# Bowdoin
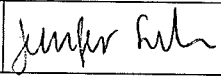
Bowdoin Grants Administration Manual

| Policy Title | Effective Date | Revision Date | Created by | Approval Signature |
|---|---|---|---|---|
| Responsible Conduct of Research | January 1, 2010 | July 1, 2014 | Cara Martin-Tetreault | *[signature]* |

## 1. Background

The responsible and ethical conduct of research (RCR) is critical for excellence, as well as public trust, in science and engineering. Consequently, education in RCR is considered essential in the preparation of future scientists and engineers. Section 7009 of the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Act requires that "institutions that apply for financial assistance for science and engineering research or education describe in its grant proposal a plan to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduate students, graduate students, and postdoctoral researchers participating in the proposed research project."

The purpose of the policy is to ensure that all postdoctoral researchers and undergraduate students that conduct research at Bowdoin College, and who are supported by federal funds or receive academic credit or who are working in labs that are supported by federal funds, receive proper training and oversight in the responsible and ethical conduct of research.

## 2. Scope

This policy applies to Principal Investigators (PI), undergraduate students, and postdoctoral researchers that participate in federally-funded research.

Because adherence to the highest ethical and moral standards in the conduct of research and scholarly activity is the expectation for all members of the Bowdoin College community, all undergraduates engaged in research are encouraged to participate in RCR training.

## 3. Responsibility

    A. Institutional Responsibilities:

        1. Bowdoin College must have a plan in place to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduates and postdoctoral researchers who will be supported by federal agencies to conduct research. For some federal agencies, institutional certification is required for each proposal.

        2. While institutional training plans are not required to be included with proposals, plans are subject to review upon request.

3. Bowdoin College must appoint one or more persons to oversee compliance with the RCR training requirement.

4. Bowdoin College is responsible for verifying that undergraduate students and postdoctoral researchers supported by federal funds to conduct research have received training in the responsible and ethical conduct of researchers.

B. PI responsibilities:

1. The PI is responsible for outlining the trainings that are required for the proposed research and in the research lab. In addition, the PI must ensure that undergraduate students or postdoctoral researchers may not begin work in the lab until all required trainings are complete.

2. The PI will keep RCR training records for all federal grant projects except NSF and NIH.

The Proposal Endorsement Form requires a signature from the PI prior to the submission of a proposal that requests funding for students. The signature indicates that the PI agrees to the terms and conditions of the award including the RCR policy.

The <u>Director of the Office of Sponsored Research</u> (Office of Academic Affairs) has been charged with overseeing compliance with RCR training requirements and will assist researchers in identifying and completing appropriate RCR training, instruction, and guidance. The OSR will serve as the final repository for RCR training records for NSF and NIH grant-funded projects.

**4. Code of Conduct**

As representatives of the College, all employees and members of the Board of Trustees (herein referred to as "representatives of the College") are expected to conduct themselves in a professional and ethical manner, maintaining high standards of integrity and the use of good judgment. All representatives of the College are expected to be principled in their business interactions and act in good faith with individuals both inside and outside the campus community. They should act with due recognition of their position of trust and loyalty with respect to the College and its students, research sponsors and donors.

Representatives of the College are expected to comply with all College policies and procedures, laws and regulations, and contractual, grant and other obligations, public or private, and to safeguard College property and funds.

**5. Training Undergraduate Students in the Responsible and Ethical Conduct of Research**

A. Upon Notice of Award, the Office of Sponsored Research (OSR) at Bowdoin College will schedule a meeting with the PI and the Grants Administrator (Controller's Office) to

review the terms and conditions of the award, including the oversight of the RCR training required for the project.

B.  At the start of a new semester or summer research season, the Department Administrator will send the OSR Director a list of names of students or postdoctoral researchers that will receive funding or academic credit from a federal grant. The Department Administrator will send an email to students and/or postdoctoral researchers a link to the RCR policy and links to the Collaborative Institutional Training Initiative (CITI) program.

C.  RCR training will be required for all students receiving wages or receiving academic credit for participating in federally-funded research. Training must be completed prior to the start of the lab work. Students and/or postdoctoral researchers will not receive wages until required trainings are complete. Trainings are valid for one year.[1]

For NSF and NIH funded research, CITI records will be retained by the OSR grant files three years from the date of the submission of the final financial report upon which the contents of that file will be sent to archives or destroyed per the College's Record Retention policy for Grants and Contracts.

D.  RCR training at Bowdoin College is based on recommendations from the NIH[2] and NSF[3] and will include any of the following components:

1.  Collaborative Institutional Training Initiative:  To satisfy the minimum training requirement, students must successfully complete the appropriate CITI module of RCR training.  The CITI program requires registration for use of its site.  Each new user must register and create an individual user name and password to gain access to the site by selecting "New Users Register Here" and select BOWDOIN COLLEGE in the "Participating Institutions" drop down box. http://www.citiprogram.org.  A Certificate of Completion generated by CITI will be sent to the OSR and filed with the grant application.  Passing score of at least 80% is required.

    This requirement can be waived by the OSR Director for students who have successfully completed an RCR workshop (at Bowdoin or another institution) designed to satisfy the College's training requirement or other comparable training;

2.  Additionally, some departments or PIs may require further training for undergraduate students or postdocs depending on the nature of the project.

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[1] Human Subjects Training via CITI is valid for three years per the College's Human Subjects Research Policy updated June 2014
[2] See NIH Instruction in the Responsible Conduct of Research: grants.**nih**.gov/training/**responsibleconduct**.html
[3] See NSF Responsible Conduct of Research Plan: http://www.nsf.gov/bfa/dias/policy/rcr.jsp

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3. <u>Human Subjects</u>: All human subjects research projects are reviewed by the College's Institutional Review Board (IRB). Information about conducting Human Subject Research and training requirements is available here http://www.bowdoin.edu/academic-affairs/research/research-oversight-committee/roc-human-subj.shtml;

4. <u>Animal Subjects</u>: All animal research projects must be reviewed by the College's Institutional Animal Care and Use Committee (IACUC). Information about conducting animal research and training requirements is available here http://www.bowdoin.edu/academic-affairs/research/research-oversight-committee/institutional-animal-care-and-use-committee.shtml;

5. Bioethics seminar as available.

## 6. Training Postdoctoral Researchers in the Responsible Conduct of Research

A. When a proposal is submitted to the NSF (or agencies with similar requirements) for research in which postdoctoral researchers will be involved, whether or not grant funds are requested for salaries, wages, or stipends, the PI is responsible for developing a plan to train these participants in the responsible and ethical conduct of research.

B. At a minimum, the plan must reflect the same components as the plan for training undergraduates (i.e., appropriate online CITI training and PI certification of other appropriate training) and must describe an adequate method to certify and track completion of the training.

C. The plan must be approved by the Dean for Academic Affairs (Authorized Organizational Representative) who is authorizing submission and providing the institutional "signature".

D. The plan will be filed with the proposal. No funds may be spent on the project until the Office of Sponsored Research has certified that the necessary steps have been taken to begin implementing the plan.

## 7. Updates and Amendments

Bowdoin College may amend this plan at any time after consultation with any of the following stakeholders: the Dean for Academic Affairs, faculty, the Director of Student Fellowships, trainers, and/or appropriate grants officers at the College. Details of any amended plan will be sent to all faculty with federal grants, the Director for Student Fellowships, trainers, and appropriate grants officers. It will be posted on the Academic Affairs website. At a minimum, the plan will be reviewed and updated annually, no later than July 1 of each year (beginning July 1, 2011).

## 8. Subawardees

RCR requirements will flow down to all subrecipients, or will be otherwise appropriately addressed in the subaward instrument.

## 9. Exceptions

The Director of Sponsored Research must approve any exceptions to this policy by written notice.

## 10. Feedback

Your feedback regarding this policy is appreciated. Please send an e-mail to the Director of Sponsored Research (cmartin3@bowdoin.edu) if you have any comments, questions or suggestions.

# Bowdoin

**Additional Resources**

**Online Training**

Collaborative Institutional Training Initiative: **www.citiprogram.org**

North Carolina State University provides online courses in Philosophy of Science, Research Ethics, and Animals in Research.

National Center for Professional and Research Ethics:
https://nationalethicscenter.org/login?return=L3JjcnR1dG9yaWFsLw==

Columbia University provides a number of online courses on RCR topics, including: Conflicts of Interest, Mentoring, Responsible Authorship and Peer Review, Research Misconduct, Collaborative Science and Data Acquisition and Management.

UNH's Web-Based Program of Instruction in the Ethical and Responsible Conduct of Research and Scholarly Activity provides several online modules for RCR training.

NSF-funded Visionlearning.com provides a learning module and follow-up quiz on Scientific Ethics.

The Poynter Center at Indiana University has developed a curriculum for Moral Reasoning in Scientific Research. The Center also holds an annual training for research ethics education.

The National Academies Press book "On Being a Scientist: Responsible Conduct in Research" is available online.

National Academies Press Scientific Research: Creating an Environment That Promotes Responsible Conduct

**Additional Information**
Resources for Research Ethics Education
HHS Office of Research Integrity
Honor in Science (Sigma Xi)

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**Policy Distribution List:**
Controller's Office
Treasurer's Office
Budget Office
Corporate and Foundation Relations
Office of the Dean for Academic Affairs