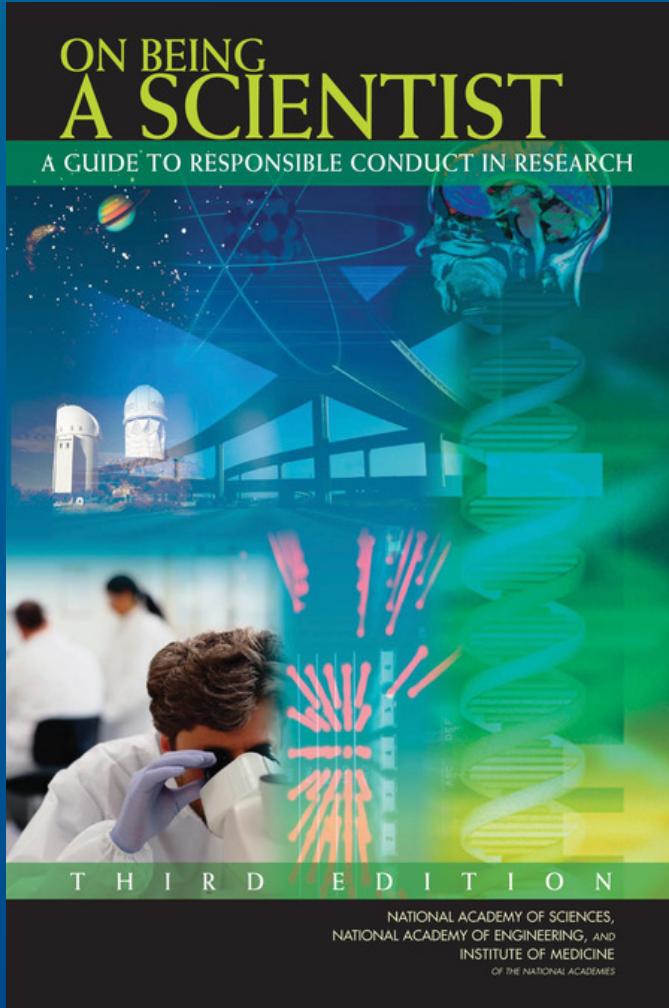


CISC-810: Research Foundations

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Ethical issues in publishing (and everything else)



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<https://www.nap.edu/catalog/12192/on-being-a-scientist-a-guide-to-responsible-conduct-in>

Authorship Practices: Who are authors? How to list the names of authors?

In many fields, the earlier a name appears in the list of authors, the greater the implied contribution.

Frank and open discussion of the division of credit within research groups-as early in the research process as possible and preferably at the very beginning, especially for research leading to a published paper-can prevent later difficulties.

The best practice is for authorship criteria to be explicit among all collaborators. Collaborators should be familiar with the conventions in a particular field to understand their rights and obligations. Group meetings provide an occasion to discuss ethical and policy issues in research.

The allocation of credit can be particularly sensitive when it involves researchers at different stages of their careers-for example, senior faculty and student researchers.

As with citations, author listings establish accountability as well as credit. Thus, unless a footnote or the text of the paper explicitly assigns responsibility for different parts of the paper to different authors, the authors whose names appear on a paper must share responsibility for all of it.

Authorship

An author is generally considered to be an individual who has made substantial intellectual contributions to a scientific investigation. All authors should meet the following three criteria, and all those who meet the criteria should be authors:

- *Scholarship: Contribute significantly to the conception, design, execution, and/or analysis and interpretation of data.*
- *Authorship: Participate in drafting, reviewing, and/or revising the manuscript for intellectual content.*
- *Approval: Approve the manuscript to be published.*

An administrative relationship, acquisition of funding, collection of data, or general supervision of a research group alone does not constitute authorship.

Reviewing: Case # 1

- Dr. Smith runs a very active, productive research group with several graduate students and postdocs.
- He is a well regarded scientist who reviews many manuscripts and serves on review panels / study sections.
- Dr. Smith makes an effort to help his trainees develop their communication skills: they write papers, and they give talks in group meeting, seminars in the department, and presentations at conferences.

Case # 1 continued

- To help his trainees understand the peer review system, Dr. Smith frequently has them help to review manuscripts.
- Some of his postdocs have become quite skilled; their reviews need virtually no editing before Dr. Smith signs them and sends them to the journals/conferences.
- Dr. Smith is surprised when a colleague says that this practice is not ethical.
- Are there ethical issues?

Case # 1, Issues to consider

- The confidentiality of the review process
- Taking credit for the work of others
- Misrepresentation to journal/conference
- Fairness to the trainees who actually perform the reviews

Case # 2

- Dr. Arditò, a postdoc, is asked by the editor of a major journal in her field to review a manuscript.
- She is sent the authors, title, and abstract for her use in deciding whether to perform this review.
- Dr. Arditò realizes that some of the research contained in the paper are indeed very similar to those included in a paper she just submitted to the same journal a few days before.
- What actions should she take?

Case # 2, Issues to consider

- Are there ethical issues that would preclude her from reviewing the paper?
- Are there other potential issues that should be discussed when Dr. Ardito contacts the editor of the journal?

Case # 3

- Dr. Li has agreed to review a paper presenting the results of an experimental study.
- As she reviews the paper, she feels that she has questions and concerns about the statistical analyses used in the paper.
- Dr. Li collaborates with an expert statistician in the design and analysis of her own research and would like to seek his advice on the analyses in this paper.
- What issues should she consider and what steps should she take?

Case # 3, Issues to consider

- Confidentiality
- Journal policy regarding consultation; is advance permission from editor needed?
- Acknowledgements of the contributions of others in correspondence with journal

Case # 4

- Dr. Hess is reviewing a paper for an IEEE journal.
- As he reads the paper, it begins to seem very familiar.
- He looks in a bibliography database and finds a very recent article by the same authors, published in a European conference proceedings.

Case # 4, continued

- This published article is virtually identical to the article under review.
- The same data are presented in the figures and tables, the same conclusions are drawn, and even the wording of the text is virtually identical in the two papers.
- What should Dr Hess do?

Case # 4, Issues to consider

- Duplicative publication
- Problem of how to appropriately handle a situation which could well develop into an allegation of scientific misconduct
- Responsibilities of reviewer
- Responsibilities of editor

Case # 5

- Dr. Arundel is asked to review a paper by a group of authors at Verynice University.
- Dr. Arundel has recently been invited to look at a position in the authors' department at Verynice; a preliminary visit and seminar have been scheduled.
- Should Dr. Arundel review this paper?

Case #5, Issues to consider

- Conflicts of Interest
 - Real
 - Apparent

Case # 6

- Dr. Sun is invited to review a very interesting manuscript, submitted for expedited publication.
- The invitation specifies that the review must be returned within 5 days.
- Dr. Sun is about to leave for meetings in Paris, and will not be able to return the review for 2 weeks.
- Dr. Sun is very eager to see the full manuscript and thinks that he would be an excellent reviewer for the paper.
- Can he accept this invitation?

Case # 6, Issues to consider

- Obligations incurred in agreeing to review
 - Acting as an agent of the journal
 - Agreeing to adhere to journal policy
 - Obligation to provide a high-quality critique in the time specified by the journal
- Conflict of interest?

Case # 7

- Dr. Elway agrees to review a paper presenting a novel algorithm.
- In this work, the researchers used a software library Dr. Elway developed 20 years ago.
- Dr. Elway has made this library widely available. He has put it on his website open to everyone.

Case # 7, continued

- When Dr. Elway receives the full paper, he realizes that the authors cite him as providing the software and that the acknowledgements thank him for this.
- Should this preclude him from reviewing the paper?

Case # 7, Issues to consider

- Real conflicts of interest
- Apparent conflicts of interest

Case # 8

- Dr. Tomas has just reviewed a very interesting paper for a journal and has recommended it for publication.
- At a reception at a national scientific meeting, she is introduced to the first author of the paper, whom she had not met previously.
- Dr. Tomas would like to talk to the author about the work described in the paper .
- Can she tell the author that she has reviewed the paper?

Case # 8, Issues to consider

- Policies of journal
- Confidentiality of review process
- Problems arising from false expectations if other reviewers were less enthusiastic

Case #9

- Dr. Shi is a very hardworking scientist who is determined to build his research program.
- He and his trainees publish several articles each year in the peer-reviewed journals in his field.
- He is frequently asked by these same journals to review papers.
- He always declines, because he feels reviewing papers would take away from the time he can spend on his own research and writing.
- Does this decision raise ethical issues ?

Case # 9, Issues to consider

- Responsibilities of researchers to colleagues and other researchers
- Responsibilities of researchers to society
- Fairness

Case # 10

- Dr. Jones agrees to review a paper which sounds from its abstract as though it contains very exciting and novel research.
- Upon receiving the paper, Dr Jones is very disappointed.
- The paper is not from a major research university, but rather from an unfamiliar group of authors at a small college in South America.

Case #10, continued

- The experiments are appropriately designed, the data appear solid, and the findings are quite interesting.
- However, the paper, although understandable, is not written in good idiomatic English.
- In addition, the graphs are not well prepared.
- Dr. Jones writes a very short review, pointing out the limitations of the paper, and recommends rejection.
- Is this an appropriate action?

Case #10, Issues to consider

- Was this review objective?
- Did the review adequately consider the quality and importance of the research?
- Was the focus of the review appropriate?
- Does this review meet the needs and objectives of a peer-reviewed journal?

Questions?
