



Online Ethics Center  
FOR ENGINEERING AND SCIENCE

# What is Research Ethics?

## Description

A description of what research ethics is, part of the [Instructor's Guide to Prepare Research Group Leaders as RCR Mentors](#).

## Body

### NOTES TO THE INSTRUCTOR:

The purpose of this section is not to be a lecture defining “research ethics,” but to be a conversation for the purpose of developing a shared understanding of the purpose and focus of this workshop.

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The subject of this workshop is research ethics. The focus is a very practical one: How should we, as researchers, act?

Unfortunately, the choices we face are not always clear. And even those cases that are clear may at times be better characterized as “right vs. right” rather than “right vs. wrong.” For these reasons, our obligation is not necessarily to make the right decisions, but to strive to make the best possible decisions. In this context, “ethics” should not be confused with ethical theory, morality, and/or simply following the rules.

While there are many possible formulations for the scope of research ethics, one useful summary for the purpose of this workshop is to focus on our obligations as researchers. Those obligations might be summarized to include research, other researchers, and society, but also a fourth overarching responsibility in all cases to ask questions:

1. *Research*: How should research be conducted so as to meet our obligations to preserve and promote the integrity of research findings?
  2. *Researchers*: How should researchers interact with one another to meet our obligations to other researchers?
  3. *Society*: How should researchers interact with the larger communities, academic and public, to meet our obligations to the society in which we live and work?
  4. *Asking Questions*: How, when, and where should researchers be prepared to ask questions about the conduct of science so as to meet their obligations to the research, researchers, and society?
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## NOTES TO THE INSTRUCTOR:

- The “examples of other topics” in the list below is not meant to be exhaustive nor definitive. You should feel free to shrink or expand this list as appropriate for and relevant to your audience.
  - It is also your choice how to use this list. You may decide that having this (or any other) list included in the participant materials will cut off avenues of discussion; you might prefer to invite your participants to create a list of topics covered under the “research ethics” heading. At the conclusion of the workshop, you could then send the generated list to your participants, or you might have this (or any other) list as an appendix that you then distribute to your participants at the conclusion of the discussion.
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## ***What topics are covered under the heading of "Research Ethics"?***

| Topics recommended by NIH | Examples of other Topics |                               |
|---------------------------|--------------------------|-------------------------------|
| Conflict of Interest      | Conflicts of Commitment  | Communication with the public |
| Human and Animal Subjects | Conflicts of Conscience  | Perceptions of public         |
| Mentoring                 | Duplicate publication    | Scientists as activists       |
| Collaboration             | Plagiarism               | Censorship                    |
| Peer Review               | Sabotage                 | Deception                     |
| Data Management           | Use of statistics        | Asking Questions              |
| Research Misconduct       | Image manipulation       | Dispute Resolution            |

|                            |                           |                                |
|----------------------------|---------------------------|--------------------------------|
| Authorship and Publication | Reproducibility           | Dependence on funding          |
| Scientists and Society     | Bias: Causes, protections | Managing budgets               |
|                            | Credit                    | Stem cells                     |
|                            | Open access               | Dual use technology            |
|                            | Page charges              | Any major scientific discovery |
|                            | Ghostwriting              |                                |
|                            | Managing a research group | ...Other?                      |

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## **Resource Type**

Instructor Materials