

Lecture 2: Introduction to Academic Ethics

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Introduction to Research



A few things about Ethics

- Ethics in Research
 - ▶ Ethical goals
 - ▶ Ethical methods
 - ▶ Ethical scientific conduct
- Ethics in the Graduate School
 - ▶ Ethics for Teaching Assistants



Ethical goals

- Contribute to society
- Consider misuses of research results
- Consider consequences



Ethical methods

- Be competent, do your best
- Do not harm people, animals
- Protect privacy, data
- Be transparent, honest
- Explain what, but also why



Ethical conduct

- Do not fabricate data
- Convince yourself first
- Correct errors
- Correct attribution of work, data, etc.
- Fraud/Error
- Plagiarism
- Misrepresentation, spin
- Be an honest reviewer
- Academic Service



Consider Costs

- Time, Effort, Public money
- Cost to participants
- Risk to participants: physical, psychological, societal
- Also consider benefits



Avoid fooling yourself

- You are the easiest to fool
- Plan ahead, separately from performing work
- Stick to correct method
- Devote time to think of all alternatives
- Devote time to consider personal biases, list systematically
- Devote time to discover conflict of interest
 - ▶ Do not hide conflicts of interest



Mistakes

- Falsifying data
- Partial reporting
- Spinning results
- Hiding conflicts of interest
- Questionable relationships with students, subjects of research, etc.
- Unauthorized use of confidential information
- Tolerating bad practices of collaborators
- Improper attribution of work, ideas, collaborations
- Duplicate publications, double reporting, self-plagiarism
- Plagiarism
- “Softening” methodology: changing design, method, measurement, experiment, to fit expectation



Play the long game

- Ethics is not a burden
- Long-term, scientific method works
- Replication studies
- Reviewing
- De-facto impact: citations, patent licensing, applications
- Trying your best to “be true” will pay off
- Pressure and stress may confuse you, be prepared



Other problems

- Confirmation bias
- Publication bias
- Replication studies
- Conference Reviewing
- Pressure and stress, societal bias



Sources, Further Reading

- These slides are heavily influenced from various sources
 - ▶ <https://www.acm.org/code-of-ethics>
 - ▶ https://ec.europa.eu/research/participants/data/ref/fp7/89888/ethics-for-researchers_en.pdf
 - ▶ <http://eneri.eu/>
 - ▶ <http://web.csulb.edu/~arezaei/EDP520/>
 - ▶ *How to Lie with Statistics*, Darrell Huff, 1954.
 - ▶ https://www.eee.hku.hk/~elec3441/sp17/handouts/Fleming_Wallace_86.pdf



TA ethics

- Do your best to transfer knowledge
- Consider who is trying to learn
- Empathy will improve transferring knowledge
- Prepare adequately
- Do not abuse authority
- Conflicts of interest
 - ▶ Best to avoid
 - ▶ If you cannot avoid conflicts, be transparent
- <http://users.ics.forth.gr/~polyvios/ta-guide.pdf>

