and blogs) that have the power to influence the actions and responsibilities of editors, as well as their legendary status.

Thus, editors are now constantly being monitored in a post-publication age, and even non-academic issues can lead to reputational damage if not carefully managed. In this 140-character Twitter age, where reputations can go from boom to bust, even in the space of days or weeks[25], editors have the responsibility of working closely with publisher management to ensure that the published product is academically sound. This implies a close association with reputational managers, and also social media managers that are able to effectively and honestly promote the journal's content and image. Editors' roles have evolved considerably to being an ivory tower academic elite, to having to be highly sensitive to changes in social media, paying close attention to current trends and criticisms, including if they or their journals are being "monitored" by whistle-blower blogs like PubPeer[26].

Editors: move forward, but stick to academic basics

A reason why some editors do not give their heart and soul to a journal is because they see themselves being exploited by high-profit STEM publishers which focus on their own market growth[10,27,28]. The vast majority of editors and peer reviewers serve freely as journal gate-keepers[29], and superficial online badges, point-like systems, ranking as is offered by Publons[30], or intangible remuneration, are both insufficient and unsustainable. Remuneration and forms of recognition of reviewers have been a main talking point between editors and other members of the scientific publishing for years[31]. Here, publishers have great corporate responsibility by offering financial remuneration for professional services rendered or even company stock to incentivize long-term investment.

The peer review process must change, but must not be scrapped. Peer review is, precisely what the

* «Editorial Freedom The editor-in-chief will have complete authority to determine the *editorial content* and to choose *theme issues* within the defined scope of the journal and to participate in the development of the advertising policy» (http://zygoscient.org/roles-responsibilities-of-editors/).

name suggests, the review of that work by professionals in that field while avoiding an abuse of the system in place for this verification process to take place[25]. In addition to traditional peer review, which continues to be flawed[32], some additional steps could be implemented to fortify the robustness of the process.

1. The first involves the use of preprints in which a paper is published online on a journal's website, and not on servers like *bioRxiv*[33]. Since such material is unsafe to cite, because its claims have not been independently tested or verified, a preprint serves simply to demarcate an intellectual claim, but not to prove its academic worth, which must be verified by traditional peer review[34]. So, a three-phase peer review process is suggested: a preprint phase, a defined period of traditional peer review[35], and a post-publication peer review phase.
2. These three phases of peer-review could involve open peer review and the requirement for open data to gain greater trust in the unbiased transparency of the process[6,36]. These three steps are likely good enough to ensure that a paper is able to survive a wide range of critique, and thus good enough to be released to the public as veritable "peer reviewed" work. This may imply that less volume per year is published, or that the publishing process takes a little longer. However, quality cannot and should never be replaced by increasing volumes, i.e. by quantity[2]. In the long run this may be not contradictory to market growth and sharing demands of STEM publishers[27] because only high quality science and scientific publishing will be able to serve society and thus survive competition on the market. Some believe that the current peer model may be heading for the archives because it is not built to deal with the fast-paced evolution of this social media-affected age of publishing[7,10].
3. Ultimately, editors play a key role in creating, and sustaining trust, in close coordination with the publisher, and transparent interaction with the peer pool on social media[3,7], such as post-publication peer review platforms, Twitter**, or Facebook, seeking to promote the fruits of their hard work through alternative metrics, and not relying on artificial metrics to claim the quality of their journal[37]. All of this, while keeping a watchful eye on competing "predatory" OA publishers that might violate basic ethical and editorial codes, and risks that face their own journal such as hijackings[38].
4. There needs to be a greater focus on what is published, and its reproducibility, rather than on where it is published[39].

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** Editors also serve an important function of disseminating the findings of academics in their journals. For example, in February 2018, the Nature Reviews Genetics editors indicated that they would post "the latest developments in research and policy" via their Twitter account, thereby shaping the conversation (https://www.nature.com/nrg/).

References

1. Gottlieb JD, Bressler NM. How should journals handle the conflict of interest of their editors? Who watches the "Watchers"? JAMA 2017; 317: 1757-8.
2. Horton R. Offline: the crisis in scientific publishing. Lancet 2016; 388: 322.
3. Farrimond V. Introducing our social media guide for editors. https://bit.ly/2quUl8l (2017) (last accessed: April 5, 2018).
4. Scopus. Frequently asked questions: the role of an editor. https://bit.ly/2ISPFRr (2014) (last accessed: April 5, 2018).
5. Marušić A. Publishing scientific journals in the digital age: opportunities for small scholarly journals. Pril (Makedon Akad Nauk Umet Odd Med Nauki) 2014; 35: 17-21.
6. Rogers H. Academic journals in the digital age: an editor's perspective. J Vic Cult 2016; 21: 112-7.
7. Carpenter J. Journal editors get Twitter-savvy. https://bit.ly/2qvnJfB (2014) (last accessed: April 5, 2018).
8. Teixeira da Silva JA, Al-Khatib A. How are editors selected, recruited and approved? Sci Eng Ethics 2017; 23: 1801-4.
9. De Castro P, Napolitani F, Poltronieri E, Rossi AM. Scientific editors in Italy: identity, certification and roles. Recenti Prog Med 2016; 107: 567-73.
10. Jefferson T. Sticking to principles and anticipating outcomes. Recenti Prog Med 2017; 108: 347-9.
11. CSE (Council of Science Editors) 2.1. Editor Roles and Responsibilities. https://bit.ly/2EHWgf7 (2018) (last accessed: April 5, 2018).
12. Early TJ. Medical Journals, Publishers, and Conflict of Interest. JAMA 2017; 317: 1759-60.
13. https://bit.ly/2GUXOrT (last accessed: April 5, 2018).
14. https://bit.ly/2JDlsad (last accessed: April 5, 2018).
15. Dobránszki J, Teixeira da Silva JA. Editorial responsibilities: both sides of the coin. Journal of Educational and Social Research 2016; 6: 9-10.
16. Liu JJ, Bell CM, Matelski JJ, Detsky AS, Cram P. Payments by US pharmaceutical and medical device manufacturers to US medical journal editors: retrospective observational study. BMJ 2017; 359: j4619.
17. Teixeira da Silva JA. Archives of Biological Sciences: from falling star to glimmer of hope. Self-published 8 pages. https://bit.ly/2GUIUxS (2015) (last accessed: April 5, 2018).
18. https://bit.ly/2kV7eZv (last accessed: April 5, 2018).
19. https://bit.ly/2HkplCw (last accessed: April 5, 2018).
20. Teixeira da Silva JA. Science watchdogs. Academic Journal of Interdisciplinary Studies 2016; 5: 13-5.
21. https://bit.ly/2IPR0bv (last accessed: April 5, 2018).
22. https://bit.ly/2Hxm68v (last accessed: April 5, 2018).
23. https://bit.ly/2FUk1Cl (last accessed: April 5, 2018).
24. https://bit.ly/2JI0Hu3 (last accessed: April 5, 2018).
25. Teixeira da Silva JA. On the abuse of online submission systems, fake peer reviews and editor-created accounts. Pers Bioét 2016; 20: 151-8.
26. https://www.pubpeer.com/ (last accessed: April 5, 2018).
27. Horton R. Offline: what is the point of scientific publishing? Lancet 2015; 385: 1166.
28. Larivière V, Haustein S, Mongeon P. The oligopoly of academic publishers in the digital era. PLoS One 2015; 10: e0127502.
29. Teixeira da Silva JA, Katavić V. Free editors and peers: squeezing the lemon dry. Ethics & Bioethics 2016; 6: 203-9.
30. https://publons.com/community/awards/ (last accessed: April 5, 2018).

31. Eaton KA, Holland GR, Giannobile WV, Hancocks S, Robinson PG, Lynch CD. How is research publishing going to progress in the next 20 years? Transcription of Session for Editors, Associate Editors, Publishers and others with an interest in scientific publishing held at IADR Meeting in Seattle on Wednesday, 20 March 2013. Journal of Dentistry 2014; 42: 219-228.
32. 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: 22-40.
33. http://biorxiv.org/ (last accessed: April 5, 2018).
34. Koutsoyiannis D, Blöschl G, Bárdossy A, et al. Joint Editorial: Fostering innovation and improving impact assessment for journal publications in hydrology. Hydrology and Earth System Sciences 2016; 20: 1081-4.
35. Teixeira da Silva JA, Dobránszki J. Excessively long editorial decisions and excessively long publication times by journals: causes, risks, consequences, and proposed solutions. Publishing Research Quarterly 2017; 33: 101-8.
36. Hitchcock T, Kelley JM. Reinventing the Academic Journal: The "Digital Turn", Open Access, & Peer Review'. History Workshop Online (22 April 2013). https://bit.ly/2qtv66p (last accessed: April 5, 2018).
37. Teixeira da Silva JA, Bernès S. Clarivate analytics: continued omnia vanitas impact factor culture. Science and Engineering Ethics 2018; 24: 291-7.
38. Dadkhah M, Maliszewski T, Teixeira da Silva JA. Hijacked journals, hijacked web-sites, journal phishing, misleading metrics and predatory publishing: actual and potential threats to academic integrity and publishing ethics. Forensic Sci Med Pathol 2016; 12: 353-62.
39. http://asapbio.org/digital-age (last accessed: April 5, 2018).

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