

# Responsible Conduct of Research Data Management

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# Data Management

- Data Acquisition
- Data Protection
- Also Includes:
  - Data Analyses and Interpretation
  - Data Ownership
  - Data Sharing

## Data Acquisition

- Data collection techniques depend on the type of research
- Underlying principles are the same
- Discuss and write down all details regarding data collection

# Data Acquisition

- Get all applicable required compliance training
- Record date with a pen and all details in a bound notebook
- No files or loose sheets!
- No scratching out data!
  - Draw a straight line through it and record explanation
- Date all electronic data

# Data Protection

## – Why?

- To confirm research findings
- For analyses and interpretation
- For writing manuscripts
- For filing ‘Disclosures’

# Data Protection

- Storage
- Confidentiality
- Retention

## Case 1: Data from a Graduate Course - Social Science

- You are a graduate student taking a course with Professor Teacher. In this course Professor Teacher gives the class some data from his ongoing research as illustrations. You also are told to use some of these data in your course assignments. In doing so, you notice that the trends in these data have some interesting implications for other research you did with Professor Study and are now writing up. You want to use some of Professor Teacher's data in your article to draw out these new implications.
- Whom, if anyone, do you approach about this, how do you approach him or her, and what do you say?

## Case 2 Changing the Procedure

- You are part of a group of graduate students working on a large project. The results from your group's experiment are used for other experiments in the project. The principal investigator (PI) for the project wants you to use a new procedure. The other students in your group do not wish to change the procedure and think that the PI will not notice if the old procedure is used.
- You believe that if you use the old procedure, the quality of the data will suffer and you will mislead the PI and perhaps the entire scientific community. You argue for using the new procedure but the rest of the group is not persuaded.
- What do you do and how do you go about it?