



Responsible Conduct of Research: Case Studies

1. Animal Research Case Study

A researcher has designed an innovative hip prosthesis and wants to test it on dogs before he tests it on humans. However, there have been cases when other hip prostheses have failed with humans after testing them on dogs. Machines that stimulate joints to test new prosthetic designs are the most successful but the researcher does not have access to such equipment.

Is it ethical for researcher to proceed with animal research? Should researcher proceed if animal results do not extrapolate to humans?

2. Conflicts of Interest Case Study

A researcher agrees to test a pharmaceutical drug from a company he has stock in. The company will fund 100% of this study and possible future studies if these results prove to be beneficial.

What is the conflict? Should researcher be allowed to conduct the study?

3. Data Management/Retention Case Study

A principal investigator decides to reevaluate the data of a 2 year old study because new research has been released refuting her data. Her postdoc conducted the study and he has since left the lab. She learns that the hard copies of the data and the computer files containing the data were discarded when the postdoc moved offices last year.

What should the investigator do? What should have been done? What can you do to protect yourself?



4. Mentoring Case Study

A master's student presents her thesis to a committee. She fumbles the answers to basic questions about the methodology of her study and it is apparent she is unsure of her answers. Her mentor, who is also on the committee, interjects each time the student is asked a question.

What problems can you identify? Who's at fault? What would you do if you were this student?

5. Collaborative Research Case Study

Three young faculty members from different scientific backgrounds share a common interest in learning disorders. Seeing the benefits from working together, they begin to form their scientific hypotheses. The three realize that there are some logistical problems that will need to be solved before the collaboration can move forward.

What are the problems? Should the person who contributes most be the lead author? Who sets the standard?

6. Publication/ Authorship Case Study

A lab that has just concluded research on a new drug discusses authorship for publication :

- The lab manager who contributed by offering a few suggestions from time to time, but whose role was largely to maintain the lab
- A post-doc who is no longer a part of the lab, but who wrote much of the protocol and obtained significant funding
- Graduate students who did the analysis
- A biostatistician
- The PI who has been rather "hands off" on this project



USC Office for Protection of Research Subjects

- A representative from the drug company who made substantial monetary contributions and provided weekly lunches

Who's the lead author? Why? Who should not be listed?

7. Peer Review Case Study

A researcher anonymously peer reviews an article but takes some of the author's ideas/findings and puts them in his own journal article and publishes it .

Is this ethical? How is this prevented?

8. Research Misconduct Case Study

A postdoctoral fellow prepares a manuscript for publication and when her mentor reviews it, he asks that she change a few things to make the results more "significant".

When is this allowed? What if this means the paper will be published?

9. Human Subjects Research Case Study

A graduate student wants to conduct a study to learn about the quality of life of elderly subjects. The survey includes questions related to elderly abuse, history of illegal drug use and medical conditions.

Can you identify special considerations and protections these subjects may require?

If the survey is anonymous, are protections irrelevant?