ST. CLOUD STATE UNIVERSITY RESPONSIBLE CONDUCT IN RESEARCH POLICY

Integrity in research is "doing the right thing, at the right time, in the right way," as defined by the Office of Inspector General at the National Science Foundation.



I. INTRODUCTION

Responsible conduct of research is defined as the practice of scientific investigation with integrity. It involves the awareness and application of established professional norms and ethical principles in the performance of all activities related to scientific research.

Responsible Conduct of Research became a public policy issue in the early 1980s with the disclosure of cases of misconduct at four major research centers. This issue has evolved since then and is now recognized as being of national importance. Congress has enacted laws establishing the Office of Research Integrity to promote integrity in biomedical and behavioral research supported by the U.S. Public Health Service.

Federal regulations define research misconduct as fabrication, falsification, or plagiarism in proposing, performing, or reviewing research or in reporting research results. It does not include honest error or honest differences in interpretations or judgments of data.

- Fabrication is making up data or results and recording or reporting them
- > Falsification is manipulating research materials, equipment or processes, or changing or omitting data or results such that the research is not accurately represented in the research
- ➤ Plagiarism is the appropriation of another person's ideas, processes, results or words without giving appropriate credit

It is well appreciated by all that responsible conduct, as opposed to misconduct, encompasses many other aspects of ethical behavior in the practice of scientific research. The practice of biomedical research continues to evolve in terms of the interaction of participants (team research) and participating disciplines, emerging technologies in both the laboratory and in the publishing arena, and in the interactions of academic institutions.

The Responsible Conduct in Research Policy is applicable to all National Institutes of Health (NIH) Institutional Research Training Grants, Individual Fellowship Awards, Career Development Awards (institutional and individual), Research Education Grants, Dissertation Research Grants, or other grant programs with a training component that requires instruction in responsible conduct of research as noted in the Funding Opportunity Announcement.

The policy also includes a plan to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduate, graduate students, and postdoctoral researchers who receive a salary or stipend from the National Science Foundation (NSF) to conduct research as specified in all grants submitted and funded as of January 4, 2010, or later. NSF funding includes Graduate Research Fellowships.

Responsible conduct in research training has been approved by the Faculty Association at the December 17, 2009, Meet and Confer Meeting.

II. BASIC PRINCIPLES

Responsible conduct in research is built on a commitment to honesty, accuracy, efficiency, and objectivity, which are shared values in the responsible conduct of research. The university will comply with ethics and compliance mandates governing federally-funded research projects.

Responsible conduct of research is an essential component of research training. Active involvement in the issues of responsible conduct of research should occur throughout a researcher's career. Research faculty of the university may participate in instruction in responsible conduct of research in ways that allow them to serve as effective role models for their trainees, fellows, and scholars.

Individuals supported by NIH individual funding opportunities such as fellowships and career development awards are encouraged to assume individual and personal responsibility for their instruction in responsible conduct of research. The university will provide access to online course instruction in the responsible conduct of research.

In addition to meeting federal mandates, the Responsible Conduct in Research Policy aims to:

- > Increase awareness of ethical dimensions of research and scholarship
- > Develop and refine skills needed to think through and resolve ethical dilemmas
- ➤ Learn relevant legal, institutional, and professional standards
- > Increase conversations with peers and faculty about the ethical dimensions of research

III. INSTRUCTIONAL COMPONENT

The university is made up of recognized scholars and junior scholars (students, trainees, and postdoctoral researchers) who coexist in a rich but competitive environment for the common purpose of learning, creating new knowledge, developing new insights through synthesis of existing knowledge, and disseminating information and ideas for the benefit of their peers and the general public. Academic excellence comes through recognition by one's peers. Some new and innovative ideas have the potential for generating widespread professional interest and credit in the area of their scholarship for purely academic reasons. Others have the potential for generating substantial commercial interest and financial gain. Either can be motivation to stretch and even exceed acceptable standards of conduct in how scholarship is conducted. At the same time, differing academic and personal perspectives and interests can lead to interpersonal conflicts that detract from achieving common goals. Collectively, these challenges are integral to the broader paradigm of professional responsibility to one's students, senior advisors, peers, and institutions.

FORMAT - St. Cloud State University recognizes that instruction in responsible conduct of research occurs formally and informally in educational settings. Informal instruction occurs throughout the research training experience. Formal instruction will be in the format of online instruction and could include face-to-face discussions. Small group meetings or case study discussions will be held for university awards for NIH participating trainees, fellows, scholars, or participants at a minimum of eight hours per academic year.

SUBJECT MATTER – Online course instruction requires completion of modules related to responsible conduct in research and any other instruction relevant to the specific research or sponsored project. The principal investigator on a federally-funded project can require students, trainees, or postdoctoral researchers to complete any elective course they deem appropriate to the research. The required online

instructional modules offered at the university are provided by the Collaborative Institutional Training Initiative (CITI).

Undergraduate, graduate students, and postdoctoral researchers supported by NSF funding will be required to complete the following online instructional models:

- ➤ Introduction to the Responsible Conduct of Research
- > Research Misconduct
- > Data Acquisition, Management, Sharing and Ownership
- ➤ Collaborative Research

University awards for NIH participating trainees, fellows, scholars, or participants will be required to complete the following online instructional models:

- ➤ Introduction to the Responsible Conduct of Research
- Research Misconduct
- > Data Acquisition, Management, Sharing and Ownership
- Publication Practices and Responsible Authorship
- Peer Review
- ➤ Mentor and Training Responsibilities
- > Conflicts of Interest and Commitment
- ➤ Collaborative Research

Additional formal instruction will be required for NIH funded projects and may occur through face-to-face discussions with sessions lead by a faculty member or university representative. Instruction to cover a wide variety of issues related to responsible conduct of research such as history, recent examples of misconduct, issues surrounding different subject matters, guidelines, safeguards for whistle blowers, university policy on misconduct, review of case studies, etc. As required by federally-funded projects, attendance at training sessions will be documented.

The university has separate policies related to conducting research with human subjects or animal welfare which is known as the Institutional Review Board (IRB) and the Institutional Animal Care and Use Committee (IACUC), respectively. Comprehensive and required course instruction for these types of research can be found in the applicable policies.

FACULTY PARTICIPATION – Faculty members, as principal investigators or co-investigators on sponsored projects, will be a resource to lead discussions, present lectures, or speak on a specific topic. They can share their experiences and decision making processes through formal and informal discussions with undergraduate, graduate students, and postdoctoral researchers regarding responsible conduct in research. Training faculty and sponsors/mentors are highly encouraged to contribution to the formal and informal instruction.

DURATION OF INSTRUCTION – The time required to complete online course instruction will vary based upon the faculty member's preference for undergraduate, graduate students, and postdoctoral researchers completing elective courses in addition to those courses required by the university through the Responsible Conduct in Research Policy. Also, at least eight hours of formal face-to-face discussions will occur each academic year for NIH participating trainees, fellows, scholars, or participants with content as noted in the Subject Matter section of this policy.

FREQUENCY OF INSTRUCTION – Reflection on responsible conduct of research should occur throughout a researcher's career, geared towards each career stage. Related to NIH funded projects,

instruction should occur during each career stage but no less than once every four years and senior fellows and career award recipients may fulfill the requirement for instruction in responsible conduct of research by participating as lecturers and discussion leaders. Refresher courses will be offered every four years.

IV. COMPLIANCE

Participation in formal instruction will be monitored, documented, and maintained in the Office of Research and Sponsored Programs. The Associate Provost of Research will be responsible for overseeing compliance of training requirements in the responsible conduct of research.

Infractions or allegations of misconduct in research will follow St. Cloud State University's Policies and Procedures for the Handling of Allegations of Academic or Research Fraud and Serious Misconduct.