



## Data Management and Whistle-Blowing

Item Type	presentation;article
Authors	Loui, Michael C.
Rights	Supported by the National Science Foundation under grant EEC-0628814. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the University of Illinois or the National Science Foundation.;Authors who create derivative works should send the author a courtesy copy of the derivative work. The derivative work should NOT imply that we agree with the authors' views.
Download date	2025-04-21 12:01:50
Item License	<a href="http://creativecommons.org/licenses/by-nc-sa/3.0/">http://creativecommons.org/licenses/by-nc-sa/3.0/</a>
Link to Item	<a href="https://hdl.handle.net/20.500.14394/23530">https://hdl.handle.net/20.500.14394/23530</a>



# Data Management and Whistle-Blowing

---

Michael C. Loui

*Department of Electrical and Computer Engineering  
University of Illinois at Urbana-Champaign*

February 25, 2008



# What are the ethical issues in the management of research data?

---

- Ownership
  - Depends on sponsor (govt, industry, foundation)
  - Rights of subjects, researchers, university
- Collection
  - Permission
  - Accurate recording, completeness
- Protection
- Sharing
  - Verifiable and reproducible by others



# We are developing role-play scenarios on research ethics

---

- Ethics Education in Science and Engineering Program, National Science Foundation Grant EEC-0628814
- M. C. Loui and C. K. Gunsalus, co-PIs  
Bradley Bummel and Kerri Kristich,  
graduate research assistants
- Approved by the campus Institutional Review Board

# You will participate in a role-play of an actual scenario

- Instructions
- Prepare roles
  - Professor
  - Student
- Run role-play
- Discussion
- Survey



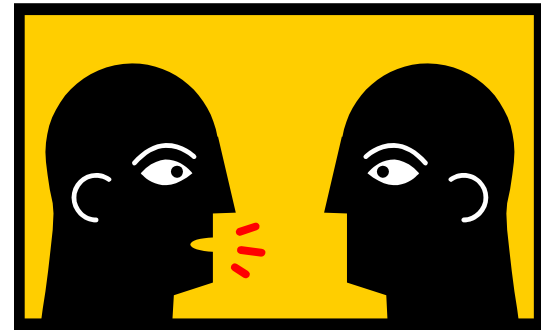
# Prepare your role

- Plan for the role-play conversation
  - Read scenario
  - Questions to ask other person
  - Answers for anticipated questions
- Observers just read everything



# Run the role-play

- Each group has a professor role and a student role
- Some groups have an observer role
- Run role-play





## What happened in the role-play?

---

- What did professors and students do well?
- What should they have asked or said instead?
- What did the professor and student decide to do? For what reasons?





# What constitutes research misconduct?

---

- *Fabrication*: creating research data
- *Falsification*: altering research data in unacceptable ways (e.g., deleting outliers without good reason)
- *Plagiarism*: using the words and ideas of others without proper attribution



# Why should you report / not report potential research misconduct?

---

- Reasons to not report
  - Potential retaliation
  - Personal distress
- Reasons to report
  - Reputation of lab, university
  - Perspectives of other researchers
  - Loss of public trust, loss of funding



# What should you do in a potential whistle-blowing situation?

---

- Consider alternative explanations
  - You may be wrong
- Ask questions
  - Do not make charges
- Find documentation, emphasize facts
- Seek advice from trusted colleague



# How does the campus respond to allegations of research misconduct?

---

- Administered by Research Standards Officer (research integrity officer)
- 1. *Inquiry*: enough evidence to proceed?
  - Fast, informal
- 2. *Investigation*: did misconduct occur?
  - Formal hearing, due process



# What actually happened in this role-play scenario?

---

- Professor confirmed student's concerns
- Inquiry, then investigation determined post-doc had fabricated data
- Student completed doctorate, became academic
- Post-doc dropped out of science, went to medical school

# Please complete the survey; pick up the summary sheet

---

- What lessons did you learn?
- How could the role-play be improved?
- On separate sheet, kindly enter name and e-mail address for follow-up





# Reference and Acknowledgments

---

- Gunsalus, C. K. (1998). How to blow the whistle and still have a career afterwards. *Science and Engineering Ethics*, 4, 51-64.
- Supported by the National Science Foundation under Grant EEC-0628814. The views, opinions, and conclusions expressed here are not necessarily those of the National Science Foundation or the University of Illinois.