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
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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

- Public Trust
- Excellence
- Future Research
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.
Research Misconduct

**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.
Research Misconduct

Fabrication

Falsification

Plagiarism
Research Misconduct

Case Studies*

1. Were These Slides Falsified

2. Struggling to Understand Plagiarism

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

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
Research Misconduct

UO Reporting Structure

1. any member of the University or other person who chooses to make an Allegation shall contact the Research Integrity Officer
2. Preliminary Assessment
3. Inquiry
4. Inquiry Report
5. Determination Regarding Investigation
6. Investigation
7. Investigation Report
8. Determination Regarding Misconduct
9. Appeal
10. Final Resolution and Outcome
Copyright, Plagiarism & Responsible Authorship

- **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
Copyright, Plagiarism & Responsible Authorship

- **Plagiarism**: using someone else’s words and ideas in a paper and acting as though they were your 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*
Copyright, Plagiarism & Responsible Authorship

• 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
Copyright, Plagiarism & Responsible Authorship

– 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 *about whom* 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)

NIH  NSF  DHHS

IRB Required
IRB application process

• IRB applications are submitted through Research Compliance Services (RCS)
• The review/approval period takes approximately 4-6 weeks
Human Subjects Research Training

• Human subjects research training requirement
  – online CITI training: www.citiprogram.org
  – http://humansubjects.uoregon.edu
Financial Conflict of Interest in Research (FCOIR)

• 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.
Financial Conflict of Interest in Research (FCOIR)

• What is a Significant Financial Interest?

  – Defined by federal regulations; universities may expand the definition beyond the scope of the federal definition
Financial Conflict of Interest in Research (FCOIR)

What if the University determines that conflict exists?

The university works with the investigator to develop an appropriate management plan.
Financial Conflict of Interest in Research (FCOIR)

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](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**