Ethics in Academic Research: Introduction and Case-Studies

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Driven by doing.

THE UNIVERSITY OF MEMPHIS

Objectives of the session

At the end of the session, students will be able to

1. Understand why we need ethics in research
2. Explain the most common cases of misconduct
3. Identify the basic principles that need to be followed

Previous experience

- We have already talked a lot about ethics and academic integrity in this course; can you remember some of the specific aspects we discussed?

As I embark on my career as a [ ] scientist, I willingly pledge that I will represent my scientific profession honorably, that I will conduct my research and my professional life in a manner that is always above reproach, and that I will seek to incorporate the body of ethics and moral principles that constitute scientific integrity into all that I do.

I will strive always to ensure that the results of my research and other scientific activities ultimately benefit humanity and that they cause no harm.

With this affirmation, I pledge to acknowledge and honor the contributions of scientists who have preceded me, to seek truth and the advancement of knowledge in all my work, and to become a worthy role model deserving of respect by those who follow me.

Craig *et al.*, 2003

Definition

- **Ethics in research encompasses the principles and standards of conduct necessary to ensure that research is performed in an honest and honorable manner.**

Typically, this is not too objectively nor too well defined…

OpenLearn; The Open University, U.K.

Roel Snieder and Ken Larner, 2009. The Art of Being a Scientist: A Guide for Graduate Students and their Mentors. Cambridge University Press, New York.

Why do we need ethics in science? Because…

Science is performed by human beings, with their:

- Emotions
- Interests (commercialization, tenure, promotion, etc.)
- Egos

Humans & animals can be used as research subjects

Places can be “used” to obtain data

Science can have unintended consequences, and research results can be used for good or for bad

How?

What?

Roel Snieder and Ken Larner, 2009. The Art of Being a Scientist: A Guide for Graduate Students and their Mentors. Cambridge University Press, New York.

Basic Principles

The principles that guide ethics in research are similar to those that guide other aspects of life: “Dos” and “Don’ts”

- The “Dos” emphasize the positive, and include *any* steps that promote not only the success of an individual scientist, but also their colleagues, their institution, the profession in general, as well as the processes upon which science is based (peer-review, publishing, etc.)

- The “Don’ts” emphasize the negative, tend to receive a lot more press, and can be stated explicitly

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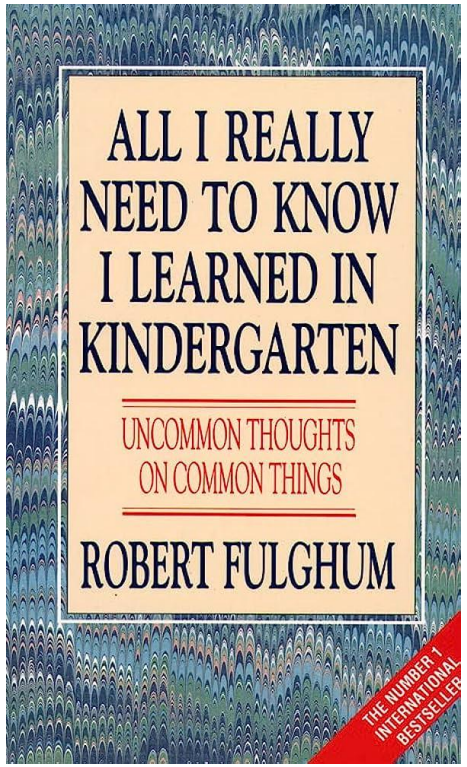
Basic Principles

In all cases, **the main rules are just as in any other aspect of life:**



1. **Respect the property of others**
2. **Be honest**
3. **Share appropriately with others**
4. **Fully acknowledge others' contributions**
5. **Treat others as you would like to be treated**
6. **Take pains to consider the consequences of your actions**

Case Study 1: Proposal Review

In its instructions for reviewing proposals, the National Science foundation indicates:

> 3. Your Obligation to Maintain the Confidentiality of Proposals and Applicants.
>
> The Foundation receives proposals in confidence and protects the confidentiality of their contents. For this reason, you must not copy, quote, or otherwise use or disclose to anyone, including your graduate students or post-doctoral or research associates, any material from any proposal you are asked to review. If you believe a colleague can make a substantial contribution to the review, please obtain permission from the NSF program officer before disclosing either the contents of the proposal or the name of any applicant or principal investigator.

You are then asked to certify your compliance, by signing a “Conflict-of-Interests and Confidentiality” statement.

Idea for example from Roel Snieder and Ken Larner, 2009. The Art of Being a Scientist: A Guide for Graduate Students and their Mentors. Cambridge University Press, New York.

Case Study 1: Proposal Review

- Is there an “elephant in the room” with this statement, in your opinion?

Is the issue taken care by the following statement?

2. No Use of “Insider” Information.

If your designation gives you access to information not generally available to the public, you must not use that information for your personal benefit or make it available for the personal benefit of any other individual or organization. This is to be distinguished from the entirely appropriate general benefit of learning more about the Foundation, learning from other panel members, or becoming better acquainted with the state of a given discipline.

Case Study 2: Plagiarism

The University of Oxford defines academic plagiarism as follows:

Presenting work or ideas from another source as your own, with or without consent of the original author, by incorporating it into your work without full acknowledgement. All published and unpublished material, whether in manuscript, printed or electronic form, is covered under this definition. Plagiarism can also include re-using your own work without citation.

This applies not only to text, but also to other media, such as computer code, illustrations, graphs etc. It applies equally to published text and data drawn from books and journals, and to unpublished text and data, whether from lectures, theses or other students' essays. You must also attribute text, data, or other resources downloaded from websites.

https://www.ox.ac.uk/students/academic/guidance/skills/plagiarism

Case Study 2: Plagiarism

Discussion: Can plagiarism be unintentional?

https://www.insidehighered.com/news/2014/04/25/investigation-brown-professors-plagiarism-case-goes-public

What do you think?

Case Study 2: Plagiarism

This is what Oxford says about unintentional plagiarism:

Not all cases of plagiarism arise from a deliberate intention to cheat. Sometimes students may omit to take down citation details when taking notes, or they may be genuinely ignorant of referencing conventions. However, these excuses offer no sure protection against a charge of plagiarism. Even in cases where the plagiarism is found to have been neither intentional nor reckless, there may still be an academic penalty for poor practice.

It is your responsibility to find out the prevailing referencing conventions in your discipline, to take adequate notes, and to avoid close paraphrasing.

Does this apply to our case?

https://www.ox.ac.uk/students/academic/guidance/skills/plagiarism

Case Study 2: Plagiarism

Types of plagiarism:

- Verbatim quotation without clear acknowledgement
- Cutting and pasting from Internet without clear acknowledgment
- Paraphrasing by altering a few words and/or changing their order
- Inaccurate citation (partial citation; secondary source*)
- Failure to acknowledge assistance
- Auto-plagiarism (but Nijkamp's case!)
- Unintentional plagiarism

* Tremendously common!!

https://link.springer.com/chapter/10.1007/978-3-030-48415-6_4

Excellent example at: https://www.ox.ac.uk/students/academic/guidance/skills/plagiarism

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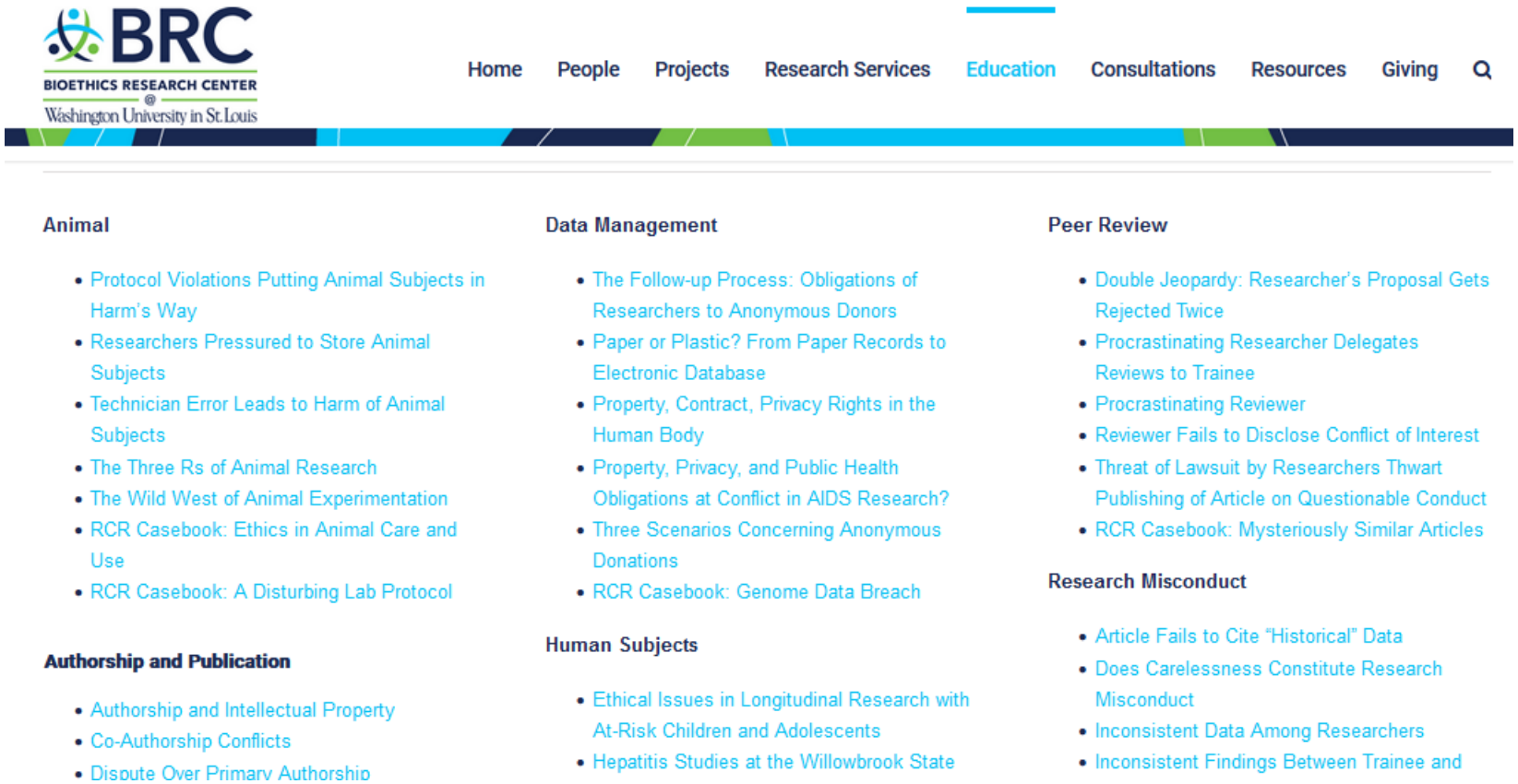
Cautionary Note

Academic misconduct in research has many more facets:



https://bioethicsresearch.org/resources/case-studies/

https://bioethicsresearch.org/resources/case-studies/

Resources

- **Books**

Snieder R. and K. Larner, 2009. *The Art of Being a Scientist: A Guide for Graduate Students and their Mentors*. Chapter 8: Ethics of Research.

Elliott, D. and J.E. Stern (editors), 1997. *Research Ethics: A Reader*. University Press of New England.

- **Online**

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