2-25-2008

Data Management and Whistle-Blowing

Michael C. Loui

University of Illinois at Urbana-Champaign

Follow this and additional works at: https://scholarworks.umass.edu/esence

Part of the Engineering Commons, Life Sciences Commons, Medicine and Health Sciences Commons, Physical Sciences and Mathematics Commons, and the Social and Behavioral Sciences Commons

Recommended Citation


Retrieved from https://scholarworks.umass.edu/esence/275

This Presentation is brought to you for free and open access by the Science, Technology and Society Initiative at ScholarWorks@UMass Amherst. It has been accepted for inclusion in Ethics in Science and Engineering National Clearinghouse by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.
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


- 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.