

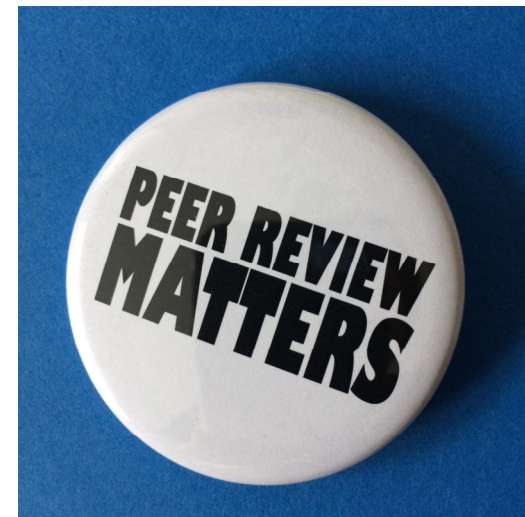
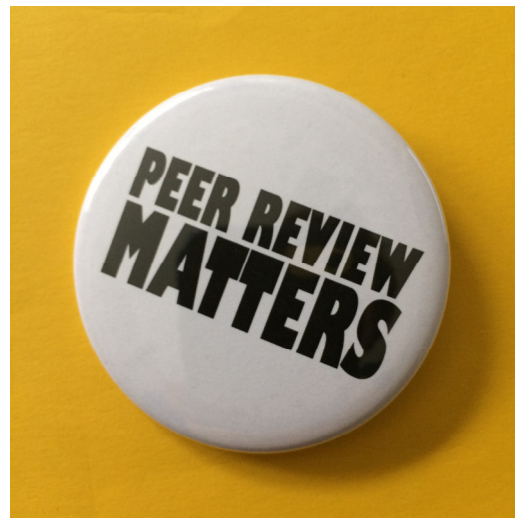
# Ethical issues and transparency in peer review



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PEERE conference [#peere2018](#), Rome, 8 March 2018



# The 'burden' of peer review

Is this the right way to think/talk about peer review?

*'Burden':*



an oppressive duty, obligation

something difficult or unpleasant you  
have to deal with or worry about

a duty or misfortune that causes  
worry, hardship, or distress

## Google search results

*"burden of peer review"* - 96,700

*"peer review is broken"* - 19,300

*"appreciate peer review"* - 346

*"enjoy peer review"* - 311

## @YourPaperSucks – “Collecting the finest real specimens of reviewer comments”

“I am afraid this manuscript may contribute not so much towards the field’s advancement as much as toward its eventual demise”

“I have rarely read a more blown-up and annoying paper in the last couple of years than this hot-air balloon manuscript”

“I found the entire premise of the work to be utterly theoretically bankrupt”

“This is an interesting manuscript, not because of its results, but because of its complete ignorance of due scientific process”


“This paper reads like a woman’s diary, not like a scientific piece of work”

“Have you no command of the English language?”

“The work that this group does is a disgrace to science”

“X has never had an original thought in his life and wouldn’t know what to do with it if he did” (IH)

# System is stretched ... lacking support, unsustainable?




**Elisabeth Bik** @MicrobiomDigest · Feb 23

I wrote about this before, but as an experienced peer reviewer it was my dream one day to become an Editor of a journal. Then I would finally be taken seriously as a scientist. Now that I am an Associate Editor, I have to deal with this.

Reviewer Invited	09 Jan 2018	<a href="#">Un-invite</a>
Reviewer Invited	08 Jan 2018	<a href="#">Un-invite</a>
Reviewer Declined	22 Dec 2017	No Reason Entered
Reviewer Declined	07 Jan 2018	<a href="#">Decline Reason</a>
Reviewer Declined	01 Feb 2018	<a href="#">Decline Reason</a>
Reviewer Declined	09 Jan 2018	No Reason Entered
Reviewer Declined	08 Jan 2018	<a href="#">Decline Reason</a>
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Reviewer Declined	21 Dec 2017	<a href="#">Decline Reason</a>
Reviewer Declined	18 Dec 2017	No Reason Entered
Reviewer Declined	02 Feb 2018	No Reason Entered
Reviewer Declined	31 Jan 2018	<a href="#">Decline Reason</a>
Reviewer Declined	28 Jan 2018	No Reason Entered
Un-invited Before Agreeing to Review		

54 86 212



**Elisabeth Bik** @MicrobiomDigest · Feb 23

I am seriously considering giving up this Associate Editor job. I have never received guidance on how to do the job (other than how to navigate the software), nor any feedback on how I did in the past year.

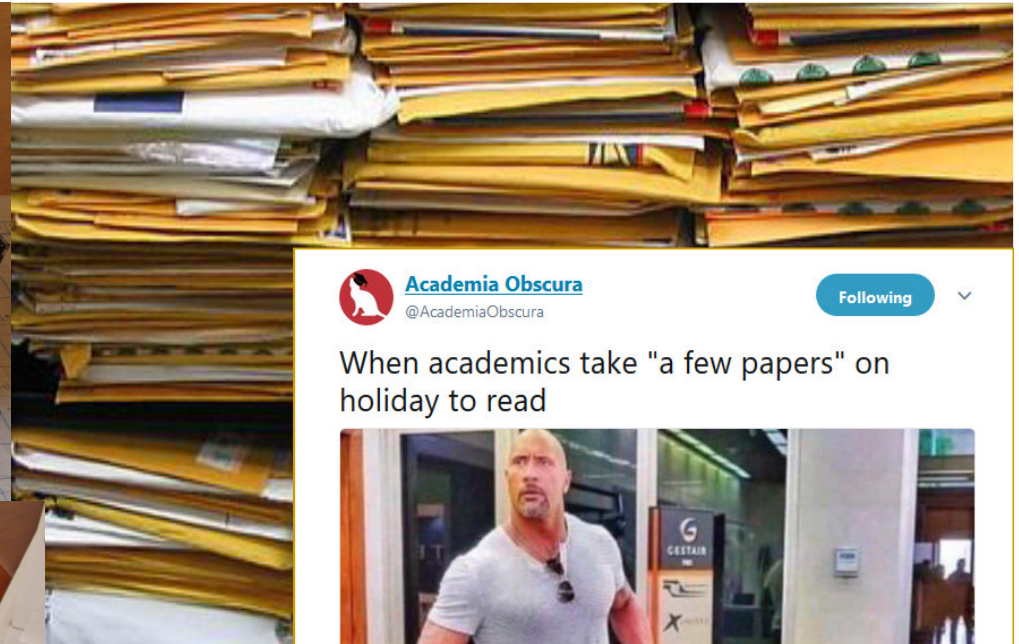
11 5 27

Being an editor is not just about moving manuscripts through an online peer-review system

... editors need training and guidance



# Not that long ago ...



**Academia Obscura**  
@AcademiaObscura

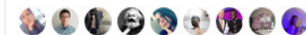
Following

When academics take "a few papers" on holiday to read



11:45 AM - 11 Sep 2017

374 Retweets 1,267 Likes



@irenehames

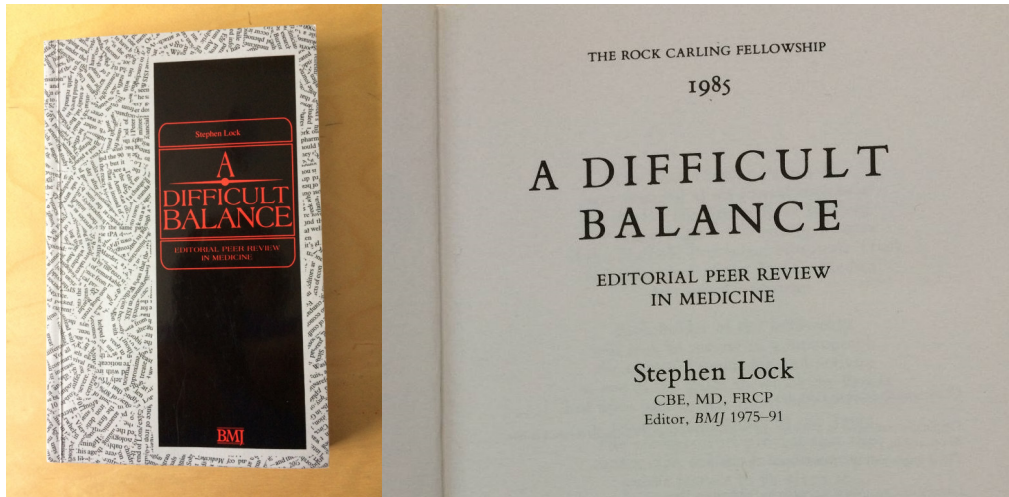
#peere2018

# Review length

- Not a proxy for review quality, but ...
- *Publons* data, ~379,000 reviews: average review length  
2017 = 342 words (2016 = 457)
- This is what 342 words looks like. Is it possible to do a proper review in this length, to comment on all parts of a paper, on the data, its analysis and presentation?

[illegible]

## Stephen Lock, Editor *BMJ* 1975 - 1991



*“And underlying these worries was yet another: that scientific articles have been hijacked away from their primary role of communicating scientific discovery to one of demonstrating academic activity.”*

*‘A Difficult Balance. Editorial peer review in medicine’, Introduction to third impression, BMJ, 1991, p.xi.*





## Stop this waste of people, animals and money

Predatory journals have shoddy reporting and include papers from wealthy nations, find David Moher, Larissa Shamseer, Kelly Cobey and colleagues.

**P**redatory journals are easy to please. They seem to accept papers with little regard for quality, at a fraction of the cost charged by mainstream open-access journals. These supposedly scholarly journals are mostly restricted mainly to the developing world. In one famous sting, a journalist for *Science* sent a purposely flawed paper to 140 presumed predatory titles (and to a roughly equal number of other open-access titles), pretending to

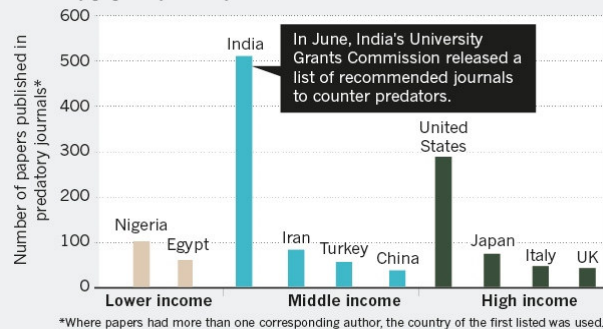
Our evidence disputes this view. We spent 12 months rigorously characterizing nearly 2,000 biomedical articles from more than 200 journals thought likely to be predatory. More than half of the corresponding authors hailed

Moher et al (2017) *Nature* 549: 23-25

### GLOBAL PREDATION

A sample of 1,907 papers in more than 200 supposed predatory journals found that most of the articles come from India. Surprisingly, however, more than half of the papers have authors from higher-income or upper-middle-income countries.

Predatory papers by country and income



©nature

# Can we trust what we read?

## China's Publication Bazaar

Hvistendahl (2013) *Science* 342: 1035-39

A *Science* investigation has uncovered a smorgasbord of questionable practices including paying for author's slots on papers written by other scientists and buying papers from online brokers.

**SHANGHAI, CHINA**—The e-mail arrived around noon from the mysterious sender "Publish SCI Paper," with the subject line "Transfer co-first author and co-corresponding author." A message body uncluttered with pleasantries contained a scientific abstract with all the usual ingredients, bar one: author names. The message said that the paper, describing a



CREDIT: ADAPTED FROM AKINDO/ISTOCKPHOTO.COM

Contained data from >2 million individuals & >8000 animals

"In our view, publishing in predatory journals is unethical"

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# Erosion of trust in peer review?

- many cases of fake or ‘compromised’ peer review (> 500 retractions on *Retraction Watch*)
- and ...
  - third-party services suggesting fake reviewers
  - editors creating fake reviewer accounts to submit favourable reports
  - editors editing reviews to better fit their decisions
  - ‘imposter’ editors guest-editing issues
- happening in established, reputable journals

## Retraction Watch

Tracking retractions as a

### 64 more papers retracted for fake reviews, this time from Springer journals

with 7 comments

This is officially becoming a trend: Springer is pulling another 64 articles from 10 journals after finding evidence of faked peer reviews, bringing the [total number of retractions from the phenomenon](#) north of 230.



Given that there have been about 1,500 papers retracted overall since 2012, when we [first reported on the phenomenon](#), faked reviews have been responsible for about 15% of all retractions in the past three years.

This isn't the first time Springer has faced the issue. As owner of the BioMed Central journals, it issued [43 retractions for faked reviews](#) earlier this year.

In a [statement](#), the publisher explains how the latest round of retractions came to light:

Springer confirms that 64 articles are being retracted from 10 Springer subscription journals, after editorial checks spotted fake email addresses, and subsequent internal investigations uncovered fabricated peer review reports. After a thorough investigation we have strong reason to believe that the peer review process on these 64 articles was compromised. We reported this to the Committee

## Retraction Watch

Tracking retractions as a

### "Compromised" peer review hits three papers from Nature Publishing Group

without comments

Nature Publishing Group is retracting three papers today, after an investigation found evidence the peer-review process had been compromised.

The publisher issued a statement saying they had notified corresponding authors and institutions associated with the three papers, which were all published last year in the journals *Cancer Gene Therapy* and *Spinal Cord*.

Here's the note that's going on each of the papers, (they're the same, except for the publication date):

The Publisher and Editor retract this article in accordance with the recommendations of the Committee on Publication Ethics (COPE). After a thorough investigation we have strong reason to believe that the peer review process was compromised.



## Retraction Watch

Tracking retractions as a

### Seven papers flagged earlier for fake reviews now retracted by Elsevier

with 2 comments

Elsevier has now retracted the seven papers it [flagged in October](#) as being affected by fake peer reviews.

If you're not keeping track, we are: We have logged a total of about 300 retractions for [fake peer review](#), in which some aspect of the peer-review process becomes compromised — for instance, in the case of the newly retracted papers, authors appear to have created fake email accounts in order to pose as reviewers and give the green light to their own papers.

The same [retraction note](#) applies to five of the recently retracted papers:

This article has been retracted at the request of the Editor and the Publisher.

After a thorough investigation, the Publisher has concluded that the acceptance of this article was based upon the positive advice of at least one faked reviewer report. The report was submitted from a fictitious email account which was provided to the journal as a suggested reviewer by the corresponding author during the submission of the paper.



# 'Fake' review

## Retraction Watch

Tracking retractions as a

### Retraction count grows to 35 for scientist who faked emails to do his own peer review

with 9 comments

[Hyung-In Moon](#), the South Korean plant compound researcher who [made up email addresses so he could do his own peer review](#), is now up to 35 retractions.



Hyung-In Moon

The four new retractions are of the papers in the *Journal of Enzyme Inhibition and Medicinal Chemistry* that initially led to suspicions when all the reviews came back within 24 hours. Here's the [notice](#), which includes the same language as Moon's 24 other retractions of studies published in Informa Healthcare journals:

The corresponding author and publisher hereby retract the following articles from publication in *Journal of Enzyme Inhibition and Medicinal Chemistry*:

Effect of betaine on the hepatic damage from orotic acid-induced fatty liver development in rats

Jae-Young Cha, Hyeon-Soo Kim, Hyung-In Moon, and Young-Su Cho

## Retraction Watch

Tracking retractions as a

### BMC editors update retraction after investigation clears authors of faking peer reviews

with 7 comments

Editors at BioMed Central have taken the unusual step of updating a retraction notice after an investigation found the authors were not responsible for a peer review process gone awry. The paper is one of dozens of other papers [retracted in March](#) for fake peer reviews.



That month, the paper "[Clinical application of contrast enhanced ultrasound to diagnose benign prostatic hyperplasia](#)" in *Diagnostic Pathology* was among the 43 papers retracted due to fake peer reviews. (Retractions for the phenomenon — more about it in our [Nature](#) feature [here](#) — are up to about 170.)

According to the update posted in July, an investigation into the paper by the Jiaxing Central Hospital in Shanghai, where the authors work, found that they "did not participate in influencing the peer review process."

Here's more from the [update to the notice](#):

## Retraction Watch

Tracking retractions as a

### 17 retractions from SAGE journals bring total fake peer review count to 250

without comments

On Monday, we reported on [64 new retractions from Springer journals](#) resulting from fake peer reviews. Yesterday, SAGE — which [retracted 60 papers for the same reason just over a year ago](#) — added 17 additional retractions to their list.



The articles were published in five different journals, and one retraction involved authorship fraud in addition to peer review fraud, according to a SAGE spokesperson:

In all 17 cases, our investigation found the peer review processes had been severely compromised by fake reviewer details that were supplied to manipulate the peer review process.

The investigations and subsequent retractions are a reflection of improved processes and guidance provided by SAGE to editors and peer review assistants that SAGE further enhanced following a group of retractions in 2014. Today's retractions are historical in nature and reflect SAGE's efforts to uncover instances of fraud that predate the new process.

NATURE | NEWS

## Publishers withdraw more than 120 gibberish papers

Conference proceedings removed from subscription databases after scientist reveals they were computer-generated.

Richard Van Noorden

24 February 2014 | Updated: 25 February 2014

[Rights & Permissions](#)

The publishers Springer and IEEE are removing more than 120 papers from their subscription services after a French researcher discovered that the works were computer-generated nonsense.



## Retraction Watch

Tracking retractions as a

### In more faked peer review news...10 papers pulled by Hindawi

with 7 comments

Guess what? We've got more cases of fraudulent peer review to report — our [second post of the day on the subject, in fact](#). In the latest news, Hindawi Publishing Corporation has retracted 10 papers for "fraudulent review reports," after an [investigation of more than 30 papers that had been flagged this summer](#).



The investigation found that author [Jason Jung](#), a computer engineer at Yeungnam University in Korea, "was involved in submitting the fraudulent review reports" for four of the retracted papers, according to the publisher's CEO. In the case of the other six, the authors didn't appear to be involved.

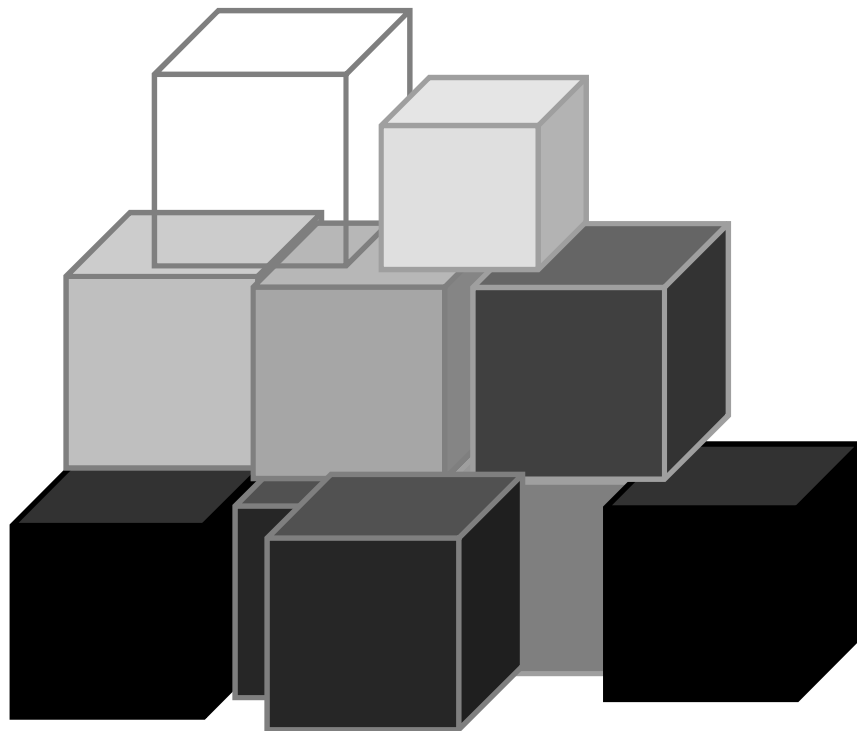
Hindawi Publishing Corporation, which publishes over 400 journals, doesn't ask authors for potential review suggestions — making a common route to fake peer review more difficult. In July, when Hindawi announced it was investigating the papers, it [posted a statement](#) saying that they suspected the editors had created fake reviewer accounts.

The retraction note on Jung's papers — identical except for the title at the beginning — explains that each paper has

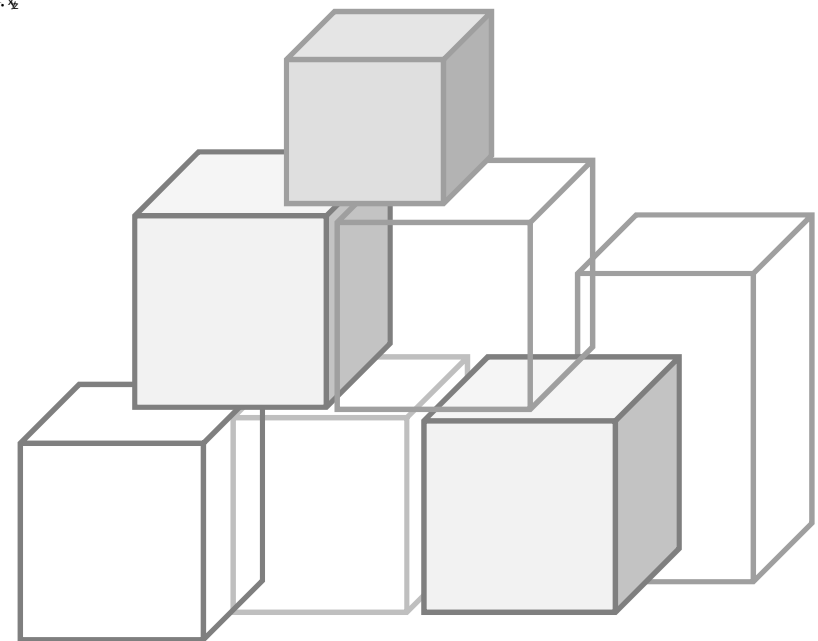
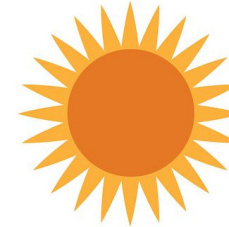
@irenehames

#peere2018

Lots of 'black' boxes



Transparency





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# Transparency in peer review

## Journal

- ❑ type of peer review, processes, who's involved, who's making decision/s, expectations, how manuscripts from Editors and EiC handled, what has been peer reviewed/not
- ❑ standards and policies, screening done, e.g. textual duplication & images, timelines, TOP guidelines

## Paper

- ❑ title, abstract, data, availability, accession codes, trial registrations, sample sizes, materials, RRIDs, protocols, reporting guidelines (*Nature*/Nature journals reporting summary forms & guidance, EMBO Press reporting checklist)
- ❑ ethical compliance & approvals

## Reviewers & Editors

- ❑ accurate personal representation, potential conflicts of interests

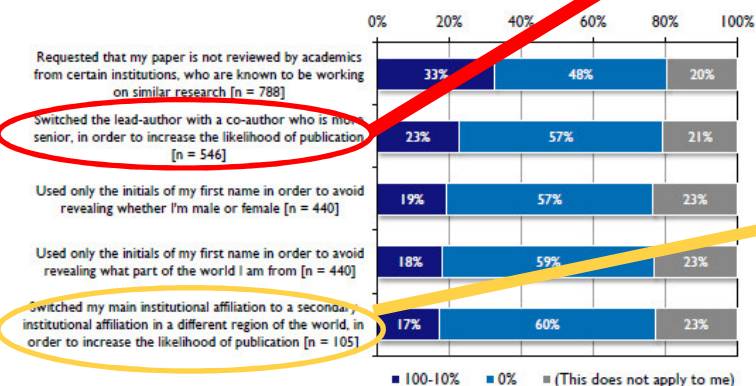
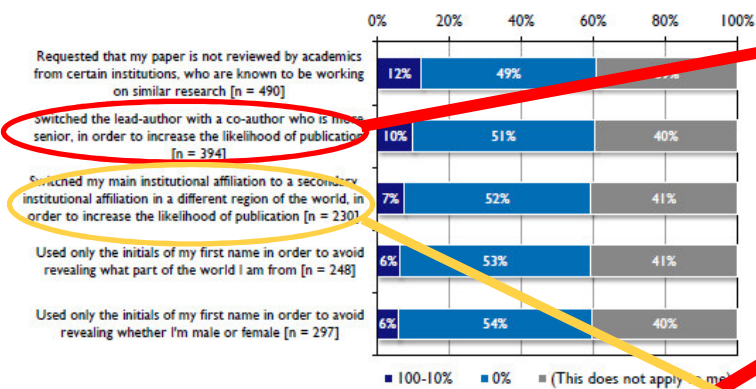
## Authors

- ❑ funding, potential conflicts of interest, appropriate attribution, true authorship listing and details

# 'Peer review in 2015: a global view' Taylor & Francis survey

## 2 Ethics in peer review

Q7 "Approximately, on what proportion of papers that you have submitted to single blind peer reviewed journals have you taken the following actions?"

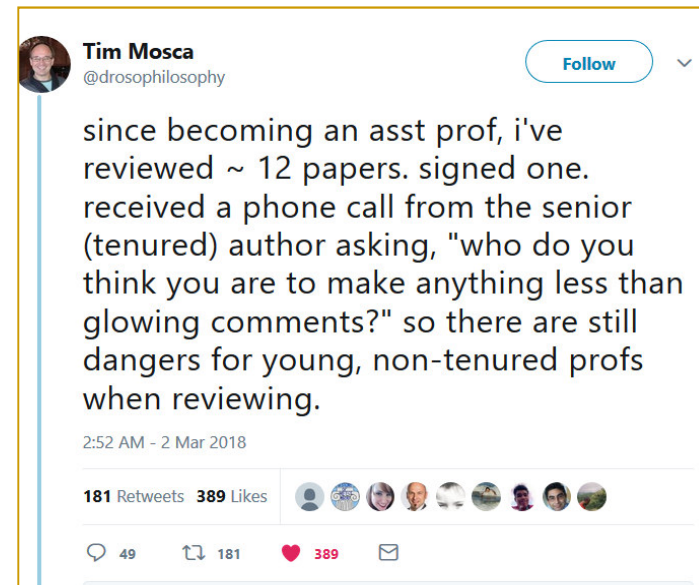
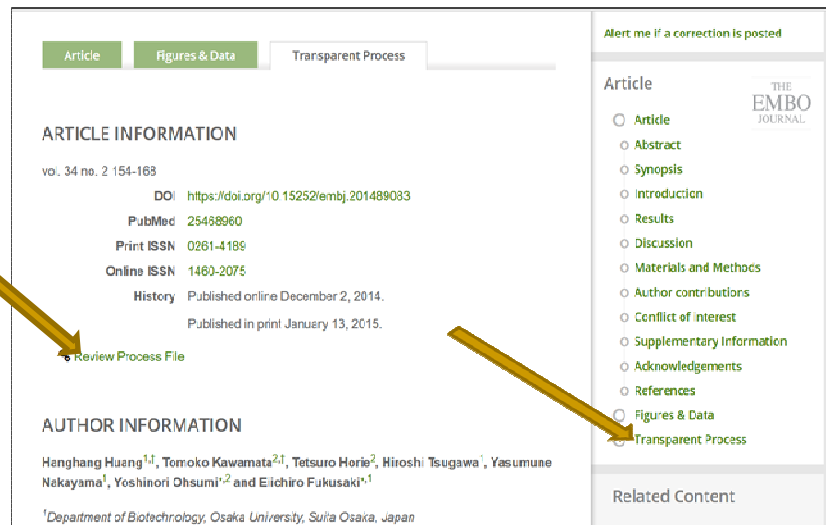


Switched the lead-author with a co-author who is more senior, in order to increase the likelihood of publication  
HSS 10%, STM 23%

Switched my main institutional affiliation to a secondary institutional affiliation in a different region of the world, in order to increase the likelihood of publication  
HSS 7%, STM 17%

# One thing that could help?

- Increasingly want to see reviews (and author responses) with articles I read, see into the 'black box'



- Reviewers don't need to be named
- Would like to see handling/decision editor named
- Would help expose 'predatory'/questionable journals

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# Public reports aren't new ... in 1832

Duke of Sussex (President Royal Society), referring to written reports/open practices of some foreign societies, particularly Paris Académie, said that the public reports were

*“often more valuable than the original communications upon which they are founded”*

Moxham, N & Fyfe, A 2017, 'The Royal Society and the prehistory of peer review, 1665-1965' *Historical Journal* DOI: [10.1017/S0018246X17000334](https://doi.org/10.1017/S0018246X17000334)



# In 1996 ...

**Recommendation**

2.1 The manuscript is  
☐ acceptable as it stands  
☐ acceptable with minor revision  
(and no requirement for reviewing or revised manuscript)  
☒ acceptable with revision and reassessment by reviewer  
☐ acceptable for publication in another journal  
☐ not acceptable

Is the manuscript better suited to another section of the journal? ☐ Yes ☒ No  
Which? *major*

The paper merits rapid publication ☐ ☒

3 Any additional comments  
*See attached*


4 Survey to improve reviewing procedures

4.1 Is this a subject area you are happy to review? ☒ ☐  
If no, why not? *willing!!*

Should this manuscript have been accepted for detailed reviewing? ☒ ☐

4.4 Do you mind your identity being made known to the author(s) if they ask? *Yes, I mind!!!* ☒ ☐

4.5 If additional reviewing is necessary, whom (with fax numbers if possible) would you suggest?

Signature:  Date: *7/2/96*

*neg ①*  
*96/2/9 ①*

*HOW DARE YOU!?*

**'Do you mind your identity being made known to the author(s) if they ask?'**

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## Reviewer in 1996

*“That you would consider making a reviewer’s identity known to the submitting authors is alarming in the extreme. How can such a practice not but undermine the peer review process and lower standards? ... I would hold the journal, not the reviewers, responsible for the evaporation of your journal’s credibility, and for an inexcusable erosion of the philosophical framework of modern plant biology.”*

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## ASAPbio @ASAPbio\_

- Scientist-driven initiative to promote transparency and innovation in life sciences communication
- ‘*Transparency, Recognition, and Innovation in Peer Review in the Life Sciences*’\* – meeting Feb 2018 #bioPeerReview Webcast archive <http://www.tvworldwide.com/events/peerreview/180207/> - majority of participants favoured:
  - Publishing the content of peer reviews (with or without the reviewers’ names) and making these reports a formal part of the scholarly record with an associated DOI
  - Formal recognition and credit for peer review activities from funding agencies and institutions
  - Acknowledging all contributors to a peer review report (such as students and postdocs) when submitting it to a journal

### COPE Ethical Guidelines for Peer Reviewers:

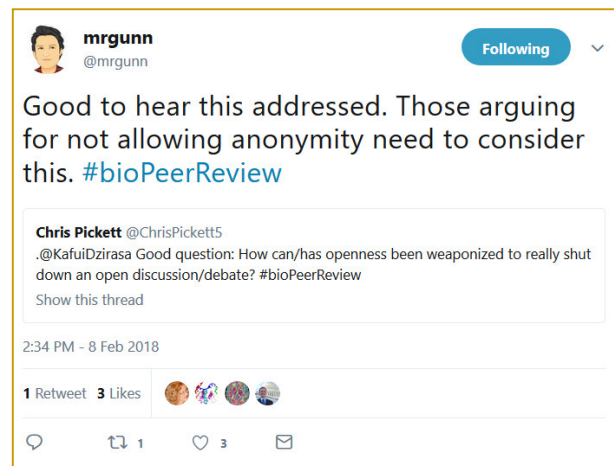
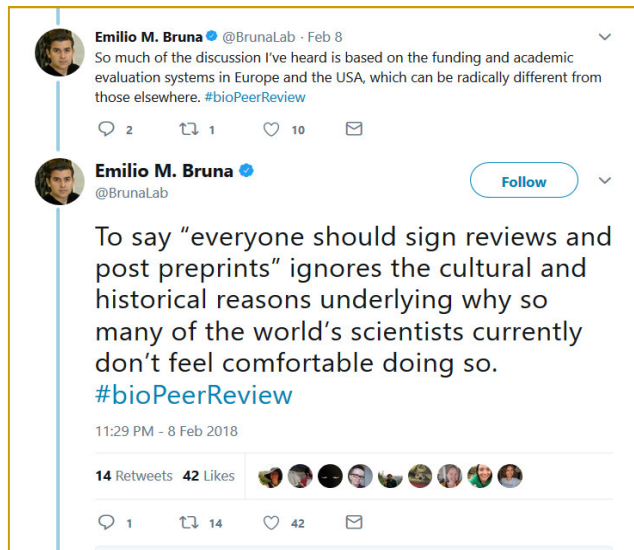
*“The names of any individuals who have helped with the review should be included so that they are associated with the manuscript in the journal’s records and can also receive due recognition for their efforts.”*

Committee on Publication Ethics <https://publicationethics.org/>

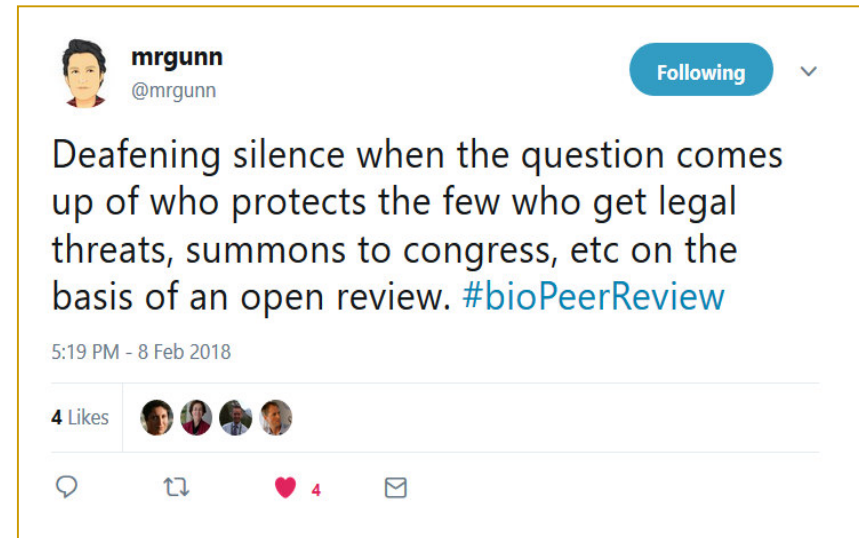
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# Social, cultural & global considerations



# Legal implications?



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# Transparency as indicator of peer-review quality

- Can help distinguish legitimate journals from 'predatory'/questionable journals
- Jelte Wicherts (2016):
  - proposal: transparency of the peer-review process is an indicator of journal peer-review quality
  - has developed and tested a 14-item tool for assessing transparency of the peer-review process based on journals' websites
  - two things most strongly predicted rejection of flawed (hoax) articles: **disclosure of identity of handling/decision editor (#6)** and **presence of publication ethics statements on journal website (#8)**

**Table 4. The revised tool and descriptive statistics of relevance ratings by 16 Dutch academic librarians (Study 3).**

No.	Item	%incl.	M	SD
1	Aims, scope, and expected readership of the journal are clearly specified on the journal's website (previously #1)	94	4.50	0.82
2	Criteria used by reviewers to rate submissions and types of submissions that are deemed appropriate for the journal are specified on the website	94	4.31	0.60
3	The website indicates whether all submissions are sent out for review and who will make final decisions about them (e.g., editor, associate/action editor) (previously #4)	88	4.00	0.52
4	The website provides targeted duration of the peer-review process and indicates that authors will be updated concerning the status of submissions (e.g., under review)	63	3.88	0.81
5	Authors are allowed to indicate names of (non-)desired reviewers	31	3.13	1.09
6	The identity of the (action/associate) editor who handled a submission is disclosed upon publication (previously #9)	31	2.75	1.12
7	Journal discloses the past (yearly) number of submissions, publications, and rejection rates (previously #10)	75	3.81	0.75
8	Journal's website highlights issues of publication ethics (e.g., plagiarism), copyright, conflicts of interest, and (if applicable) publication fees	88	4.19	0.66
9	Published papers include information on dates of original submission and acceptance (previously #13)	75	4.13	0.81
10	Website allows ratings of papers and post-publication commentaries by the community (previously #14)	31	3.19	0.83
11	Reviewer's comments and editorial correspondence are published alongside papers (previously #15)	38	3.06	1.12
12	The names and affiliations of members of the editorial board are listed on the website	100	4.38	0.50
13	The role of members of the editorial board is explicated on the website	63	3.69	0.95
14	The journal has clear guidelines concerning sharing and availability of research data	88	4.25	0.68

%incl. refers to percentage of stakeholders who agreed (4) or agreed strongly (5) with inclusion of the item in the final scale. Previous item rank numbers are given in parentheses.

doi:10.1371/journal.pone.0147913.t004

Wicherts JM (2016) Peer Review Quality and Transparency of the Peer-Review Process in Open Access and Subscription Journals. PLOS ONE 11(1): e0147913. doi:10.1371/journal.pone.0147913



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Grazie mille! ... questions?

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