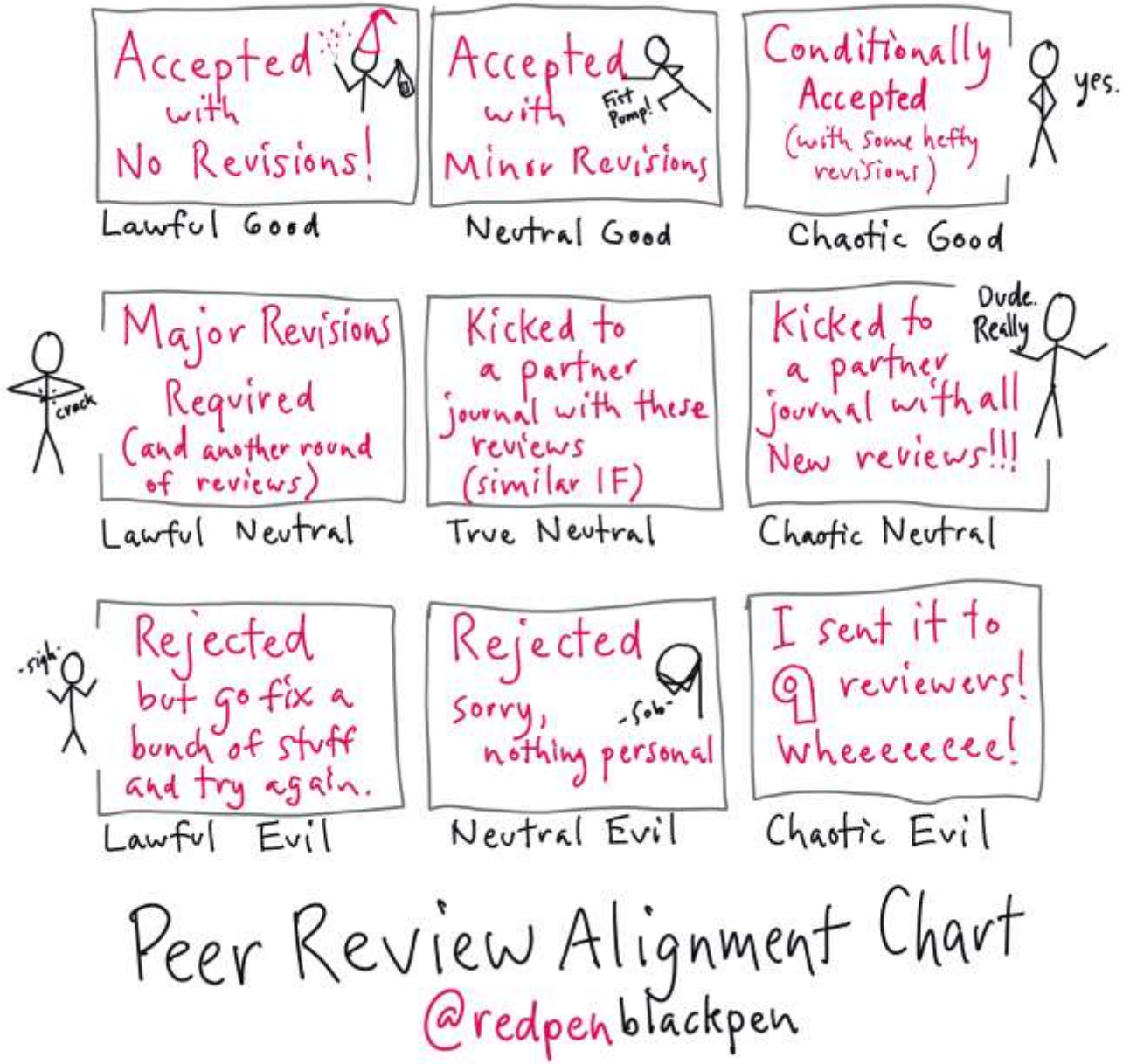
Peer Review Process: From Submission to Publication

4th October 2023

Disclaimer: The material is prepared for the students of IIT Gandhinagar and is intended as awareness of peer-review process. Images/Text sourced are cited as much as possible

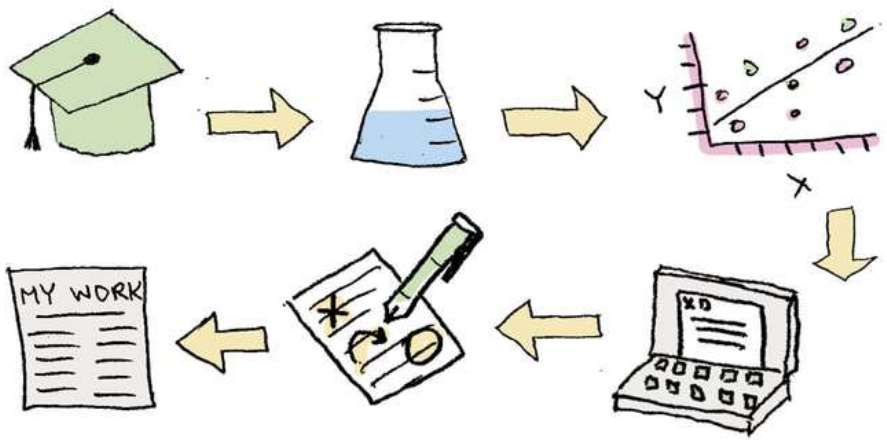


http://sandhya.varadh.com/2020/01/academic-jokes-on-twitter.html

Peer Review Process: From Submission to Publication

Getting science published

is a **Rigorous Process**



Let's Break It Down...

10 **Accepted!**

Did you know that **Scientists are not paid** for the papers they write?

https://www.kmeverson.org/blog/may-11th-2020

What is Peer Review?

- **Peer review** is designed to assess the validity, quality and often the originality of articles for publication. Its ultimate purpose is to maintain the integrity of science by filtering out invalid or poor quality articles

Review by peers

Includes researchers in the field of research

https://www.linkedin.com/posts/jason-thatcher-0329764_on-anonymity-and-reviewing-or-write-like-activity-7046628885119008768-eLfa/?originalSubdomain=cm

HOW RESEARCHERS REALLY FEEL ABOUT PEER REVIEW

To celebrate Peer Review Week 2016 (19th-25th September), this infographic examines the attitudes of researchers to peer review in scholarly communication. The research was carried out by Elsevier's Customer Insights team in collaboration with the PRC (Publishing Research Consortium) . Where data is available, results are compared to 2007 and 2009 figures.

86% of respondents have reviewed an article in the last 2–3 years

Those under **36** were less likely, while those aged **56–65** were more likely, to have reviewed

72% of them reviewed 1 or more papers per month

Researchers spent a median **5** hours (mean **8.4** hours) on each review - unchanged from 2007

82% agreed without peer review there is no control in scientific communication (similar to 2007 and 2009)

74% agreed peer review improves the quality of the published paper (similar to 2009)

65% were satisfied with peer review (similar to 2007 and 2009)

28% agreed peer review is unsustainable because there are too few willing reviewers (this was 19% in 2009)

https://www.elsevier.com/__data/assets/pdf_file/0004/205717/PeerReviewWeek2016_Infographic.pdf

Peer Review Process

- Internal review (by editorial staff)

(Initial Assessment/Initial Evaluation)

(Organic Biomolecular Chemistry- RSC) Editorial Staff

Katie Lim, Executive Editor
Jack Washington, Deputy Editor
Daniel Robertshaw, Development Editor
Sarah Whitehouse, Editorial Production Manager
Nicola Burton, Publishing Editor
Tom Cozens, Publishing Editor
Katie Fernandez, Publishing Editor
Ryan Kean, Publishing Editor
Roxane Owen, Publishing Editor,
Andrea Whiteside, Publishing Assistant
Sam Keltie, Publisher, Journals,

(Initial Assessment/Evaluation)

- Submitted manuscripts undergo initial evaluation.

❑ May be returned in one (or more) of the following situations:

- ➢ The manuscript clearly lies beyond the scope of the journal.
- ➢ The **novelty** of the study is not sufficient.
- ➢ The scientific quality is quite inadequate.
- ➢ The quality of the English
- ➢ The results/conclusions of the manuscript have been published or well-known.

- ➢ The manuscript is insufficient for the general interest of the journal and would be better suited to a more specialized journal.

(its possible that I missed this reference).

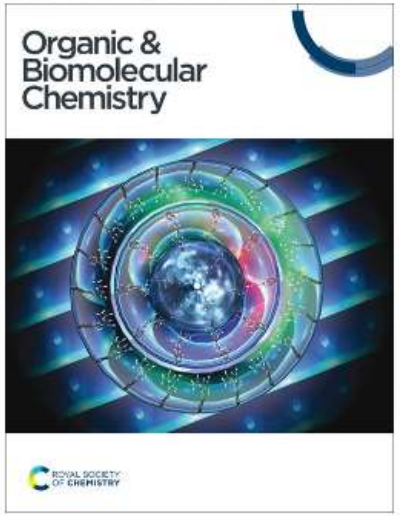
Journal scope

Organic & Biomolecular Chemistry (*OBC*) publishes original and high impact research and reviews in organic chemistry.

We welcome research that shows new or significantly improved protocols or methodologies in total synthesis, synthetic methodology or physical and theoretical organic chemistry as well as research that shows a significant advance in the organic chemistry or molecular design aspects of chemical biology, catalysis, supramolecular and macromolecular chemistry, theoretical chemistry, mechanism-oriented physical organic chemistry, medicinal chemistry or natural products.

Articles published in the journal should report new work which makes a highly-significant impact in the field. Routine and incremental work is generally not suitable for publication in the journal.

More details about key areas of our scope are below. In all cases authors should include in their article clear rationale for why their research has been carried out.



Organic synthesis

We welcome important research in all areas of organic synthesis, including studies on small organic molecules and biomolecules, and studies that report purely synthetic work without biological data. Total or multistep syntheses should report new or improved strategies or methods, or a more efficient route to the target compound.

Methodology studies should show a significant improvement on known methods. Research that extends the known methodology to a different class of compounds is generally not suitable unless that class is significantly different in scope to previously reported methodology. Where methods are directed towards a narrow range of structures, the importance of these targets must be clearly justified.

Physical and theoretical organic chemistry

We welcome studies that report new models of reactivity, selectivity, bonding or structure, or new computational methods and have relevance for the design of subsequent experiments. That relevance should be clearly justified in the paper. Relevance is perhaps most clearly demonstrated by the description of testable predictions derived from the results of the reported theoretical work; the tests of these predictions could be contained in the same paper in which the predictions are described. Computational research that merely reproduces experimental data is not suitable for *OBC*.

Chemical biology

We welcome articles that report new or improved methodologies in the chemical aspects of chemical biology, including design, development and use of chemical tools, chemical studies of biomolecules such as carbohydrates, proteins and nucleic acids or biological processes such as protein-protein interactions and epigenetics, and chemical methods such as imaging and labelling techniques.

Catalysis

❑ External review (by experts in the field)

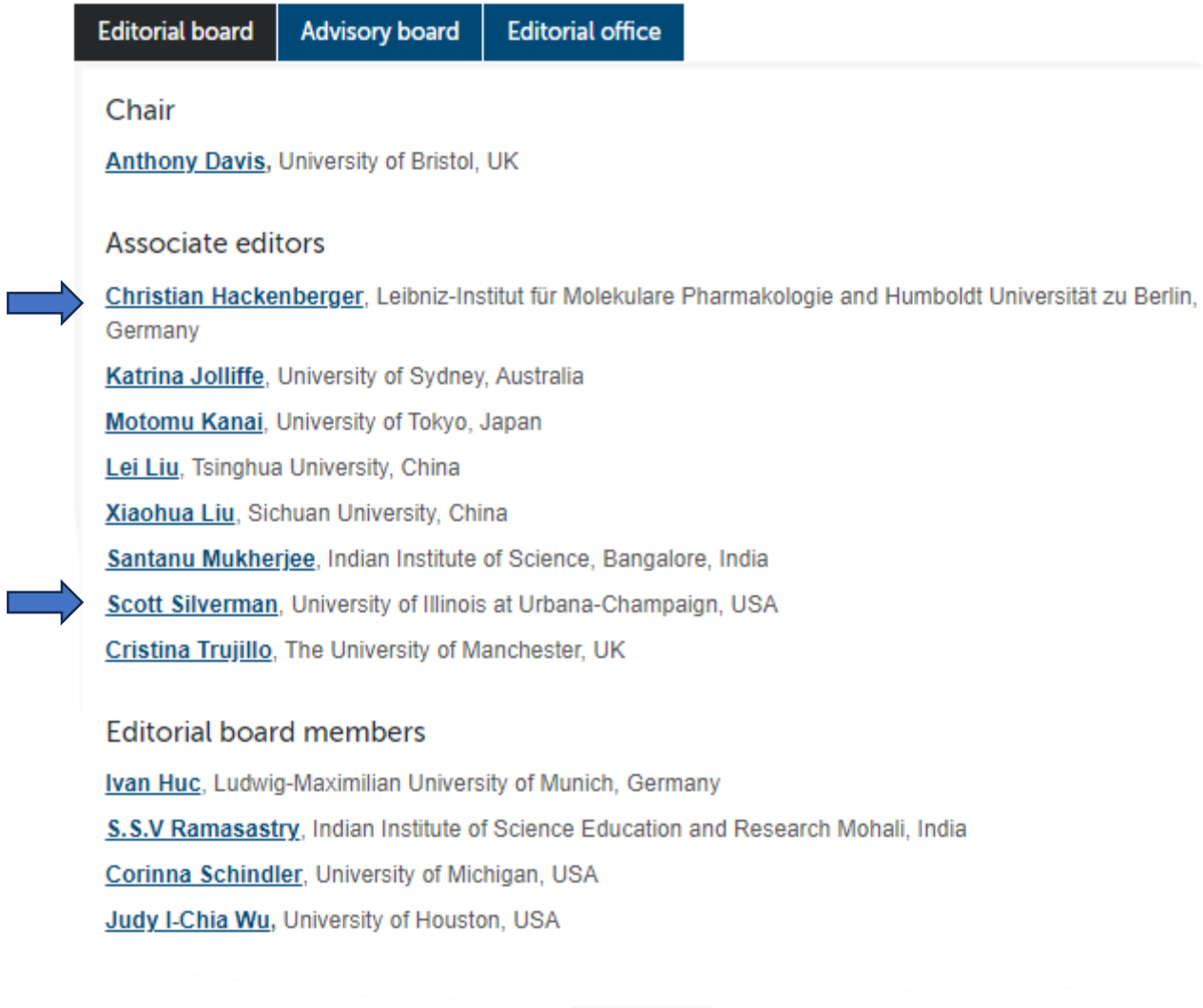
- Only those manuscripts that pass the initial review process, will be continued to other stages for further evaluation.

- Assigned an editor (ACS) or With the Editor (RSC)

Editor may then decide by himself or send out to peer reviewers

Who are the experts?
How do editors choose the experts?

❑ People with general expertise in the subject area
- ❖ Other researchers in the field
- ❖ Authors from the reference list
- ❖ Recommendations given by you.
- ❖ Journals maintain a general database of reviewers

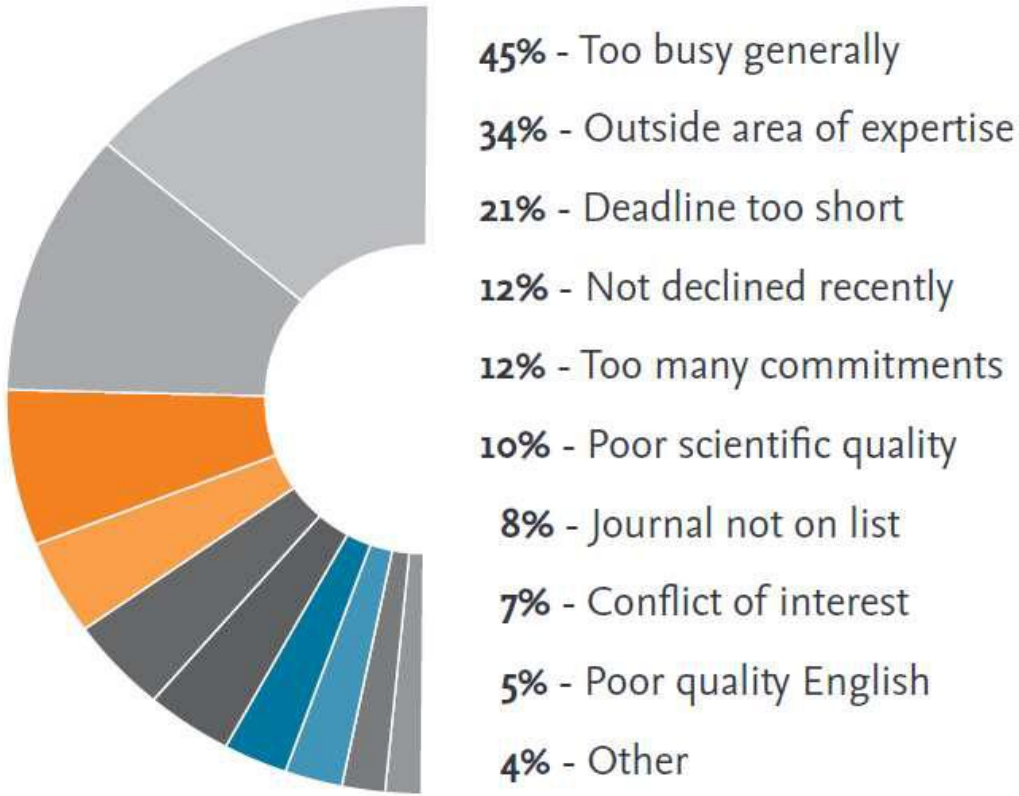


Why do people Review?

- ❑ The typical turn-around time for peer review is 2-14 weeks.
- ❑ If you have not heard back, re-check the journal for expected response time and allow 2 more weeks before tactfully emailing the editor.
- ❑ Now some Journals have Tracking your Submission Options

https://www.elsevier.com/__data/assets/pdf_file/0004/205717/PeerReviewWeek2016_Infographic.pdf

REASONS FOR DECLINING TO REVIEW



- Adds to the general delays in processing times

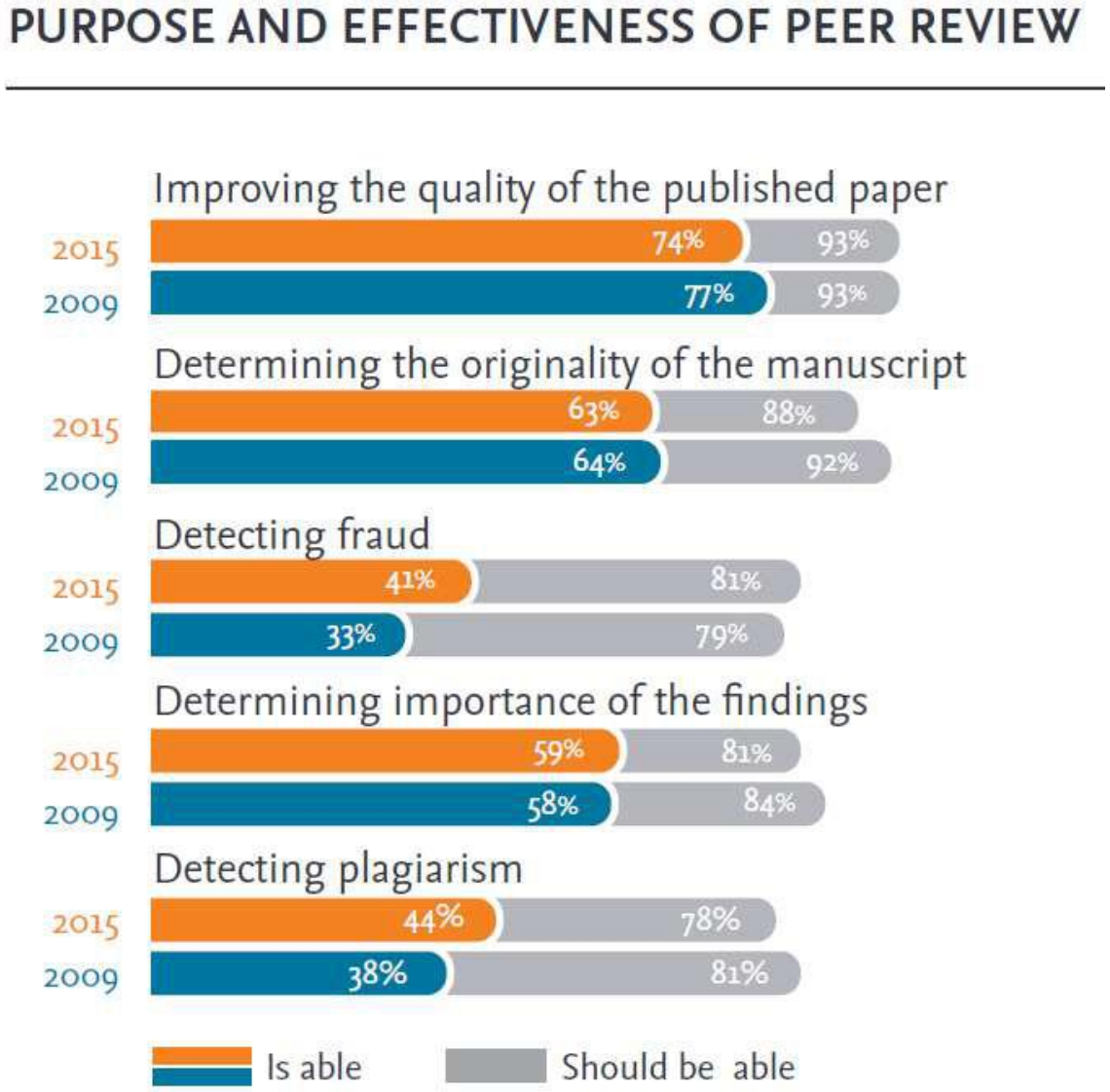
https://www.elsevier.com/__data/assets/pdf_file/0004/205717/PeerReviewWeek2016_Infographic.pdf

Forms of Peer Review

- Single Blind,
- Double Blind,
- Open,
- and Post-Publication Review.

- Single Blind: The reviewer knows the identity of the author. The author does not know the identity of the reviewer. (Many Journals follow this)
- Double Blind: Author and reviewer identities are concealed. (eg. ChemComm)
- Open: The identity of all parties is openly disclosed. (Eg. Frontier Publications: Options to Reveal Names (eg. NatureComm)
- Post-Publication: Publication precedes reviews (eg. Archives)

https://fourwaves.com/blog/single-double-blind-peer-review/



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The editor makes a decision based on the reviews, and their own evaluation of the paper.

The editor can choose to:

- **REJECT** the manuscript
- **REVISE** with **MAJOR revisions** needed.
- **REVISE** with **MINOR revisions** needed.
- **ACCEPT** with no revisions.

MAJOR revisions needed: Probably needs an experiment or two is needed and may be sent to reviewers again
MINOR revisions: Generally, some clarification, general errors and the Publishing editor might take care,

- ***The paper does not need any more revisions, and is ready to be published!*** Sometimes the manuscript does not need any revision at all, but this is rare.

- The paper is edited and proofread by the journal, then is published.

Responding to reviewers' comments

- In most cases, if your article has been accepted for publication, it will require making changes (**major or minor**) that respond to reviewers' comments.

Immediate reaction	Don't respond immediately. Cool down first!
Study the review	Next, read the revision document carefully, noting each point the reviewer/editor has made, so you have a full understanding of the reviewers' and editors' concerns
Consider ALL comments raised by reviewers individually	Those that require more substantial changes (such as clarifying the case for your research or clarifying your contribution) and those that address more minor issues (such as editing).
Where you disagree	Politely and tactfully explain why you disagree; Support your point with evidence, e.g. cite other published work.

https://rmit.pressbooks.pub/researchwritingmodules/chapter/the-peer-review-process/

Reply to the editor

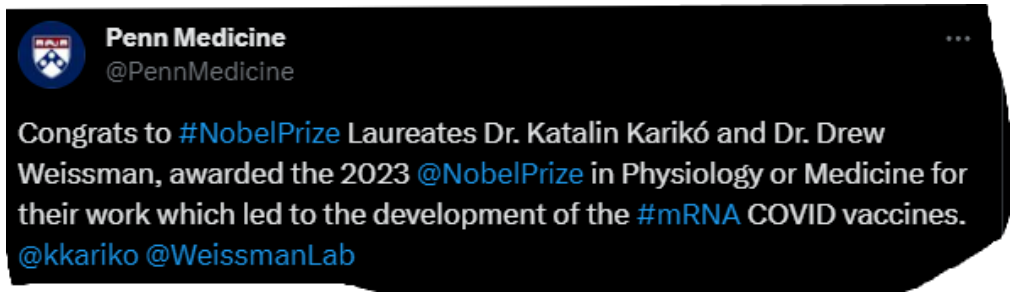
In your response email to the editor, thank the editor and reviewers, summarise the changes/rebuttals and include your detailed responses to reviewers' comments

REMEMBER:

When responding to peer review, it is important to be polite, clear and concise

Remember, rejection of publication happens to everyone

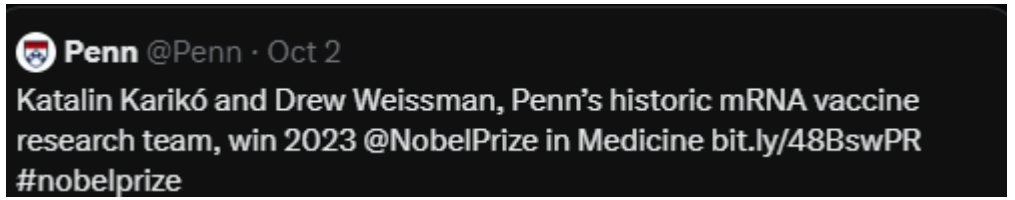
Animal Farm,
Gone With the Wind
Harry Potter
rejected multiple times before they were published!



Rejection can also be a very useful learning process, even if it hurts!

- ❑ It is equally important to know that, despite publication rejection, you still have a number of choices available. You can:

- ➢ Submit your article to another journal
- ➢ Revise and resubmit the article to the same journal
- ➢ Revise and resubmit the article to a different journal
- ➢ Appeal the decision
- ➢ Abandon the article (for now)



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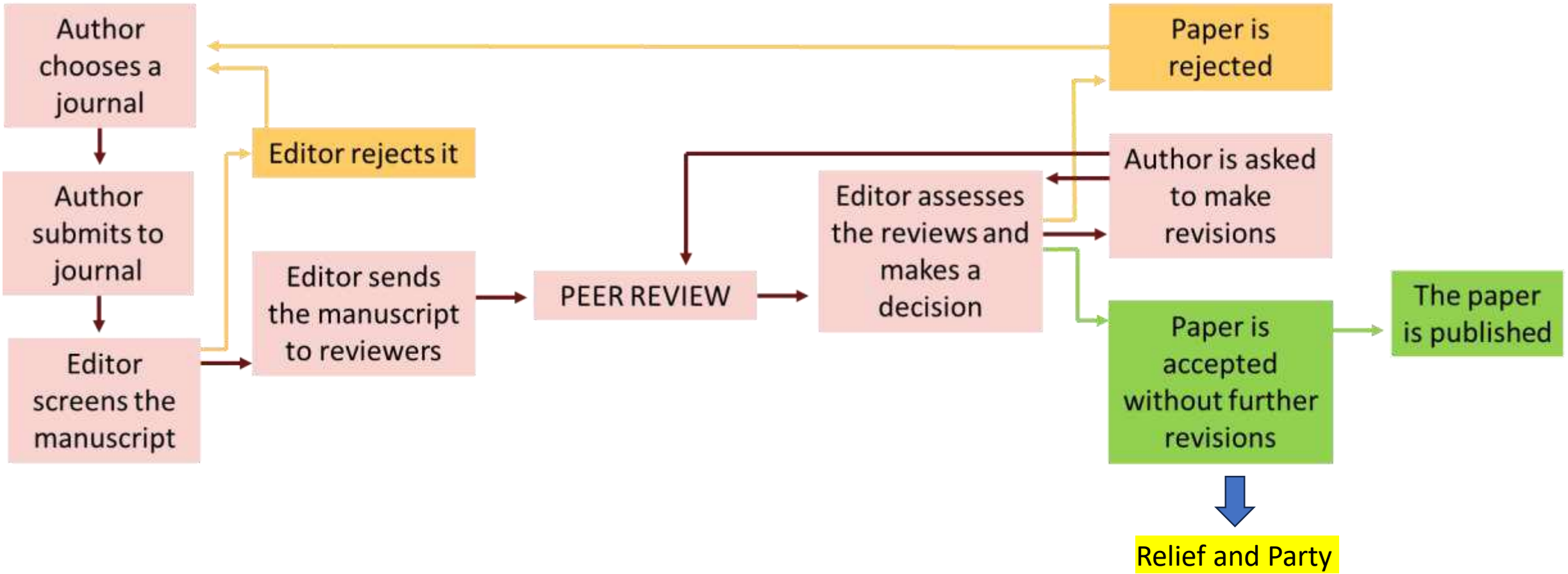
Summary



Sourced from.

https://www.abdn.ac.uk/staffnet/documents/Navigating%20Peer%20Review5.pptx