

Peer Review Week 2018

- 10-16 September 2018
- Theme: Diversity and Inclusion in peer review
- Twitter: @PeerRevWeek
- #PeerReviewWeek18
- #PeerRevDiversityInclusion
- @mehmanib

Peer Review: Past, Present and future

Bahar Mehmani

Entre Pares, Mexico September 2018

Peer Review in our time

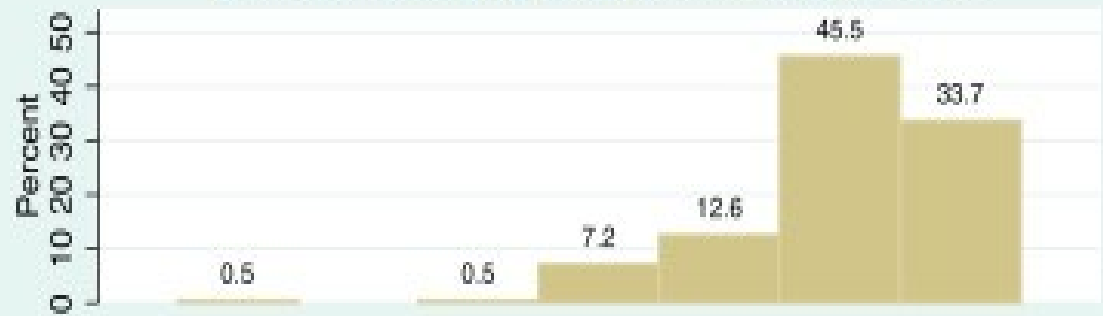


➤ 2,2M articles published in 2016

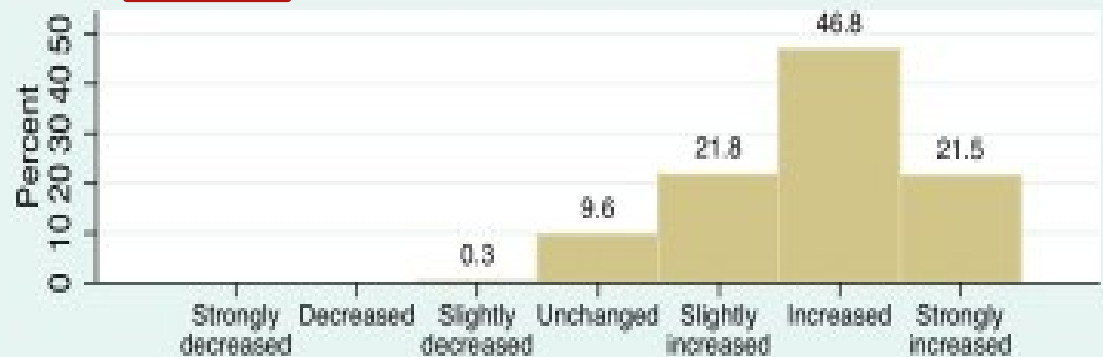
➤ Annual growth: ~5%

➤ Peer review: core part of publication

Perceived change in publication pressure



Perceived change in pressure to raise external funds



[Research Policy](#)

[Volume 43, Issue 10](#), December 2014, Pages 1747-1759

Why do you peer review?

- Playing my part in the research community
- Enjoy being able to help improve the paper
- Improving own writing skills
- Reciprocating the benefit gained

Elsevier: peer review survey 2015
Wiley: reviewer survey 2016

Let's not forget:



Average number peer
reviewed manuscripts



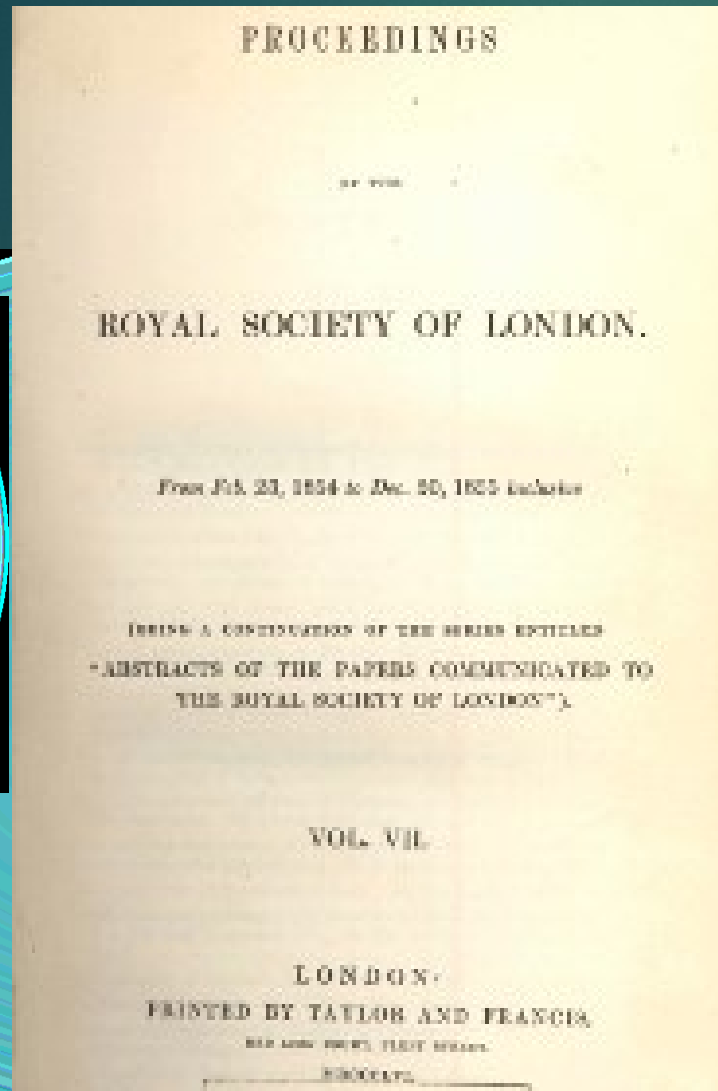
Average time spent
on the last peer
review report

1665: *Philosophical Transactions*



Henry Oldenburg

1831: Open Peer Review



William Whewell

Physical Review: 1936

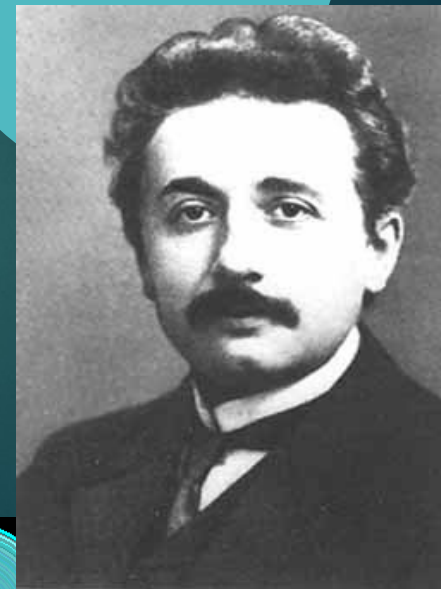
Dear Sir,

We (Mr. Rosen and I) had sent you our manuscript for publication and had not authorized you to show it to specialists before it is printed. I see no reason to address the—in any case erroneous—comments of your anonymous expert. On the basis of this incident I prefer to publish the paper elsewhere.

Respectfully,



John Torrence Tate



Albert Einstein

Lessons from the past

➤ Purpose of peer review is not set in stone

➤ Future of peer review depends on researchers' insight on
the purpose they want it to serve

Peer Review: Researchers' Insight

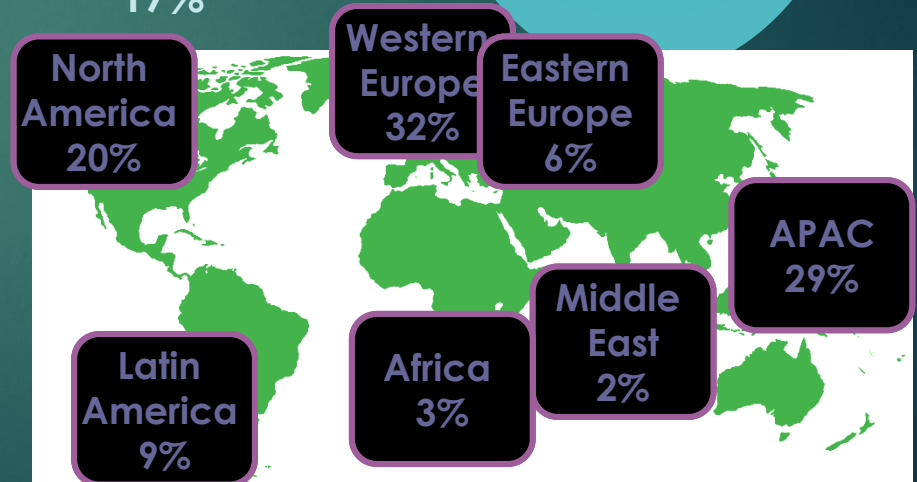
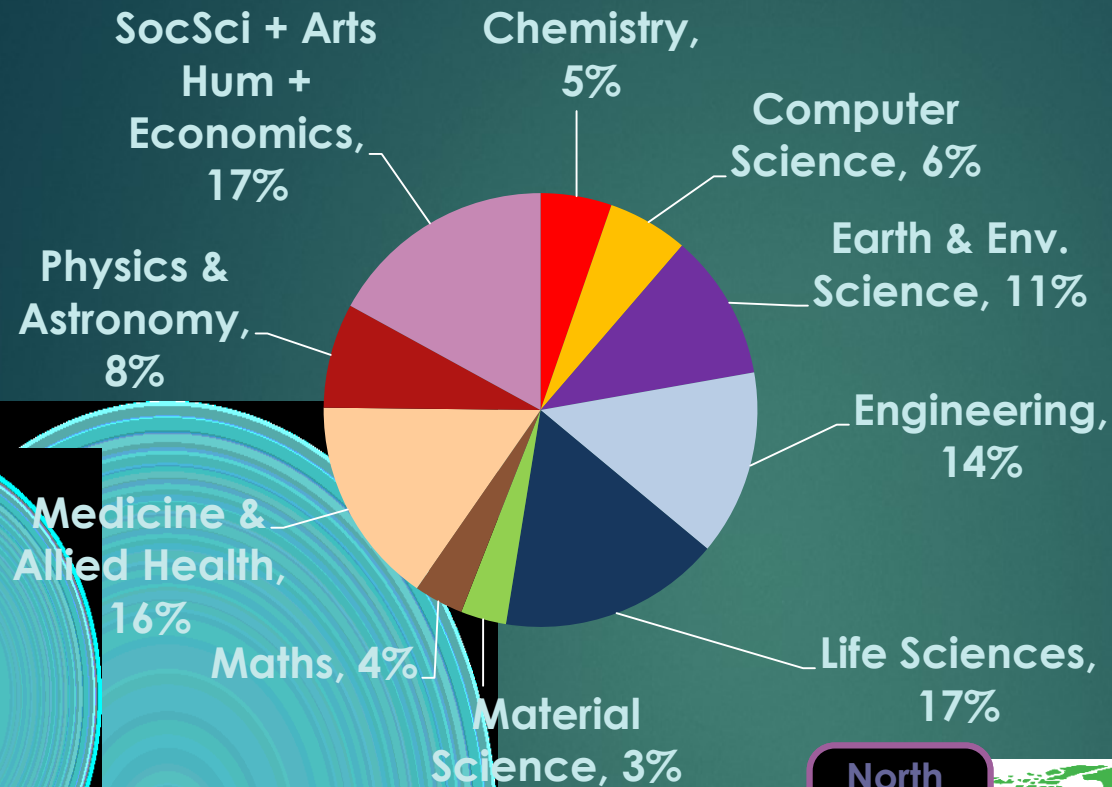
- Are you satisfied?
- What's the purpose?
- Why do you peer review?

**Elsevier
Survey: +2,000
researchers,
2015**

**OpenAIRE:
+3000
researchers,
2016**

**Wiley:
+3000
reviewers,
2016**

Demographics

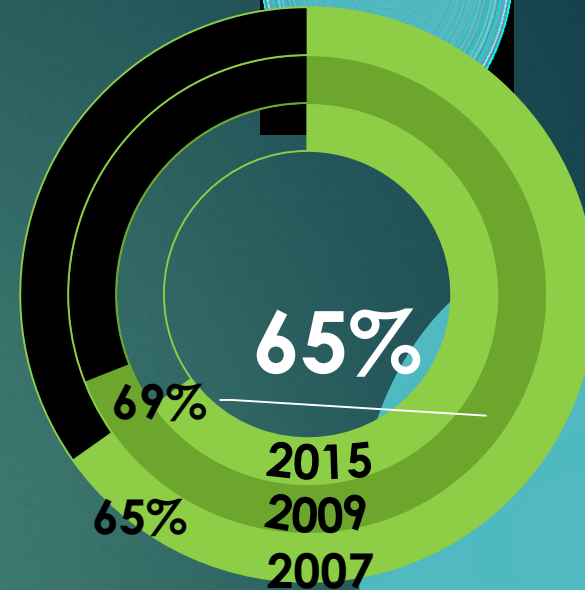


Are you satisfied with peer review?

without peer review
there is no control in
scientific
communication

83% agree

“Peer review is a valid way to verify the authenticity of a research. Without it, there would be a lot of distrust and suspicion on “great findings”.



Peer review helps
improve rejected
articles too

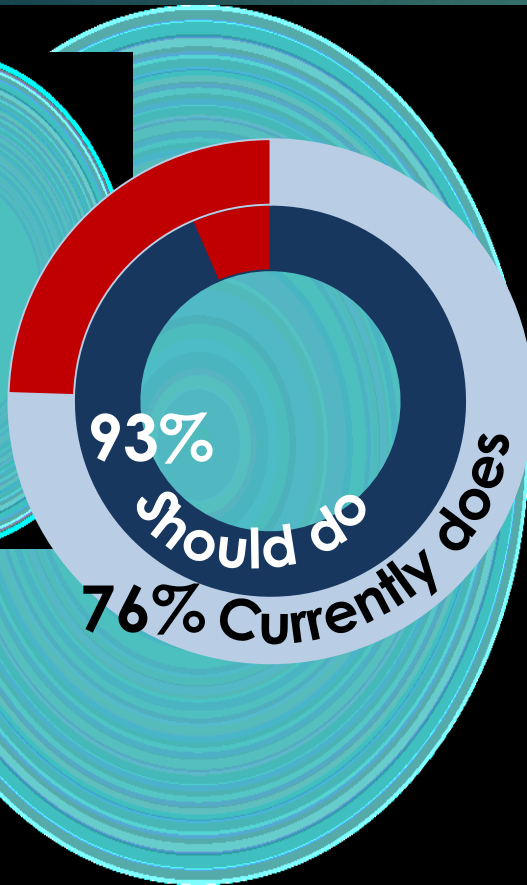
Peer review was...

Beneficial
76%

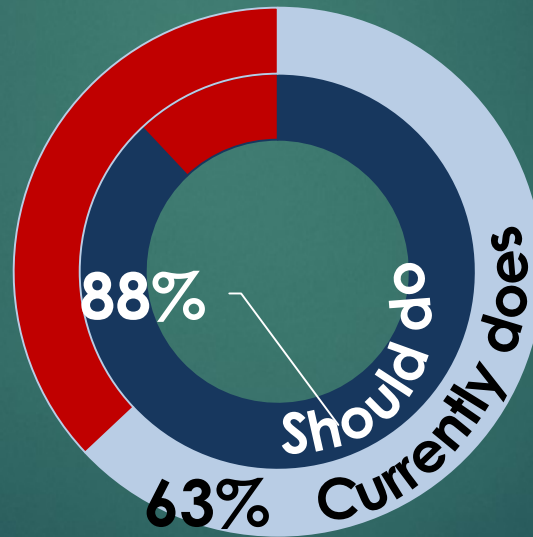
“Alternative interpretations of the data. Suggestions on better presentation of results in figures and/or tables. Word smithing.”

What is the purpose of peer review?

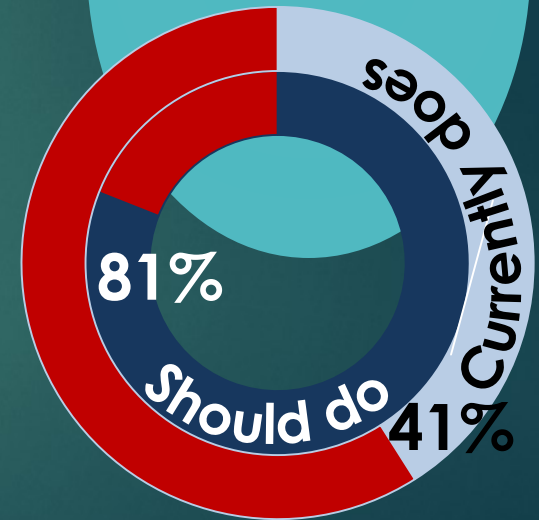
Improve Quality #1



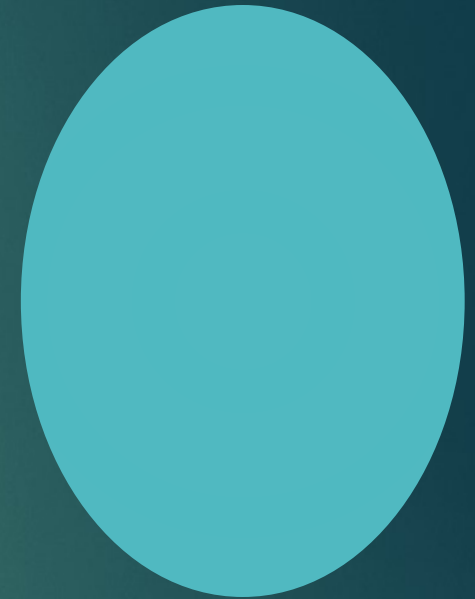
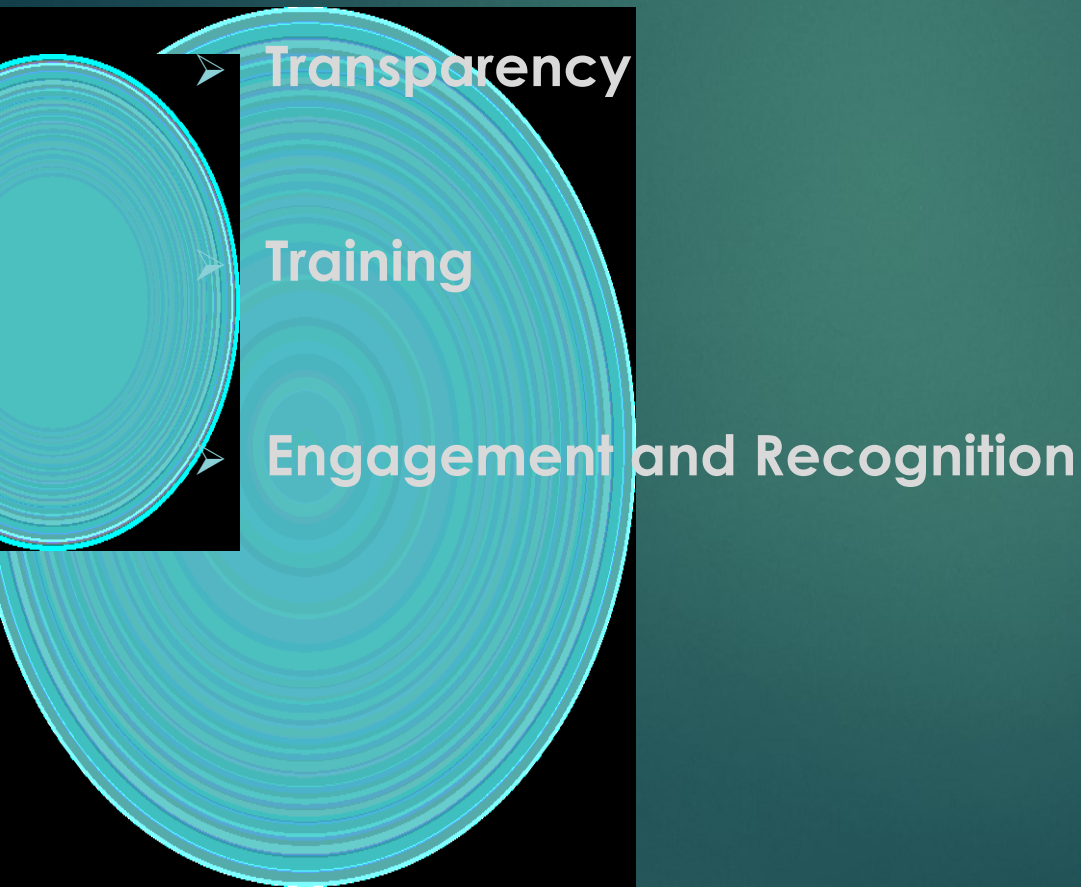
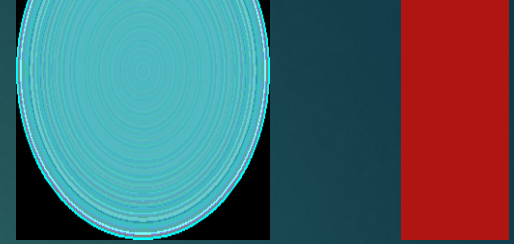
Detect Originality #2



Detect Fraud #3

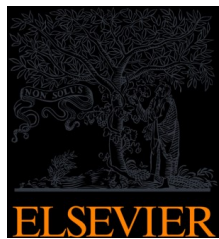


How can it be improved?



Transparency: OpenAIRE survey 2016

- ▶ 70% favor direct reciprocal discussion between author(s) and reviewers
- ▶ 60% agree publication of review reports improves review quality
- ▶ 74% agree that reviewers should be allowed to choose to reveal their identity



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ROYAL SOCIETY
OPEN SCIENCE

Transparency

Transparency: Who handled the peer review?



Advances in Mathematics

Volume 320, 7 November 2017, Pages 1-81



Euler class groups and the homology of elementary and special linear groups

Marco Schlichting 

Mathematics Institute, Zeeman Building, University of Warwick, Coventry CV4
7AL, UK

Received 4 August 2017, Accepted 10 August 2017, Available online 4 September 2017.

Communicated by Tomasz S. Mrowka



Check for updates

Transparency: How many reviewers?



Research in Developmental Disabilities

Volume 66, July 2017, Pages 1–15



The effectiveness of the computerized visual perceptual training program on individuals with Down syndrome: An fMRI study

Yi-Ting Wan^a, Ching-Sui Chiang^a, Sharon Chia-Ju Chen^b, Yee-Pay Wuang^{a, c}, , 

^a Department of Occupational Therapy, Kaohsiung Medical University, Kaohsiung, Taiwan

^b Department of Medical Imaging and Radiological Sciences, Kaohsiung Medical University, Kaohsiung, Taiwan

^c Department of Pediatrics, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan

Received 9 December 2016, Revised 16 March 2017, Accepted 26 April 2017, Available online 20 May 2017



Number of reviews completed is 2

 Show less

Transparency: Publishing review reports (example)



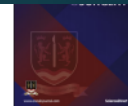
Annals of Medicine and Surgery

Volume 4, Issue 1, March 2015, Pages S1-S2



Annals of Medicine and Surgery

journal homepage: www.annalsjournal.com



Peer review report

Long-term results of open repair of popliteal artery aneurysm

M.U. Wagenhäuser✉, K.B. Hermaier✉¹
Duran✉¹

[+](#) Show more

<https://doi.org/10.1016/j.amsu.2015.01.001>

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Referred to by Peer review report 3 on Long-term Results of Open repair of Poplite...

Annals of Medicine and Surgery, Volume 4, Supplement 1, January–December 2015, Pages S1

Peer review report 3 on Long-term Results of Open repair of Popliteal Artery Aneurysm

Original Submission

Recommendation

Reject - invite resubmission.

Comments to the author

This paper describes treatment of popliteal artery aneurysm (PAA) from a single centre. Only 30 patients, operated on 42 legs. Open operation with medial approach in all cases. All aneurysm were resected at the operation. Different subgroups of the PAA are based on morphology, symptomatic or asymptomatic.

Control examination and assessment of the quality of life with clinical examination/duplex sonography and a homemade questionnaire.

Good operative results and patency in accordance with other

The outcome of this paper is not accordance with the title. The descriptions of the long-term results are few and weak. The operation technique could be better described in details. The anatomic dissemination of the aneurysm could be of interest for other surgeons who would like to use this approach instead of the posterior approach. The analysis of the 8 patients, who were deceased or did not participate in the control examination, could be more detailed, ex. From which group did they come and what did they die from?

The 12 patients who had bilateral operations: Symptoms from the legs, which group did they belong to; asymptomatic or symptomatic?

The answers from these 12 patients in the questionnaire: Did they get two or one questionnaire? How did the author assess the information from these questionnaires? Which leg was of current interest?

The discussion is very focused on endovascular treatment. The discussion consists of 36% of treatment which is not the author's treatment of choice and only 7% questionnaire review.

Training



Most Reviewers Desire Training

Desire was high among both early career and established researchers.

Demand for training by reviewing experience

less than 5 yrs

89%

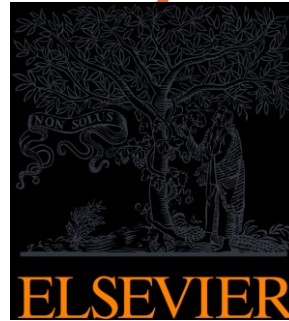
more than 6 yrs

65%

Researcher Academy

F1000

Faculty of 1000



 **Clarivate**
Analytics

 **publons**

WILEY



eLIFE

Training



Recognition

My Elsevier Reviews profile

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Consciousness and Cognition**

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* Create a signature

🕒 Yearly overview for 2017



Please find an overview of your review recognitions below.



Recognized reviewer - Consciousness and Cognition Achieved: January 2018

— You have been awarded this recognition because you completed at least one manuscript review in the last two years for **Consciousness and Cognition**.

View details for your full Elsevier journal review record and to claim your free certificate.

[View Detail...](#)



Outstanding reviewer - Cortex Achieved: June 2017

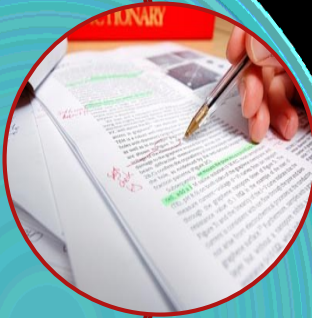
— You have been awarded this recognition as you are within the top 10th percentile of reviewers for this Journal, in terms of the number of manuscript reviews completed in the last two years. For **Cortex**, this meant a minimum of 2 reviews in two years. View details for your full Elsevier journal

Recognition: My Elsevier Reviews profile



Objective

- Recognition
- Engagement



Current Status

- +700,000 review profiles
- ~2000 Elsevier Journals
- ~50,000 of Volunteers



Furthermore

- Peer Review card on Mendeley profiles

Engagement and Feedback

Journal homepage



Registration page

Volunteer for Peer Review with JMB

JMB provides high quality and broad coverage in all areas of molecular biology. Editorial decisions are made by the editorial board members who are active scientists and recognized experts in their respective fields. The editorial board works very closely with a large number of dedicated reviewers to offer expert and constructive comments to authors with the goal of improving their manuscripts.

Register as a reviewer for Journal of Molecular Biology

Please make sure to specify your areas of expertise, your short CV, your motivation for choosing this journal to review for and indicate your availability. It is then up to the relevant editors to contact volunteer reviewers in order to request a review.

JMB Editors will consider volunteer reviews along with editor-invited reviews for each manuscript and provide feedback to volunteer reviewers.

The aim of this program is to offer a quick, constructive and fair peer-review process, to engage reviewers actively into the publishing process and to provide mentorship to researchers (especially early career) to provide meaningful and constructive reviews to their peers.



Review history:	Science, Scientific Reports, JACS, The Journal of Membrane Biology, International Journal of Molecular Sciences
Short C.V.:	JMB volunteer peer-review pilot
Other Journals:	Journal of Molecular Biology
List of subject areas:	NMR; structural biology; amyloid fibrils; macromolecular assemblies; protein filaments
Motivation:	to be actively engaged in the reviewing process.
Availability:	Monthly
Latest articles:	ORCID or Scopus ID

Engagement and Feedback



- 60% reply rate to initial notification
- 7.7 days in average to submit review
- 4.18/5 editor satisfaction
- 5/5 reviewer satisfaction

Feedback from reviewers:

“This was the first time that I got a detailed review/feedback on my review. It’s really helpful, and I think more journals should do this. Encourages a better review process, and also encouraged me that my efforts to improve the manuscript were appreciated by the authors/editors”

Feedback from editors:

“The review was far more comprehensive and helpful, both to the editor and to the authors, than the usual reports.”

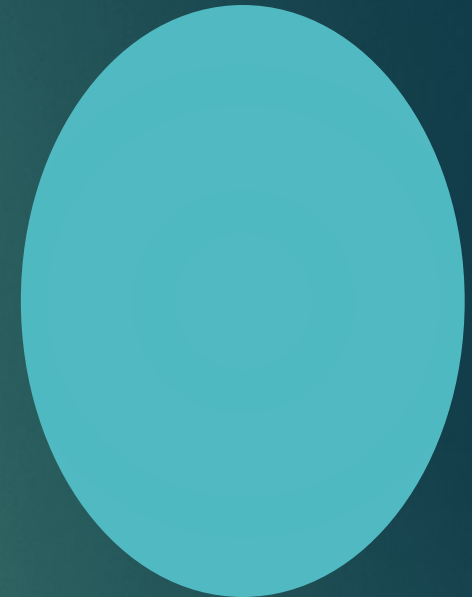
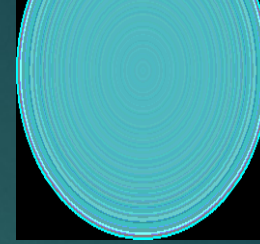
Peer Review in Future

- Measurable research output

- Transparent

- Inclusive and collaborative

- Technology enhanced



Thank you!



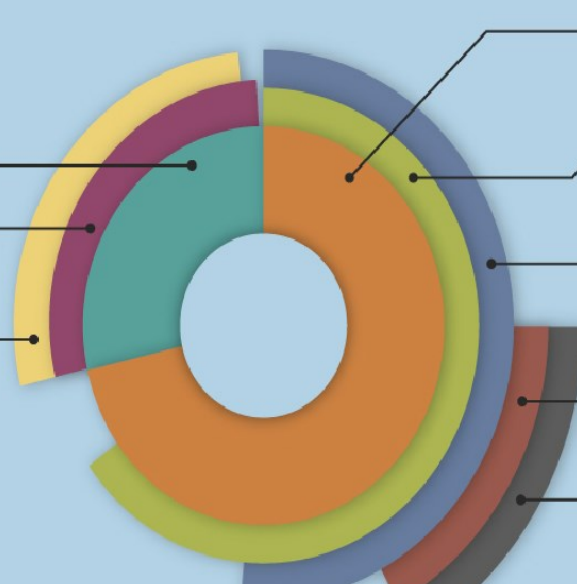
Transparency: Survey results

We surveyed 204 referees who had accepted

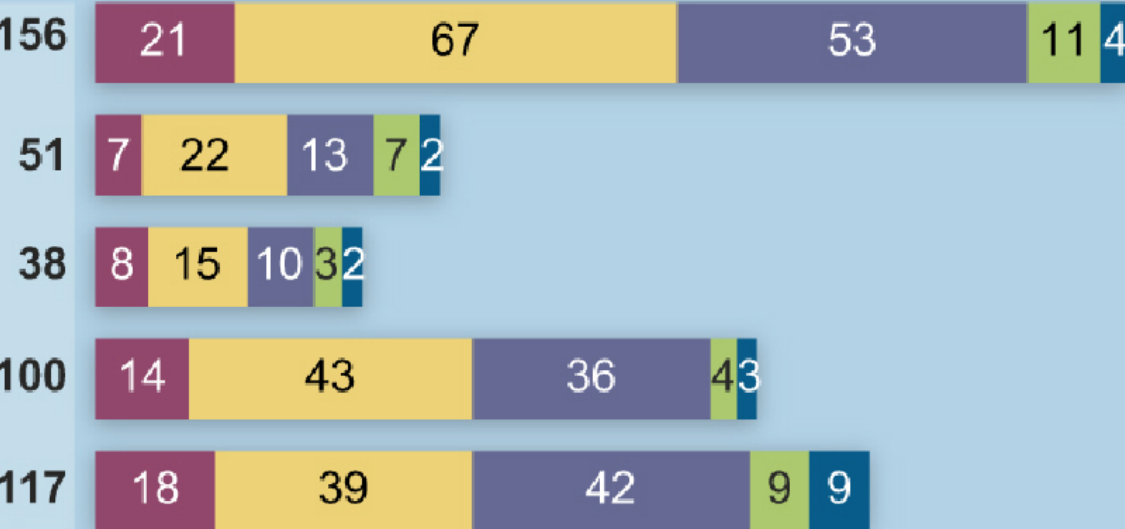
We surveyed 440 referees who declined

Response to the survey
Willing to accept further review invitations from the journal
Publishing referee reports did not influence their recommendation

40 (19.6%)
39 (97.5%)
38 (95.0%)



100 (22.7%) Response to the survey
91 (91.0%) Publication of referee reports was not the reason for declining
68 (68.0%) Indicated lack of time as the primary reason
24 (24.0%) Indicated personal reasons
23 (23.0%) Indicated a mismatch with areas of expertise



Very much
Liked it
Neutral
Disliked it
Didn't like it at all

Authors are supportive of the pilot

Transparency: Data analysis with PEERE

- No significant impact on accept-to-review
 - despite the design of the pilot
- No significant impact on recommendation type
- No significant impact on reviewer turn-around time



Engagement: VolunPeers

RRP registered volunteers in JMB

