# Publication and peer review

# What roles does peer reviewed publication play in the current infrastructure of science?

**A**. *"publication in a peer-reviewed journal remains the most important way of disseminating a complete set of research results."*

**B**. *"Peer review in publication actually helps us to improve our scientific paper. The suggestions that we get from the peer review actually strengthens our quality of the research paper."*

*"In the current era, where (bio)arXiv and similar repositories exist for publicly disseminating preliminary research findings, peer review provides 'an official stamp of approval' from members of the scientific community."*

*"Peer reviewed publication plays an essential role in the current infrastructure of science. By sending submitted manuscripts to scientists who can judge its correctness, honesty and importance, we can avoid publishing wrong / plagiaristic results."*

*“It is the central theme: peer reviewed publication are most often considered as truth on which future research is based. While peer review may fail, it is implicitly accepted as proof that a particular claim is valid.”*

# How does one choose a reasonable balance in research between (i) quality versus quantity; (ii) timeliness versus thoroughness?

*"To balance timeliness and thoroughness, researchers can disseminate research findings in seminars, conference talks, abstracts, posters, and new scientific output sharing platforms, either by traditional approaches or through new communication technologies. These communications not only give an author the chance to get feedback on work in progress before full publication in a peer reviewedjournal, but also distribute research results quickly and broadly."*

*“ think no one could give a good answer for this. Most research would like to do a high quality paper To achieve this goal, they will take a lot of time on a single project and take a high risk that they will get nothing at the end. If so, they cannot get enough funds to support their further research. Thus, maybe they should publish some papers that has moderate quality . The same situation happens between the timeliness and thoroughness. I think choose by your own and take the responsibility of your own choice.”*

# To what extent are referees responsible for checking the correctness of research?

**A**. *"Referees take full responsibility for checking the correctness of research."*

**B**. *"The authors have the primary responsibility for ensuring the accuracy of their research since they are the most familiar with the nuances of their work."*

*"A referee probably shouldnt go retrace every step of the researcher, but she should check for any kind of obvious errors and that the conclusions the researcher makes are justified by the evidence provided."*

*"... placing total responsibility for catching every error in the hands of the reviewer would incentivize the authors not to put in much effort."*

*"A researcher has complete control over the material that they are publishing. A referee is not necessarily properly trained to evaluate all of the credibility of the results produced in the paper. With a publication comes an implicit signature that to thebest of your knowledge, the research produced is correct, leaving the entirety of that responsibility to the researcher and none to the referee."*

# How should a responsible referee decide how much time to take writing a review?

*"Depends on whether the paper being reviewed is worth publishing or not. I personally dont think that referees should give too much comment on researches that are trivialor uncreative."*

*"... If the referee does not have time to provide a helpful and well thought-out critique, he or she should decline to review the paper."*

# What are the costs and benefits of agreeing to review a paper?

*"Reviewing a paper could take a significant amount of time. However, reviewing papershelps a researcher learn how to improve their own work and is a service to the scientificcommunity."*

*"The costs are your time as well as potential reputational damage if the paper turns out to have many issues that you did not catch. The benefits are that other people may return the favor and review your paper, that you will learn from the material presented by the author, and that you will be recognized by other researchers for your hard work and service to the field."*

*"Benefit: learn new material, techniques, and perspective, particularly when the submitted paper is in ones own area. Being in good favor with Associate Editors is also a long-term plus. Costs: time spent away from ones own research; time spent on background reading/learning to properly judge the submission."*

As a researcher, one aims to read high-quality papers which have made, or will make, an impact. How can you estimate quality from (i) the journal reputation; (ii) the authors; (iii) internet sites such as Google Scholar and the Web of Knowledge.

*"The paper should be on one of the journals with the best reputation, and maybe the author should be well-known, if I dont know him, I will search on Google Scolar for his H-index. If the H-index is high, the paper will have good chance to be good."*
*"This is hard, because papers from lesser known people or published in lesser known journal may be as relevant–or even more relevant–as other papers. While you shouldnot judge a paper by the author/journal it is published in, you can still have better faith in the authors if they are known or if the journal has better reputation."*

# Why do people try to assign "credit" between coauthors? How should one interpret the order of the authors? How is this affected by their reputations?

*"Since publication records strongly influence the amount of respect as a researcher onereceives, including prospects of employment, the credit assignment should accuratelyreflect the extent to which "authors" actually contributed to the work. My under-standing is that first authorship indicates the primary contribution to the paper, andthe order of the others doesnt matter much, though the conventions will vary acrossfields/journals."*

# When writing a manuscript, who should be included as an author? How and when is author order usually determined?

*" The order of author order should be made at the beginning of the project, but in some cases where it is hard to determine, researchers can decide at the end of project."*

RESPONSES WERE SPLIT BETWEEN SELECTING THE AUTHOR ORDER AT THE START AND AT THE END OF WRITING THE PAPER. WHAT ARE THE STRENGTHS AND WEAKNESSES OF EACH APPROACH?

# Collaboration: How much statistical advice should you give to a scientist before expecting the reward of coauthorship?

**A**. *"Enough to show that you are useful (essential?), but not so much that scientists no longer need your assistance. Dont give away your wares too freely!"*

**B**. *"I believe you should have not only given statistical advice but also contributed a new idea to be awarded authorship. In other words, I believe if you just passed on existing knowledge, I think you should not be rewarded coauthorship."*

*"I think it should be sufficient for making an impact on the paper, it could be a suggestion for a proof, a detailed solution of a theorem, an idea which advances the topic of the paper or some theoretical results."*

Generosity: What are the advantages and disadvantages of awarding coauthorship for relatively minor contributions? What are the advantages and disadvantages of refusing an offer of coauthorship if you feel your contribution is too small to justify it?

*"If you put someone important on your paper who made relatively minor contributionsit may make your paper seem more important so more people will look at it but it also may diminish the personal efforts you put into it because readers may think that person made a significant contribution and it was not your work primarily. If thepaper is good and accurate then having coauthorship when you made contributionsis beneficial and makes you look good however if there are issues with the paper that reflects badly on you."*

*"Advantages for awarding coauthorship for minor contribution: any contribution counts and it make the work complete, so coauthorship is an encouragement to not miss any credit for them. Disadvantages: making people feel that they do not need to work hard and can still earn credit. Discourage the enthusiasm in the long term."*

*"Author lists that are too lengthy diminish the individual contributions of those involved, while increasing the number of publications and subsequent citation counts for those involved."*