Introduction to Responsible Conduct of Research

January 13, 2016



Agenda

- i. Overview of Responsible Conduct of Research (RCR)
 - i. Definitions
 - ii. Why it is important
 - iii. Federal requirements
- ii. Research Misconduct
 - i. Fabrication
 - ii. Falsification
 - iii. Plagiarism
- iii. Copyright, Plagiarism & Responsible Authorship
- iv. Human and Animal Welfare
- v. Information Security
- vi. Conflict of Interest
- vii. Intellectual Property
- viii. Additional Resources

Definitions

"the practice of scientific investigation with integrity." (National Institutes of Health, 2009)





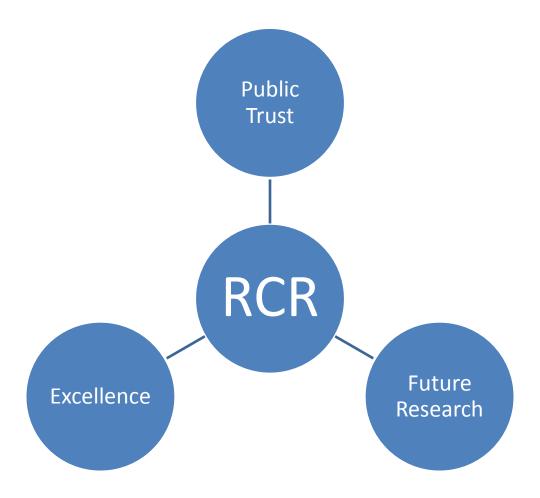
Definitions

It involves a commitment to personal responsibility in upholding established professional norms and ethical principles throughout the research process.

*UO Research Compliance Services (RCS)



Significance





Federal Requirements

all undergraduate students, graduate students and postdoctoral researchers that are supported by NSF to conduct research receive training in the responsible conduct of research.





Federal Requirements

all trainees, fellows, participants and scholars receiving support through any NIH training, career development award (individual or institutional), research education grant, and dissertation research grant must receive instruction in responsible conduct of research.





Fabrication: making up data or results and recording or reporting them.

Falsification: manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.

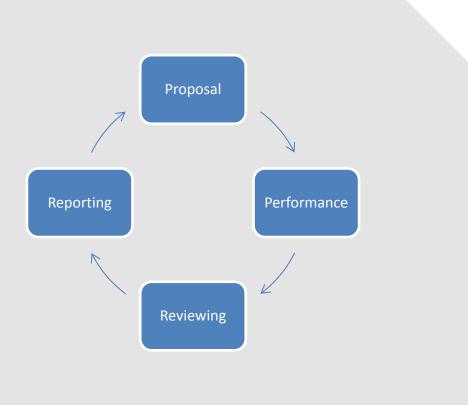
Plagiarism: the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.



Fabrication

Falsification

Plagiarism





Case Studies*

1. Were These Slides Falsified

2. Struggling to Understand Plagiarism

* from Office of Research Integrity in Department of Health and Human Services



UO Policies that govern research misconduct

- UO Student Code of Conduct
 - Section 1, V: Student Conduct Code Violations
 - 1: Academic Integrity
 - Section 1, VI: Sanctions
 - 1: Forms of Sanctions

UO Policy – Allegations of Research Misconduct



UO Reporting Structure

- any member of the University or other person who chooses to make an Allegation shall contact the Research Integrity Officer
- Preliminary Assessment
- 3. Inquiry
- Inquiry Report
- 5. **Determination Regarding Investigation**
- 6. Investigation
- **Investigation Report**
- **Determination Regarding Misconduct**
- **Appeal** 9.
- 10. Final Resolution and Outcome



- **Copyright***: applies to the use of "original works of authorship that are fixed in a tangible form of expression".
 - authors should have the right to reasonably control the use of their creative output and to receive appropriate recognition for their contribution
 - exists upon the creation of an eligible work—you do not have to do anything to obtain it

*from UO Innovation Partnership Services



- **Plagiarism***: using someone else's words and ideas in a paper and acting as though they were you own.
 - includes ideas, graphs, pictures, or anything that you borrow without giving credit to the originator of the words and ideas.
 - it also includes stealing the ideas of another person without giving her or him proper credit.

*from Pearson Education



- Responsible Authorship
 - Who is an author?
 - Policy on authorship can vary by lab, department, institution, journal
 - Best practice discuss issue of authorship during the research design stage and prior to the study taking place



- Other authorship responsibilities:
 - Good writing
 - Accuracy
 - Context and citations
 - Publishing negative results
 - Conflicts of interest
 - **Sponsorship**

- Copyright law
- **Duplicative** publication
- Fragmentary publication
- Intellectual property
- Dealing with the press



Research with Human Subjects

Human Subject: a living individual <u>about whom</u> an investigator (whether professional or student) conducting research obtains:

- Data through intervention or interaction
- Identifiable private information



The Institutional Review Board (IRB)

Committee for the Protection of Human Subjects (CPHS)

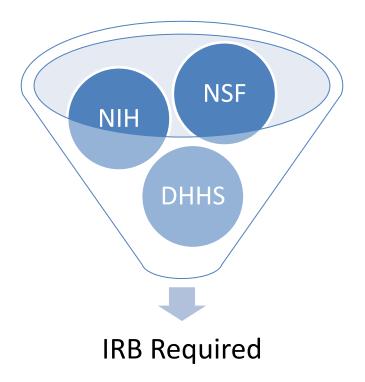
Institutional Review Board (IRB)

- Quick facts:
 - Independent committee
 - Formally designated to approve, monitor, and review biomedical and behavioral research involving human participants.
 - Ensure research design adheres to regulatory requirements and ethical principles
- **Guiding Principles**
 - Respect for person
 - Beneficence
 - Justice



Research with Human Subjects

All universities receiving federal funds must have an Institutional Review Board (IRB)





IRB application process

- IRB applications are submitted through Research Compliance Services (RCS)
- The review/approval period takes approximately 4-6 week



RESEARCH COMPLIANCE SERVICES



Human Subjects Research Training

- Human subjects research training requirement
 - online CITI training: www.citiprogram.org
 - http://humansubjects.uoregon.edu



What is Financial Conflict of Interest?

 When a researcher has a Significant Financial Interest that could directly and significantly affect the design, conduct, or reporting of research.



What is a Significant Financial Interest?

 Defined by federal regulations; universities may expand the definition beyond the scope of the federal definition



What if the University determines that conflict exists?

The university works with the investigator to develop an appropriate management plan



UO Policy

- Investigators who apply for or receive external funding are required to declare their "significant financial interests" (SFIs)
 - FCOI training
 - Declaration
 - Applies to all investigators



Research with non-human animals

- Research with animals must be reviewed by Animal Care Services (ACS) and the Institutional Animal Care and Use Committee (IACUC)
 - www.acs.uoregon.edu



Information Security

Best Practices for Important and Sensitive Information

- Data Storage
 - Properly managed servers
 - Encryption for highly sensitive information
- Data sharing
 - Properly managed servers
 - No email
- General security best practices
 - Safe email and web usage

UO Information Technology: http://it.uoregon.edu



Intellectual Property

 Patents, copyrights, trademarks and agreements are legal constructs (tools) used to establish how innovation is shared, and who should be identified with the work. These tools can be used to help direct your research output in a manner consistent with your goals.



Additional Resources

- UO RCR Education and Training
 - Includes access to CITI training for certification
- DHHS Office of Research Integrity
- UO Student Code of Conduct
- UO Policy Allegations of Research **Misconduct**

