

## The editor's bookshelf

*Bookshelf is compiled by Anna Maria Rossi (annamaria.rossi@iss.it). Please contact Anna Maria if you wish to send items or become a member of the EASE journal blog (<http://ese-bookshelf.blogspot.co.uk>) and see your posts published in the journal.*

### EDITORIAL PROCESS

Fanelli D, Ioannidis JPA, Goodman S. **Improving the integrity of published science: An expanded taxonomy of retractions and corrections.** *European Journal of Clinical Investigation* 2018;48(4):e12898  
Journal practices for amending publications offer too few incentives for authors and editors to correct or retract articles when errors have been made. The authors present a unique and expanded set of amendment formats and procedures, each of which addresses a distinct issue. This new taxonomy integrates and unifies the diversity of formats currently deployed and suggests five new ones.  
doi: 10.1111/eci.12898

Roediger HL. **Anonymity in scientific publishing.** *Observer* 2018;31(4)  
Is there room for anonymous manuscript submissions and reviews in the era of transparency in science? In this article, the past president of the Association for Psychological Science (APS) provides some insight into publication practices. Anonymous submission helps researchers who are starting out, giving them a shot at a fairer process, but there are counterarguments. For example, signing reviews represents a danger to young scholars who might have recommended rejection of a paper written by someone senior, who might later become an editor or be asked to provide a reference for the young reviewer.

### ETHICAL ISSUES

Acuna DE, Brookes PS, Kording KP. **Bioscience-scale automated**

**detection of figure element reuse.** *bioRxiv* 2018 Feb. 22  
The authors describe a copy-move detection algorithm that finds reused images in the biological sciences literature even if they have been rotated, resized or had their contrast or colours changed. An analysis of figure element reuse is presented on a large dataset comprising 760,000 open access articles and 2 million figures.  
doi: 10.1101/269415

Berg J. **Measuring and managing bias.** *Science* 2017;357(6354):849  
Implicit biases – those that we are not consciously aware of – are intrinsic human characteristics that should be acknowledged and managed, rather than denied or ignored. Implicit association tests can be a useful tool for understanding and measuring implicit biases. Even those involved in research should consider randomising and blinding experiments, including animal and other studies, when feasible.  
doi: 10.1126/science.aap7679

Cochran A. **Paper accepted... unless the letter was forged.** *The Scholarly Kitchen* 2018 Apr 18  
The American Society of Civil Engineers (ASCE) has become aware of seven fake acceptance letters for its journals over the last five years. Someone promised acceptance in a journal and misrepresented a relationship with ASCE. Also, a certain number of conferences advertised that the top 10 papers submitted would be sent to one of ASCE journals. The author, ASCE Associate Publisher and Journals Director, suggests adding detailed and complete information to instructions for authors about what an author should expect from the journal after submitting a paper.

Lundine J, Bourgeault IL, Clark J, *et al.* **The gendered system of academic publishing.** *The Lancet* 2018;391(10132):1754-56  
Despite growing numbers of women in the research workforce, most authors, peer reviewers, and editors at academic

journals are men. This leads to women's underrepresentation and disadvantage in other areas of scientific enterprise. Women receive less research funding, and thus they publish fewer research articles; being less visible, they are less likely to be invited as peer reviewers and editors. Editors and publishers should address those gender gaps.  
doi: 10.1016/S0140-6736(18)30950-4

McNutt MK, Bradford M, Drazen JM, *et al.* **Transparency in authors' contributions and responsibilities to promote integrity in scientific publication.** *PNAS* 2018;201715374  
The authors, a group of editors and publishers, propose changes to journal authorship policies and procedures to provide insight into which author is responsible for which contributions, assurance that the list is complete, and clearly articulated standards to justify authorship. They recommend that journals adopt common and transparent standards for authorship.  
doi: 10.1073/pnas.1715374115

### INFORMATION RETRIEVAL

Shotton D. **Funders should mandate open citations.** *Nature* 2018 Jan 9  
Analyses of citations can reveal how scientific knowledge develops over time and illuminate patterns of authorship. Such information is essential for assessing scholars' influence and making wise decisions about research investment. Bibliographic databases and citation indices are also crucial to individual researchers to find relevant papers throughout the literature. According to the author, all publishers must make bibliographic references free to access, analyse, and reuse.

### LANGUAGE AND WRITING

Yoshihara Motojiri, Yoshihara Motoyuki. **"Necessary and sufficient" in biology is not necessarily necessary - confusions and erroneous conclusions resulting from misapplied logic in the field**

**of biology, especially neuroscience.***Journal of Neurogenetics*

2018;32(2):53-64

The authors describe an incorrect use of logic in current biology (especially neuroscience) which involves careless application of the “necessary and sufficient” (N&S) condition originally used in formal logic. The words N&S are not only misleading, but the way of thinking of researchers when they use them is often incorrect. In most cases, the authors propose to use “indispensable and inducing”.

doi: 10.1080/01677063.2018.1468443

**PUBLISHING****How to be a great journal editor: advice from eight top academic editors.***Times Higher Education**Features* 2017, Dec. 14

Editing an academic journal is a vital and rewarding task, but also time-consuming and often frustrating. Eight top academic editors share their experiences of various issues: peer review, editing a small journal, promoting good science, and other tasks.

Grimaldo F, Marušić A, Squazzoni F.

**Fragments of peer review: A quantitative analysis of the literature (1969-2015).***PLOS One* 2018 Feb 21

This paper examines research on peer review between 1969 and 2015 by looking at records indexed from the Scopus database. The most prolific and influential scholars, the most cited publications, and the most important journals in the field were identified. The number of publications doubled from 2005, largely from the US, but also with important research groups in Europe. There is a lack of large-scale, cross-disciplinary collaboration.

doi: 10.1371/journal.pone.0193148

**Reporting of preclinical research: what do we get told - when and how?***Medical Writing* 2017

(4):20-23

At present, there are no specific requirements for the reporting of preclinical research, and many studies, particularly those with negative results,

never get published. However, routine and reliable reporting of all research – preclinical, clinical, laboratory, animal or human based, and with positive or negative outcomes – is essential to the future of collaborative and successful clinical research. Several new ideas are proposed to promote such reliable reporting.

**Packer M. Does anyone read medical journals anymore?***Medpage Today*

2018 March 28

In the past, physicians kept up with current medical literature. But today, physicians merely click the table of contents as a duty, spend less than 30 seconds perusing the titles, but rarely click any paper. Much of the literature is replete with data and analyses that are satisfying to the authors, but never reach potential readers.

**Singh Chawla D. Most researchers disclose their results before publication.***Physics World* 2018 May 17

More than two-thirds of researchers have released the results of at least one study they have authored before the findings were formally published. A survey of more than 7000 researchers across nine disciplines found that social scientists, mathematicians, biological scientists, and those working in agriculture have the highest disclosure rates, around 75%. Most academics do this to get feedback from peers.

**Wijewickrema M, Petras V. Journal selection criteria in an open access environment: A comparison between the medicine and social sciences.***Learned Publishing*

2017;30(4)

This study compares 16 factors that influence journal choices between medicine and social sciences using the answers given to a global survey of 235 open access journal authors. Authors of both areas consider “peer reviewed” status as the most important factor. Those in medicine give more consideration to impact factor, inclusion in abstracting and indexing services, publisher’s prestige, and online submission with a tracking facility.

doi: 10.1002/leap.1113

**RESEARCH EVALUATION****Stark PB. Before reproducibility must come preproducibility.***Nature*

2018 May 24

Most papers fail to report many aspects of an experiment or an analysis that are crucial to understanding the result and its limitations, and to repeating the work. The author proposes a new neologism, “preproducibility”: an experiment or analysis is preproducible if it is described in adequate detail for others to be able to repeat it. It requires information about materials, instruments and procedures, experimental design, raw data, computational tools used in analyses, and so on.

doi: 10.1038/d41586-018-05256-0

**SCIENCE**Colombo M, Duev G, Nuijten MB, *et al.***Statistical reporting inconsistencies in experimental philosophy.***PLOS One* 2018 Apr 22

Experimental philosophy (x-phi) is a young field of research at the intersection of philosophy and psychology. The authors investigated the prevalence of statistical reporting errors in x-phi. Results showed that the rates of inconsistencies in x-phi were lower than in the psychological and behavioural sciences.

doi: 10.1371/journal.pone.0194360

**Knepper TC, McLeod HL. When will clinical trials finally reflect diversity?***Nature* 2018;557:157-159

Many studies show that the likelihood, nature, and severity of side effects from a medication can differ between populations. For this reason, funders and researchers have repeatedly said that clinical trials should include more participants from ethnic minorities. An analysis of drug studies shows that most participants are white, even though trials are being done in more countries.

Thanks to John Glen.

**Anna Maria Rossi**

Publishing Unit

Istituto Superiore di Sanità, Rome

annamaria.rossi@iss.it