

Online Ethics Center FOR ENGINEERING AND SCIENCE

# **RCR Collections & Projects**

### Author(s)

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#### Description

A list of major collections and projects related to research ethics in the Online Ethics Center. The collections include cases, teaching guides, and descriptions and resources from major projects related to the teaching of research ethics.

#### Body

#### Addressing Problems in Research Ethics

This section contains resources and scenarios submitted by visitors to the Center and student projects (problem situations followed by interviews with knowledgeable people on how best to address those problems). All have been edited slightly for clarity, and most names appearing within the scenarios have been changed.

#### An Instructor's Guide for Ethical Issues in Physics

An excellent guide for physics instructors interested in integrating ethics into their courses.

#### Best Practices for Publishing Your Research

A tutorial developed by the American Psychological Society that provides detailed guidance for data collection and publishing scientific research. The guidance here can be used by researchers from all disciplines.

#### Bottom-Up Ethics: Real World Training for Professional Practice

For students, opportunities to apply ethics training in real world circumstances are

rare, especially for those who will eventually work in multiple disciplinary teams where members may have different levels of training in, and interpretations of, what constitutes ethical practice. Includes an instruction guide, participant packet, and slides.

#### Dartmouth Professional Ethics Program for First Year Graduate Students

This webpage describes an institution-wide program of training in the basics of professional ethics for first year graduate students at Dartmouth.

#### Ethics in Science & Engineering: Redefining Tools & Resources

This report summarizes the main points of discussion of a national workshop convened to advance knowledge and practice for ethics in science and engineering.

#### Ethics Sessions in a Summer Undergraduate Research Program

This activity is considered an NAE Exemplar in Engineering Ethics Education and was included in a 2016 <u>report</u> with other exemplary activities. This activity describes an ethics module for students involved in a research experience for undergraduates that involved case study discussions and other activities that asked students to think about macro and microethical issues in research.

#### Ethics in the Science Classroom

Ethics in the Science Classroom: An Instructional Guide for Secondary School Science Teachers With Model Room Use, by Theodore Goldfarb (Chemistry, SUNY at Stony Brook) and Michael Pritchard (Philosophy, Western Michigan University).

#### Getting Started in Teaching about Ethical Issues in Physics

A fantastic guide for anyone who is interested in integrating ethics discussions into physics courses. Over the years, through discussions with colleagues and observations of debate in various forums, I have identified several concerns some physicists have over the usefulness of ethics education in physics. I have classified some of these concerns as myths in that, when they are accepted as fact, they lead us in the wrong direction. This essay briefly discusses these myths and then describes some approaches to incorporating ethics into the physics curriculum.

#### Graduate Research Ethics: Cases and Commentaries

These cases and commentaries result from a series of workshops on Graduate Research Ethics Education, held at Indiana University, Bloomington, from 1996 to 2006. The project brought together many graduate and post-doctoral students in the natural sciences for a study of research ethics and reflects the experiences and

#### problems they face

#### Instructor's Guide to Prepare Research Group Leaders as RCR Mentors

These materials are designed to provide motivation and content sufficient for an instructor to lead a workshop titled: "*Mentoring for Responsible Research*." The long-term goal is to foster an environment in which research faculty are better empowered to initiate conversations within their research groups about the responsible conduct of research. Workshop participants are introduced to rationales, content, approaches, and resources so that they will have the means to develop and implement concrete, discipline-specific strategies for research ethics mentoring.

#### Ken Pimple Collection

This collection includes teaching materials, articles, and other resources developed by Dr. Ken Pimple, one of the first and foremost trainers in ethics education. Dr. Pimple served as the Director of Teaching Research Ethics Programs at the Poynter Center for the Study of Ethics and American Institutions at Indiana University Bloomington.

#### Moral Reasoning in Scientific Re search: Cases for Teaching and Assessment

This excellent volume, published in 1995 by Muriel J. Bebeau and Kenneth Pimple represents a seminal publication on teaching ethics whose instructional essays and cases are still being used today. The collection can be downloaded as a PDF or as individual cases or essays.

#### Research, Ethics, and Society: Case Summaries

Research, Ethics, and Society Cases provide starting points for discussion of the outcomes of new knowledge and innovation for society and the ethical obligations of researchers to society. Collectively these eight cases explore several themes in this broad area, and they introduce historical episodes in which research or researchers impacted public interests.

# Responsible Conduct in Computational Modeling and Research: RCR Training for Students and Professionals

The material in this package aims to enable the reader to recognize responsible conduct issues within computational modeling, including issues related to model integrity, model robustness, model representation, data and code integrity, and intellectual property. This package includes case studies that can be used for discussion and role-play, and tools for assessment.

#### Resources for Research Ethics Education Collection

This resource collection was originally developed and maintained by Dr. Michael Kalichman, Director of the Research Ethics Program at the University of California San Diego. The collection includes an introduction to the major areas of responsible conduct of research, and a detailed discussion of the topic, related case studies, a summary of important laws and regulations related to the topic, and further resources.

#### Role-Play Scenarios for Teaching Responsible Conduct of Research

This collection includes nine role-play scenarios on central topics in responsible conduct of research (RCR): authorship, conflict of interest, peer review, interpersonal conflicts in mentoring, data management and whistle-blowing, professional relationships and whistle-blowing, and compliance with regulations on human participants, animal subjects, and hazardous materials. Each scenario has a professor role and a graduate student role. The instructions for the two roles provide divergent perspectives on the same problem.

#### Scenarios for Ethics Modules in Responsible Conduct of Research

An extensive list of scenarios that are part of a modular sequence of materials on the responsible conduct of research. The materials support a series of activities for student-faculty learning.

#### Scholarship and Research Integrity (SARI) Program at Penn State

As part of the Council of Graduate School's Project for Scholarly Integrity and internal university initiatives, Penn State University is implementing required graduate student education in the responsible conduct of research (RCR) through a program called Scholarship and Research Integrity (SARI). This program is required of all graduate students beginning with students entering the university in Fall 2009.

Training Graduate Students in the Responsible Conduct of Research A case study in building the Ethics Education Library.

# **Contributor(s)**

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# Discipline(s)

Teaching Ethics in STEM Research Ethics