PLAN for TRAINING UNDERGRADUATES, GRADUATE STUDENTS AND POSTDOCTORAL RESEARCHERS IN THE RESPONSIBLE CONDUCT OF RESEARCH (RCR)

May 2016 update approved by Susan Baldridge, Provost¹

(reviewed by Andrea Lloyd, Vice President for Academic Affairs and Dean of the Faculty, Jeffrey Dayton-Johnson, Vice President for Academic Affairs and Dean of the Institute, and Jeffrey Cason, Vice President for Academic Affairs and Dean of the Schools)

Background: Pursuant to the 2007 America COMPETES Act (42 U.S.C. 18620–1), the National Science Foundation (NSF) adopted a certification requirement that became effective January 4, 2010.

When submitting a proposal to NSF, the Authorized Organizational Representative is required to complete a certification that the "institution has a plan to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduates, graduate students, and postdoctoral researchers who will be supported by NSF to conduct research." Although training plans are not required to be included in proposals submitted to NSF, institutions are advised that they are subject to review, upon request. An institution must designate one or more persons to oversee compliance with the RCR training requirement. Institutions are responsible for verifying that undergraduate students, graduate students, and postdoctoral researchers supported by NSF to conduct research."

Currently, institutions are free to develop their own plans, and at present there are no NSF-recommended models.

Other federal agencies also have RCR training requirements; for example

The National Institutes of Health (NIH) has RCR requirements for trainees supported by NIH grants; the definition of trainee does not include undergraduate research assistants who are paid grant-funded wages on R01 and R15 awards.

The United States Department of Agriculture National Institute of Food and Agriculture (USDA NIFA) grants require all program directors, faculty, graduate students, undergraduate students, postdoctoral researchers and staff who are paid from NIFA grants receive training in Responsible Conduct of Research (RCR). The RCR training provided to each individual must be documented and is subject to NIFA review.

This plan is designed to comply with the above requirements and covers all proposals submitted by Middlebury² that are subject to RCR training requirements.

The plan has two components: 1) a detailed program for training undergraduate students and monitoring of that training (currently implemented only for grants that require RCR training); and 2) a requirement that the Principal Investigators for all proposals seeking support for graduate students or postdoctoral researchers must develop a plan for RCR training specific to their projects and in compliance with any requirements set by any funding sponsor.

1) PROGRAM FOR TRAINING UNDERGRADUATE STUDENTS IN THE RESPONSIBLE CONDUCT OF RESEARCH

- 1. Faculty Principal Investigators (PIs) have the primary responsibility for complying with RCR training requirements on their awards and for training the undergraduate students involved in their research.
- 2. The Grant Proposal Endorsement Form (formerly known as the "blue sheet") requires a signature (in the Research Issues section) from any PI who submits an NSF proposal that requests funding for

students. This signature indicates that the PI agrees to provide appropriate RCR training for students involved in the NSF-funded research.

- 3. RCR (Responsible Conduct of Research) training will be required for all students participating in NSF-funded research, including students receiving wages, students working as volunteers, and students receiving academic credit. In general, training must be completed within the semester or summer that the student begins work on the NSF-funded research. RCR training will be documented on a form developed for that purpose, signed by both the PI and the student. This RCR Training Documentation form will be maintained by the Undergraduate Research Office (URO) at Middlebury College until the grant has been officially closed, after which the documentation will be transferred to the Office of Grants & Sponsored Programs (OGSP). RCR training will include the following components:
 - a) Each student must successfully complete all of the required elements of the RCR training module on the CITI* website. This requirement can be waived by the Associate Dean for Fellowships & Research for students who have successfully completed an RCR workshop (at Middlebury or another institution) designed to satisfy NSF's training requirement or other comparable training; the Associate Dean will specify what constitutes appropriate documentation in these cases.
 - b) Successful completion will be documented by attaching to the RCR documentation form a certificate generated by the CITI online training program or by other documentation acceptable to the Associate Dean.
 - c) PIs will certify on the RCR documentation form that the student has received additional RCR training appropriate to the research and discipline.
- 4. OGSP or the Director of Grants & Contracts Administration will notify the URO when the college receives a grant from the National Science Foundation, providing the name of the PI, the NSF grant number, and Middlebury FOAP. PIs provide the URO periodic updates listing the students participating in the research. The URO will facilitate this process by sending reminder emails to all faculty who are PIs on NSF grants during the fall semester and before summer research begins.
- 5. The same procedures as above in 1-4 will be followed for all grants that have an RCR training requirement.

2) PROGRAM FOR TRAINING GRADUATE STUDENTS AND POSTDOCTORAL RESEARCHERS IN THE RESPONSIBLE CONDUCT OF RESEARCH

- 1. Whenever a proposal is submitted to NSF, NIH, USDA NIFA, or any other agencies with similar RCR training requirements, if the proposal involves the participation of graduate students or postdoctoral researchers—regardless of whether or not grant funds are requested for salaries, wages, or stipends—the Principal Investigator (PI) is responsible for complying with RCR training requirements and for developing a plan to train these participants in the responsible conduct of research.
- 2. At a minimum, the plan must reflect the same components as the plan for training undergraduates (i.e., online CITI training, documentation form, and PI certification of additional RCR training appropriate to the research and discipline) and must describe an adequate method to certify and track completion of the training.
- 3. The plan must be approved by an appropriate academic dean and the Authorized Organizational Representative who is authorizing submission and providing the institutional "signature".
- 4. The plan will be filed with the proposal in internal records. No funds may be spent on the project until OGSP or the Director of Grants & Contracts Administration has certified that the necessary steps have been taken to begin implementing the plan.

3) UPDATING AND AMENDING THE PLAN

This plan may be amended at any time after consultation with OGSP, URO, and appropriate academic deans and financial officers. Details of any amended plan will be sent to all faculty with NSF grants (and any other faculty subject to the plan), OGSP, URO, appropriate academic deans, and the Director of Grants & Contracts Administration and will be posted on the Grants & Sponsored Programs and Undergraduate Research websites. At a minimum, the plan will be reviewed and updated annually.

* CITI – Collaborative Institutional Training Initiative - see directions: http://www.middlebury.edu/offices/support/grants/sro/policies/RCR

1 History of Approvals:

-Original Policy Certified by Alison Byerly, Provost & Executive Vice President, Middlebury College – December 18, 2009 -October 2012 update approved by:

Timothy Spears, Vice President of Academic Administration, Middlebury College and

Amy Sands, Provost, Monterey Institute of International Studies

- December 2014 update approved by Timothy Spears, Vice President for Academic Development

- May 2016 update approved by Susan Baldridge, Provost (following review in December 2015 by URO and in May 2016 by Andrea Lloyd, Vice President for Academic Affairs and Dean of the Faculty; Jeffrey Dayton-Johnson, Vice President for Academic Affairs and Dean of the Institute, and Jeffrey Cason, Vice President for Academic Affairs and Dean of the Schools)

2 Applicability:

- For purposes of this plan, "Middlebury" means all entities formally governed by the President and Fellows of Middlebury College, including Middlebury College, Middlebury Language Schools, Middlebury C.V. Starr Schools Abroad, Middlebury Bread Loaf School of English, Middlebury Bread Loaf Writers' Conference, Middlebury School of the Environment, and the Middlebury Institute of International Studies at Monterey