Research Integrity: Best Practices

- Research Integrity
- Research Compliance
- Data Handling
“The public will support science only if it can trust the scientists and institutions that conduct research.”

National Research Council and Institute of Medicine 2002
Best Practices: Research Integrity

- Maintain High Standards in Own Work
- Understand Policies
- Raise questions and problems promptly and professionally
- Strive to be a generous and collegial colleague
Best Practices: Research Compliance

- Protect Human Subjects and Laboratory Animals
- Follow Environmental and Other Safety Regulations
- Do not engage in misuse
- Disclose and manage conflicts of interest
Best Practices: Data Handling

• Develop data management and sharing plan at the outset of a project
• Incorporate appropriate data management expertise in the project team
• Understand and follow data collection, management and sharing standards, policies and regulations
Research Misconduct

• Fabrication
• Falsification
• Plagiarism
Detrimental Research Practices

• Include But Not Limited to:
  • Not Sharing Data or Code
  • Misleading Statistical Analysis
  • Misuse of Animal or Human Subjects
  • Sabotage
Consequences of FFP & DRP

- Direct costs
- Lost years of training/work
- Advance of knowledge is impaired
- Science as an institution is less effective/trusted
- Suspension or disbarment of individual or organization
Case Study Example

- Dutch psychologist Diederick Stapel was found to have falsified data in 30 peer-reviewed articles over a number of years. Often, Stapel and a colleague or student came up with a hypothesis, and then designed an experiment to test it. Stapel took responsibility for collecting data through what he said was a network of contacts at other institutions, and several weeks later produced a fictitious data file for his colleague to write up into a paper. On other occasions, Stapel received co-authorship after producing data he claimed to have collected previously that exactly matched the needs of a colleague working on a particular study. The data were also suspicious, the report says: effects were large; missing data and outliers were rare; and hypotheses were rarely refuted. Journals publishing Stapel's papers did not question the omission of details about where the data came from.
Small Group Discussion

- Review the case study for your group
- Identify potential FFP and DRP issues
- Discuss what you would do if you were involved in a similar situation (e.g., as a colleague, co-author, team member, student, peer reviewer, journal editor)

- Each small group will present to the full group a brief summary of the case study and what you would do in a similar situation
Resources

- OSU Ombuds Office: [http://oregonstate.edu/ombuds/](http://oregonstate.edu/ombuds/)
- OSU Office of Research Integrity: [http://research.oregonstate.edu/ori](http://research.oregonstate.edu/ori)
- US Dept. of Health & Human Services Office for Human Research Protections: [https://www.hhs.gov/ohrp/](https://www.hhs.gov/ohrp/)
- Research Data Services: [https://guides.library.oregonstate.edu/research-data-services](https://guides.library.oregonstate.edu/research-data-services)
- Library Graduate & Faculty Workshops: [http://library.oregonstate.edu/graduate-students](http://library.oregonstate.edu/graduate-students)
Books


Any Final Questions?

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