Research Integrity Overview

Dr. Philip R. Cunningham
Associate Vice President for Research Integrity
Research Integrity

Research provides new knowledge that enriches the quality and quantity of our lives.

Like any exploratory activity, however, research is not without risks and responsibilities.

Rules, regulations and guidelines have been developed to minimize the risks associated with research.

In research integrity, we work with researchers to help them comply with these rules and regulations and to provide a safe working environment so they can focus on the fun stuff.
Research Integrity Areas

I. Research Ethics

II. Research Safety (Rob Moon)
Research Integrity Areas

Research Ethics

• Research involving human subjects, such as clinical trials of new therapeutic drugs or devices.
• Research involving animals such as testing new therapies to treat diseases.
• Financial conflicts of interest.
• Research involving national security
• Honesty in performing and reporting research.

How do we provide assurance that research in each of these areas adheres to the highest ethical standards?
Institutional Review Board (IRB)

• Any research plan involving human subjects must first be reviewed and approved by an Institutional Review Board. The research is also reviewed periodically by the IRB as the study progresses.

• The purpose of these reviews is to ensure that the rights and welfare of the human subjects in the studies are protected.

• WSU has five IRBs.

• The Administrative Office is located 87 E. Canfield
Any research or teaching plan involving vertebrate animals must first be approved by an Institutional Animal Care and Use Committee.

The research is also reviewed as the study progresses.

The purpose of the IACUC is to protect the welfare of animals used in teaching or research.

Administrative office located 87 E. Canfield.
Conflict of Interest (COI)

• Occasionally, a research project has the potential to place the researcher in a conflict of interest

• For instance, owning stock in a company that is paying you to test one of its new drugs. If the drug tests are successful you stand to make lots of $$$ but if the drug tests are not successful ...

• To manage these sorts of conflicts, we have a Financial Conflict of Interest Committee whose job is to devise a management plan for the researcher that keeps him/her from being placed in this predicament.

• The committee may allow the researcher to perform the study but not to receive or analyze the data.
Export Control Regulations

• Some research activities are restricted by the federal government. Examples are:
  – Weapons research
  – Research that uses technology that can be used for weapons development
  – Research that involves trade with embargoed countries

• This type of research may be subject to export controls that restrict who has access to the research and technology. Violations carry severe penalties.

• Our Export Control Office works closely with Sponsored Programs, researchers and the Office of International Students and Scholars to identify and resolve potential issues.
Research Misconduct

- Research misconduct occurs when a researcher makes up data (*fabrication*), alters data (*falsification*), or uses another person’s data, ideas, or writing without their permission (*plagiarism*) when proposing, conducting, reviewing or reporting research.

- We are obligated by federal law to investigate any credible accusation of research misconduct.

- Allegations of research misconduct are handled by the Research Integrity Officer (me) according to WSU policy.
Research Misconduct

Fabrication
Falsification
Plagiarism

Which do you think occurs most often in universities?

Why?
Plagiarism

• Plagiarism is taking or using another person’s ideas, processes, results, or words without giving appropriate credit.

• Repeatedly reporting results in different publications (self-plagiarism)

Plagiarism is the most common form of research misconduct at universities.
What is the major conflict between faculty and trainees in research labs?
Data Ownership

“Guidelines Regarding Research Data Ownership”

www.research.wayne.edu/compliance

In general, all research data are owned by the University.

The Principle Investigator (faculty advisor) is the steward of the research data.

• Collect, manage, and retain research data.
• Decide when and where to publish the data.
Trainees and Research Data

- Trainees cannot take original copies of data when they leave the Institution without written permission of the Chair or Dean.

- Trainees may be allowed to take duplicate copies of data with permission from Principal Investigator:
  - Should be arranged in advance.
  - Helpful if agreement is in writing.
Suggestions for Avoiding Authorship Disputes

• Discuss early in the collaboration:
  – Who can expect to be an author
    • On presentations? On abstracts? On publications?
  – Under what circumstances can an investigator or trainee expect to be an author?
    • Sometimes, always, never, only if…
    • Who can initiate a report of the data?
  – When can preliminary data be used in a grant application, and by whom?

• It is highly recommended to form a committee to organize, track and review the above activities
Lab Safety Culture

Rob Moon
Associate Director
Office of Environmental Health and Safety
Industry places a high value on safety

- ISO 14000 - Environmental Management
- ISO 45001 (draft) - Occupational Health and Safety Management Systems
- OHSAS 18001 - Occupational Health and Safety Management Systems
Safety increases value of education

- Quality: Safe labs produce better results
- Productivity: Safe labs have higher morale
- Improve reputation of WSU with
  - Employers
  - Media
  - Community
  - Regulators
Observations from other Universities

• Safety is everyone’s responsibility
• Formally communicate commitment to safety
• Research and administration need to openly communicate frequently, and cooperate
• Safety culture is complex & multi-dimensional
• Be persistent and consistent
HazMat / Dry Ice Shipping

• Dangerous Goods must be shipped by trained personnel. Violations are punishable by up to 10 years in prison and $110,000 fine per violation.

• DRY ICE and LITHIUM BATTERIES are Dangerous Goods – ALL materials shipped on dry ice are regulated.
“IT’S THE LAW!” - OSHA

• Every worker has a voice.

• You must know your rights and that you can use them without retaliation when you believe that safety or health is at risk.

• We must provide a workplace free from recognized hazards.

• It is illegal to retaliate for raising concerns with MIOSHA.
Researcher Empowerment

- Consider safety while planning research
  - Research isn’t complete until waste is dealt with
- Document safety SOPs
- Receive training about hazards in your lab
- Follow safety rules
- OEHS is available to consult / advise
  - 577-1200 or oehs.wayne.edu
Strategic Opportunities

- Set a good example
- Communicate. Who do you notify about injuries / incidents / spills?
- Identify and help remediate hazards (before injury)
- Positive reinforcement
Phases of Safety Systems

Awareness (transactional / reactive)

Compliance

Management Ownership

Full Partnership (Strategic)