

# **Ethics of Peer Review: A Guide for Manuscript Reviewers**

## **Case studies - Guide for the Discussion Leader**

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### **Introduction**

The 12 case studies presented in the Powerpoint presentation have been developed to illustrate ethical questions related to peer review. Each case was written so as to focus on a specific issue or set of issues. Some cases reflect very minor concerns that can be readily addressed, others raise concerns which require action on the part of the reviewer, and others raise very significant ethical issues. The cases are purely fictional, as are the researchers. Each case is outlined briefly in one or two slides. The next slide for each case lists some issues that should be considered. This guide brings in some additional elements that might be used to broaden or enhance the discussion of each case.

The handout which accompanies the two Powerpoint presentations discusses many of the issues in more depth. The suggested readings listed at the end of that handout include papers, books, and web-based documents that cover most areas of discussion in considerable depth.

### **Case # 1**

This case considers Dr Smith, a researcher who is trying to be good mentor, but whose actions raise some important ethical issues. All could be addressed and corrected by some relatively minor changes in his procedures.

By sharing the papers with his trainees without permission, he is violating the confidentiality of the review process. This could easily be remedied by asking permission from the editor and giving the editor the name of the trainees who assisted with the review.

Dr Smith is making a serious ethical error in signing only his name to the reviews that are written largely by his trainees. He is falsely implying to the journal that he wrote the reviews, while in fact some were written largely by others. He is also failing to ensure that his trainees receive proper credit for their work and ideas. When the trainee has written the critique alone or with little advice, Dr Smith should ensure that the critique is submitted in the name of the trainee, rather than in his own name. He should also note to the editor that he provided assistance with and review of the critique.

One of Dr Smith's roles as a mentor should be to help his trainees develop their careers and professional reputations. His procedures with manuscript reviews should be changed to ensure that this valuable training exercise better fulfills this goal.

## **Case # 2**

This case considers a potentially volatile situation.

Dr Ardito has been asked to review a paper which is probably so close to her own studies that it would be a conflict of interest for her to review it. She should certainly decline to perform the review.

If Dr Ardito were to review the paper, she would put herself in a no-win situation. If she were to recommend that the journal accept the paper, she would risk of precluding publication of her own work. If she were to recommend that the journal reject the paper or that it request extensive, time-consuming revisions, this action could give the appearance of misconduct even if this recommendation was appropriate and was made with the utmost integrity. Declining to review therefore protects her at the same time that it eliminates the potential conflict of interest.

Dr Ardito should also contact the editor of the journal and alert the editor to the situation. It is quite possible that the editors or the journal staff invited her to review this manuscript because they remembered her paper as being related, but did not recognize the extent of the similarity between the two works. Identifying this scientific overlap for the editor will note for the record that she has appropriately disclosed and managed the potential conflict of interest. This action by Dr Ardito protects the author and the journal, as well as Dr Ardito.

This action will also alert the journal to be alert for potential conflicts of interest in the review of Dr Ardito's paper, and may therefore prevent her paper from being sent to an equally conflicted but less careful and conscientious reviewer.

## **Case # 3**

This case illustrates a very common problem.

Dr Li probably could not obtain an adequate statistical consult without showing the statistician the paper. The reviewer should contact the editor before doing this unless the journal's policies clearly state that such consults are allowed. The consultant should always be acknowledged in the comments to the editor in the review.

Statistical questions are so common during reviews that most journals have consulting statisticians on their editorial boards. The editor may already have asked for a statistical consult,

or may do so after hearing the reviewer's concerns. In this case, Dr Li may be able to review the other aspects of the manuscript without worrying about the statistics.

## **Case # 4**

Dr Hess has uncovered a very significant problem. This appears to be an attempt to publish essentially the same paper in two different journals. Duplicative publication is unethical; it violates the policies of most journals and it is viewed as scientific misconduct.

On the one hand, the reviewer and the journal must take appropriate steps to avoid duplicative publication. On the other hand, the mere suspicion of scientific misconduct can have a devastating impact on a scientific career, even if deliberate malevolence is eventually disproved. Such situations can occur because of misunderstandings or errors, without deliberate misconduct on the part of the corresponding author. The author must therefore be considered as innocent until proven guilty and must be protected and treated appropriately.

Dr Hess should carefully examine copies of the original documents to confirm his initial impression. He should then contact the editor in confidence to discuss the problem. He should provide the editor with copies of the original paper.

The editor will bear the primary responsibility for researching the problem further, and for reporting the incident to the appropriate institutional officials and taking other appropriate actions if these become necessary.

Both the reviewer and the editor should be extremely discreet, thorough, and thoughtful in their discussions, deliberations and actions related to the paper, recognizing the potential seriousness of the situation for the authors, the journal, the funding agencies that supported the research, and the scientific community.

## **Case # 5**

Dr Santos has concerns about the welfare of the animals used in the experiments. These raise legitimate ethical issues. Most journals, funding agencies, research institutions, and governments have policies and/or regulations protecting the welfare of animals used in research and the welfare and privacy of the human subjects who participate in research projects. Most journals will not publish articles that violate these standards.

It is, unfortunately, not uncommon for reviewers to have concerns about the ethics of studies involving human or animal subjects. In some cases, these concerns arise from the use of inappropriate methodology in the experiments and will preclude publication of the research in the journal.

However, other cases reflect the different standards implemented in different places or by different oversight agencies. For example there has been considerable debate in the veterinary community about the levels of stress and distress induced by different methods of euthanasia. The methods of euthanasia approved and recommended for experimental animals therefore vary in different countries. Similarly the need for IRB review and approval of studies using human blood donated by healthy volunteer donors varies in different countries. This variation can raise problems for international journals, as authors and reviewers from different countries may follow different guidelines and all may be citing/using procedures that had been identified by the own regulatory agencies as being ethical and appropriate.

At other times problems arise because of the fact that the “standards” evolve. For example, the procedures implemented recently under HIPAA to protect personal health information were not in place at the time of the initiation of the long term studies following populations exposed to the atomic bombs, Thalidomide, or the polio epidemics of the 1950’s. These studies therefore cannot be expected to have received pre-review for HIPAA compliance, although the privacy of the subjects must be protected in current publications according to current standards.

In cases where the regulations and guidelines vary with time or place, the editor may need to consider whether the concerns of the reviewer represent true ethical concerns or whether they reflect acceptable variations in regulations. It is therefore important for Dr Santos to document her concerns carefully and specifically for the editor, so that the editor can make a decision on how to handle the matter. The problem must also be carefully documented in the comments to the author, so that the author understands the reason for the concern, especially if the paper is rejected.

## **Case # 6**

Dr Arundel’s case illustrates a case of potential conflict of interest.

Dr Arundel does not have a current affiliation with the author’s institution. Moreover, she may feel that she can review the manuscript objectively. However, she should consider the fact that she could appear to have a conflict of interest because she is considering and is being considered for a possible position with the authors’ department. If this would raise questions or concerns, she should decline to review the paper.

Item for discussion: The conflict of interest rules for reviewers of NIH grants specifically state that a person who is “negotiating for employment” shall be considered to have a real conflict of interest with applications from that organization. While Dr Arundel may not have reached the “negotiation” stage, this rule does set a standard which needs to be considered in this case.

The situation illustrates the fact that conflicts of interest can go beyond current financial ties and may at times involve conflicts of interest that an editor would not know of when identifying potential reviewers.

## **Case # 7**

Dr Sun's dilemma arises because he has not thought through the implicit obligation he will incur if he agrees to review this paper.

By agreeing to perform a review, he is agreeing to act as the agent of the journal, to adhere to the journal policies, and to provide a high quality critique in the time specified by the journal. He cannot do this, and therefore should decline to review.

At the very least, Dr Sun should contact the editor, state the timeframe in which he could complete a review, and allow the editor to determine whether to make an exception to the general policy.

The scenario also raises the question of why Dr Sun wishes to review the paper. It seems likely that he thinks the paper will be interesting and useful to him. This raises the possibility of a conflict of interest. If he agrees to review the paper, will he be putting his own interest (seeing the paper before it is published) above that of the author and the journal (receiving a timely review)?

## **Case # 8**

Dr Takahashi's situation illustrates that conflicts of interest can occur even when the potential reviewer has no personal conflict of interest.

Institutional conflicts of interest (real or apparent) could arise from the fact that the company provides major research funding to her department. Dr Takahashi should probably decline to review the paper.

Some discussion points might include:

1. Does it matter that the PI on the contract is the department chair? What if the PI were another assistant professor?
2. Would the conflict be less significant if none of Dr Takahashi's direct collaborators received research support from the contract?
3. Does the size of the Department matter? Would it be different if the contract supported 7 of 200 faculty members than if it supported 7 of 9 faculty in the department?

4. Does the fact that Dr Takahashi is a junior faculty member important? What if she was the chair of the department and the PI of the contract was an assistant professor and one of the 50 faculty members of her well-funded department?
5. Could apparent conflicts of interest (i.e. the perception of conflict), as well as real conflicts of interest, be important in this situation?

## **Case # 9**

Dr Elway's case illustrates a situation in which a distant relationship between two researchers probably does not produce a real conflict of interest that would compromise objectivity of the review.

The cell line is freely available and Dr Elway does not profit financially from its distribution. Neither a positive nor a negative review of this paper would seem to me to affect Dr Elway's scientific career significantly. Therefore, the fact that the paper thanks Dr Elway for providing a stock culture of cells did not appear to me to pose a significant conflict of interest and would not preclude him from reviewing the paper.

However, in discussions of this case in a workshop testing this module, a contrary point of view was presented. The discussant felt that Dr Elway could be perceived as having a conflict of interest because the widespread use of his cell line would enhance his scientific status and reputation and would increase citations of his articles on the origin and characteristics of the cell line. Furthermore, the fact that the authors thanked him for giving them this cell line could create the appearance of collaborative ties between the groups and therefore create the appearance of a conflict of interest.

The case therefore raises some interesting elements for discussion.

## **Case # 10**

Dr Tomas is in a delicate situation. She must remember that the confidentiality of the review process continues even after the review has been submitted. She should not discuss her review with the author.

Dr Tomas should also remember that the journal may not yet have received all of the reviews and may not have made a decision concerning publication of the paper or transmitted this decision to the author. The author therefore may not know the outcome of the review.

Dr Tomas should also consider the effect that revealing her role and her recommendation could have if the other reviewers or the editor disagreed with her recommendation and the paper were rejected.

Another issue to consider: Are there ways that Dr Tomas could lead the conversation to a discussion of this work, for example, by asking the author about her other published work (which was probably mentioned in the paper) or by asking the author what she is presenting at the meeting or what she is working on in her laboratory?

## **Case # 11**

Dr Yang's attitude raises general issues concerning the responsibility of scientists to participate in the peer review process and to be "good citizens" of the scientific community.

Dr Yang is benefiting from his colleagues willingness to review his papers. Is it ethical of him to refuse to do the same service for them?

Other points to consider:

1. Do scientists have responsibilities to perform other tasks within their institutions or within the larger scientific community?
2. If so, what are some of these activities?
3. Scientists are funded to perform their research by universities, governmental agencies, public charities, and charitable foundations. Do researchers incur obligations to society as a result of this support?

## **Case #12**

Dr Jones's viewpoint and review raise ethical concerns.

Dr Jones appears to have come to the review with the viewpoint that excellent science can be done only in prestigious institutions in certain countries.

Moreover, it is unclear whether he was able to objectively consider and review the quality of the research. If the studies are well designed, the data are solid and the results are interesting and unexpected, they probably merit publication. His review should have focused on an analysis of these elements.

Problems in the quality of figures and in the writing style generally can be corrected by the authors and the journal. These should not be the focus of the review. If the science is appropriate for publication in the journal, the review should recommend publication of the findings and should provide guidance on the changes needed in their presentation.