"Biased peer review or flawed methodology?"

Overview of this session

In this session, learners will explore issues related to the peer review process. Learners will view a brief case study video and respond to questions related to the presented scenario.

Learning objectives

Through this case, learners will:

1) learn about ethical conduct related to the peer review process

Lesson description

Instructional Event		Action		Time	Tochnology
ins	structional Event	Instructor	Learner	Time	Technology
1.	Introduce learning objectives	Give an overview of this sessionState learning objectives	 Listen and react to instructions Recognize the necessity of this session 	5 min	
2.	Observe the case study	 Present the case study and review discussion questions with audience 	Watch the presentation and review discussion questions	2 min 52 sec	Internet capability
3.	Talk about discussion questions	 Ask learners for feedback and discuss questions/topic Facilitate discussion and provide answers 	 Ask questions related to the case study Share ideas or experiences related to discussion questions/topic 	~10 min	
4.	Explain essential concepts that learners should know	 Summarize discussion points Reiterate core concepts of session 	– Listen	5 min	
5.	Provide feedback	 Ask for feedback and address any remaining questions 	 Ask anything related to this session 	5 min	
6.	Enhancing retention and transfer	 Provide additional materials including links to other resources 	Reviewadditionalmaterials asneeded	2 min	

Overview of case study

A PI is voicing his frustrations with his colleague regarding a recent critical review he received on a manuscript submitted for publication. He feels the critique is overly harsh and asks for extensive edits. The two PIs speculate whether the review was done by Dr. Chang who is a PI at a competing lab. Dr. Chang and the disgruntled PI have a history of disagreeing with each other's research. The colleague suggests the PI contact the journal editor and ask for a new reviewer or the possibility of withdrawing the manuscript and resubmitting it to a different journal. The PI is left reflecting on what his options are.

Discussion questions

1. What are the PI's options in this situation?

While not every option listed below is ideal, the PI could address the situation in a number of ways:

- The PI could contact the editor about the overly harsh review and ask for assistance or advice on how to proceed.
- The PI could address the concerns of the reviewer directly and ask some follow-up questions regarding the rationale for some of the proposed revisions.
- The PI could address the concerns from the reviewer he deems appropriate and dismiss those he considers overly harsh.
- The PI could withdraw the manuscript from consideration for publication and submit it to a different journal.

2. If you suspect the motivations behind a review, how would you decide what edits/requests are valid and which are superfluous?

The best approach may be to address the reviewer directly and try to respond to all their requests. You can always express your concerns with some of the suggested revisions if you have valid concerns.

3. What would motivate a peer review to purposefully slow down someone's publication?

While it is uncertain why some people decide to engage in unethical conduct, there are pressures that may influence bad behavior. If a reviewer has a conflict of interest such as their research closely resembling a competing lab's work, they may consider such measures. Pressure to publish or perish may influence some PIs to publish ahead of competitors and may go to such extremes. Limited funding pools can create competition over collaboration resulting in an array of unethical practices.

4. What can be done to prevent this from happening?

While you may not be able to stop someone else from exhibiting bad behavior, you can ensure you don't engage in unethical peer review practices. If you are concerned about performing a review on research that may be too closely related to your own, refrain from doing the review. Be transparent and discuss any concerns you may have with the individual that requested your participation in the peer review.

Additional discussion prompts

- If you were in the PI's position, how would you respond to the overly harsh comments?
- Have you encountered a situation similar to this and how did you respond?

Additional resources

- UK's Responsible Conduct of Research & Scholarly Activity webpage: https://www.research.uky.edu/responsible-conduct-research
- DHHS ORI's Introduction to the Responsible Conduct of Research: rcrintro.pdf (hhs.gov)
- UK's Good Research Practice Resource Center: https://www.research.uky.edu/good-research-practice-resource-center
- CITI RCR Course information: https://www.research.uky.edu/responsible-conduct-research/getting-started
- ORI's resources on peer-review: https://ori.hhs.gov/peer-review-0