

# RESPONSIBLE CONDUCT OF RESEARCH POLICY AND TRAINING PLAN

## Introduction

Manchester University is committed to the highest standards of excellence and integrity in all research and scholarly endeavors. Individuals involved in research should have adequate training in the responsible conduct of research and scientific ethics. In addition to the technical and fiscal management of sponsored projects, Principal Investigators (PIs) are obligated to use all resources effectively and efficiently, and are responsible for the direction of research and scholarly activities and the training of students, laboratory staff, and postdoctoral scholars. This includes participating in and introducing students and lab members to the appropriate standards of the Responsible Conduct of Research, and ensuring compliance with institutional policy, federal and state regulations, guidelines, and sponsor requirements.

## Purpose

To maintain confidence and trust in academic research, researchers must protect the empirical objectivity of research, the unbiased reporting of results, and the open sharing of information. On August 9, 2007, Public Law 100-69, otherwise known as the AMERICA COMPETES ACT, was passed. Section 7009 specifically addresses the Responsible Conduct of Research and reads as follows:

*The [NSF] Director shall require that each institution that applies for financial assistance from the Foundation 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.*

Although issues can vary slightly depending on the academic discipline and individual program of research, topics that fall under the broader topic of “research integrity” include the following:

- environmental health & safety
- use and protection of human subjects and lab animals
- safe and responsible use of biological materials
- conflicts of interest – financial and otherwise
- publication, intellectual property and data management
- error, negligence or misconduct
- fabrication, falsification, and/or plagiarism
- response to violations of ethical standards
- responsible authorship
- mentor/trainee relationships
- peer review
- collaborative science

## Scope

***Manchester University Practices and Committee Oversight:*** Note that separate or additional training (other than what is mentioned in this document) in the responsible and ethical conduct of research may also be required by other entities on campus, such as the University's Institutional Review Board, which oversees research involving human subjects.

***Training for Federally-Funded Research, NIH-Funded Research, Evidence of Training, and Consequences of Not Completing Required Training:*** Manchester University's plan under this policy to provide appropriate training and oversight in the responsible and ethical conduct of research applies to faculty mentors, undergraduate students, graduate students, and postdoctoral researchers who are working on a federally-funded research project; all will complete educational training in issues surrounding research integrity. This training is overseen by Manchester University's Office of Institutional Effectiveness.

## Manchester University Practices

Discussions of the responsible conduct of research are regularly woven into class instruction, and first year courses typically address plagiarism. An Academic Dishonesty Policy is included in the student handbook, the faculty handbook, and in many course syllabi. It is expected that faculty members teaching courses involving research will educate students in the responsible and ethical conduct of research; many departments have their own customized introductions to the principles of responsible research that ground disciplines at the University. Please see the Office of Academic Resources for more information.

## Committee Oversight

***Human Subjects:*** The Manchester University Institutional Review Board reviews all research protocols involving human subjects to ensure compliance with federal guidelines and professional and ethical standards. Federal regulations mandate that research involving human subjects must be reviewed, approved and be subject to continuing review by the IRB. The IRB is responsible for providing guidance and oversight for the human participant protection program and for helping to maintain compliance with applicable laws, regulations, and policies. Please see the chair of the Institutional Review Board for more information.

***Vertebrate Animals:*** Manchester University does not oversee research involving Vertebrate Animals. Instead, the University has an agreement in place with another organization to review research involving Vertebrate Animals and to ensure compliance with guidelines and professional and ethical standards. Please see the Office of Institutional Effectiveness for more information.

***Recombinant DNA and Synthetic Nucleic Acid Molecules:*** Manchester University currently conducts only level one work involving recombinant DNA and synthetic nucleic acid

molecules, which does not require committee oversight. Please see the Office of Institutional Effectiveness for more information.

## Training for Federally-Funded Research

Manchester University requires the following additional **web-based** training for individuals working on federally-funded research projects.

- Undergraduate students, graduate students, and postdoctoral researchers working on a federally-funded research project must complete and pass a designated online training course. Faculty members supervising these individuals must complete and pass the same online training course. Please see the Office of Institutional Effectiveness for more information.
- Twice each year (early fall, late spring), the Office of Institutional Effectiveness will solicit names of researchers from federally-funded faculty mentors. Each faculty member will respond promptly with names of undergraduate students, graduate students, and postdoctoral researchers who are working on funded projects. Each faculty mentor will notify the Office of Institutional Effectiveness if a new individual joins his/her research team mid-term. Once the researchers' names are provided to the Office of Institutional Effectiveness, researchers will receive an invitation and instructions to complete the required online training and must do so within four weeks.
- The Office of Institutional Effectiveness and/or faculty mentors may require completion of additional online RCR or other related training modules. The faculty mentor will notify the Office of Institutional Effectiveness if additional training is required for members of his/her research team.
- Certification: Once an individual completes the required online RCR training it is valid for four years, or until the individual moves to a new career stage (for example, undergraduate to graduate). Individuals who remain at Manchester University beyond the expiration date of their certification and/or individuals who provide evidence of having already completed RCR training may be required to complete additional training, including but not limited to a "refresher" course in the responsible conduct of research. Faculty mentors will only be required to complete the training once.

## Training for NIH-funded Research

Manchester University requires the following additional **in-person/contact** training for individuals working on NIH (National Institutes of Health)-funded research projects. Click [here](#) for more information.

- Undergraduate students, graduate students, and postdoctoral researchers working on NIH-funded research projects must participate in a minimum of eight hours of in-person/contact responsible conduct of research training conducted by a faculty mentor.

This training may take place as part of a course, or outside of a course. The training must cover the topics that fall under the broader topic of “research integrity” listed above. Training resources for faculty mentors are available [here](#).

- Twice each year (early fall, late spring), the Office of Institutional Effectiveness will solicit names of researchers from NIH-funded faculty mentors. Each faculty member will respond promptly with names of undergraduate students, graduate students, and postdoctoral researchers who are working on funded projects. Each faculty mentor will notify the Office of Institutional Effectiveness if a new individual joins his/her research team mid-term. Once the researchers’ names are provided to the Office of Institutional Effectiveness, the faculty mentor and researchers will receive a certification form that must be completed once training is complete.
- Certification: Once an individual completes the required RCR training it is valid for four years, or until the individual moves to a new career stage (for example, undergraduate to graduate). Individuals who remain at Manchester University beyond the expiration date of their certification and/or individuals who provide evidence of having already completed RCR training may be required to complete additional training, including but not limited to a “refresher” course in the responsible conduct of research.

## **Evidence of Training**

The PI is responsible for making sure members of his or her research team comply with training protocols. The Office of Institutional Effectiveness will track completion of training modules, keep institutional records updated, and if necessary, provide the PI with periodic updates regarding the compliance status for those under their mentorship.

## **Consequences of Not Completing Required Training**

If a researcher does not complete the required training in a timely manner, his or her compensation may be withheld until s/he has successfully completed the course and the Office of Institutional Effectiveness has received appropriate certification.