Academic Ethics

Academic Misconduct
Research Ethics
Human Subjects Research
Ethics training
Academic Misconduct

- Cheating
- Plagiarism
- Claiming the ideas of others as your own
- Falsifying data
- Interfering with the work of others
Cheating

• Getting help on a test, exam or assignment without *explicit* authorization from the instructor

• *Giving* help without explicit authorization

• Submitting the same work for two different classes without prior authorization from the instructor
Cheating

• Submitting the same work for more than one class may be permitted with prior authorization by both professors

• Typically, a more substantial piece of work will be required in such cases
Cheating

• If you have any question whether helping each other is allowed……..

• Ask the instructor
Plagiarism

• Using the words or ideas of others without explicit citation
• If you use the words of others, use quotation marks and reference the source
• If you use the ideas of others, make clear you are doing so and reference the source
Plagiarism

• It doesn’t matter if the work cited is published or unpublished, if it is the work of a friend, colleague, fellow student, professor, or anyone else

• It doesn’t matter if your assignment is written or oral, you must still cite your sources
Plagiarism

• **Correct:**
  – In a previous study, Jones found “the consequences of iron deficiency in infancy are devastating” (Jones, 1994)

• **Plagiarism:**
  – There have been many studies of iron deficiency. They found the consequences of iron deficiency in infancy are devastating (Smith 1992; Jones 1994; Kumar, 1985).
Plagiarism

• Correct:
  – Previous studies suggest cognitive losses due to iron deficiency are caused by interference with the dopamine receptor system (Smith, 1992; Jones, 1994; Kumar, 1986).

• Plagiarism
  – Cognitive losses due to iron deficiency are caused by interference with the dopamine receptor system. (No references provided.)

• (Note: this is plagiarism even if the references are listed in the bibliography.)
Plagiarism

• Correct:
  – Our study tests Jones’ (1994) hypothesis that iron deficiency affects cognition through the dopamine receptor system in the brain.

• Plagiarism:
  – The proposed study tests the hypothesis that iron deficiency affects cognition through the dopamine receptor system.
Plagiarism

• Self-plagiarism: publishing the same material in more than one place
• This is considered misconduct: ‘redundant publication’
• Is there a fuzzy line here?
Plagiarism

• Internet has made plagiarism extremely easy and tempting
• BUT
• Internet has made it amazingly easy to identify plagiarized work!
Sanctions for academic misconduct may include:

- Grade reduction
- Requirement for additional work
- Assignment of a failing grade in the course
Sanctions

• Serious or repeated instances of academic misconduct may result in
  – Temporary suspension
  – Withholding of honors and awards
  – Withdrawal of financial aid
  – Dismissal
  – Note of reason for dismissal on permanent record
Ethical Issues in Research

- Academic conduct
- Choice of question
- Treatment of subjects
- Use of funds
- Analysis and interpretation
- Reporting
Claiming the Ideas of Others

• It is academic misconduct to claim to have originated ideas for research, interpretation, or other significant original thought

• It doesn’t matter if the other person is a friend, fellow-student, colleague, professor, or anyone else

• Use of others’ ideas in developing your own is allowable, as long as explicit credit is given for their contribution
Falsifying Data

• Falsifying or manipulating data to reach a desired conclusion is grave misconduct

• Falsifying data includes
  – Selectively dropping cases or variables
  – Making up data
  – Selectively reporting or suppressing results
Interfering With Others’ Work

• Altering, sabotaging, or otherwise interfering with the work of others, or

• Attempting to do so
Control and Ownership

- Ownership of data
- Rights to publish
- Authorship credit requires
  - Contribute to the research
  - Write or revise the article
  - Approve the final version
  - Just providing the funds is not sufficient
- It is wise to discuss these issues in advance!
Choice of Question

• Risks balanced with possible benefits of the research
• Possible uses and misuses of the results
• Influence of funding sources
• So what? Is the research useful?
Treatment of Subjects

• Voluntary participation/coercion
  – Implied coercion
  – Coercive (excessive) compensation
  – False promises
Treatment of Subjects

• Ethical treatment of human subjects
  – Harm
  – Risk
  – Deception
  – Anonymity
  – Confidentiality
Treatment of Subjects

• Milestones
  – Nuremberg Code
    • Ten principles – voluntary, useful, no undue harm, scientific qualification of researchers..
  – Belmont Report
    • Autonomy (respect for persons)
    • Beneficence
    • Justice
Analysis and Interpretation

- Can you change your question after the fact? (Or add a new question)
Reporting

• Obligation to report results
  – Negative results
  – Unexpected results
  – Lack of results

• Accepting research support if the right to report results is compromised (not permitted at Tufts)
  – But risk of influence (still) exists
Use of Funds

- Responsible use of funds for intended purposes only
- Accounting properly
- Getting advance permission for deviations
Research in Other Countries

• Responsibilities
  – Who chooses the question?
  – Who benefits?
  – Capacity building?

• Adaptation of IRB process

• Adaptation of informed consent process (?)
Human Subjects Research

• ALL research using data collected from human subjects is subject to review by the Institutional Review Board (IRB)
• This includes original data collection and use of existing human subjects data for a purpose other than that for which it was originally collected
• This includes human subject data used, or collected for use, in a class
Human Subjects Research

• Many types of studies, including some qualitative and quantitative surveys, are exempt from IRB review, but…

• **You must submit your study to the IRB**

• The IRB determines whether your data collection effort is exempt, eligible for expedited review, or requires full review
Human Subjects Research

- Many data collection or data analysis projects are not intended to produce generalizeable or publishable result, and thus may be exempt from IRB review, but....

- **You must submit your study to the IRB**

- The IRB will determine if it is exempt
• Certain protections are mandatory when collecting data from human subjects
• You can find guidelines for informed consent and other protections on the web
• Forms and guidelines for requesting review are also found on the web.
Human Subjects Research: Elements of Informed Consent

- It is research
- Participation is voluntary (no sanctions for refusal or for stopping participation)
- Procedures to be followed
- Possible risks; possible benefits; alternative treatments (if applicable)
- Anonymity or confidentiality protection
  - Anonymity is not the same as confidentiality
- Compensation, options in case of harm
- Contact information in case of problems
Human Subjects Research

• IRB review is an absolute requirement of the University for all research and data collection involving human subjects

• Many journals will not accept articles for review without evidence that the research was cleared in advance by the Institutional Review Board
Human Subjects Research

• If your research is in the social sciences, contact
  – Medford IRB Office, 617 627 3417
  – Yvonne.Wakeford@tufts.edu

• If your research is in the biomedical sciences, contact
  – Boston IRB Office, 617 636-7512
  – André Briola abriola@tufts.edu

• Forms may be found at http://www.tufts.edu/central/research/IRB.htm
Human Subjects Ethics Training

- All researchers including students are required to complete ethics training regarding treatment of human subjects if they are involved in human subjects research
- Evidence of human subjects ethics training is required for some research grant applications
- Ethics training requirements change from time to time (and will change Jan 1); check the web site…
- Collaborative IRB Training Initiative (CITI) Program
<table>
<thead>
<tr>
<th>Top ten behaviours</th>
<th>All</th>
<th>Mid-career</th>
<th>Early-career</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Falsifying or ‘cooking’ research data</td>
<td>0.3</td>
<td>0.2</td>
<td>0.5</td>
</tr>
<tr>
<td>2. Ignoring major aspects of human-subject requirements</td>
<td>0.3</td>
<td>0.3</td>
<td>0.4</td>
</tr>
<tr>
<td>3. Not properly disclosing involvement in firms whose products are based on one’s own research</td>
<td>0.3</td>
<td>0.4</td>
<td>0.3</td>
</tr>
<tr>
<td>4. Relationships with students, research subjects or clients that may be interpreted as questionable</td>
<td>1.4</td>
<td>1.3</td>
<td>1.4</td>
</tr>
<tr>
<td>5. Using another’s ideas without obtaining permission or giving due credit</td>
<td>1.4</td>
<td>1.7</td>
<td>1.0</td>
</tr>
<tr>
<td>6. Unauthorized use of confidential information in connection with one’s own research</td>
<td>1.7</td>
<td>2.4</td>
<td>0.8 **</td>
</tr>
<tr>
<td>7. Failing to present data that contradict one’s own previous research</td>
<td>6.0</td>
<td>6.5</td>
<td>5.3</td>
</tr>
<tr>
<td>8. Circumventing certain minor aspects of human-subject requirements</td>
<td>7.6</td>
<td>9.0</td>
<td>6.0 **</td>
</tr>
<tr>
<td>9. Overlooking others’ use of flawed data or questionable interpretation of data</td>
<td>12.5</td>
<td>12.2</td>
<td>12.8</td>
</tr>
<tr>
<td>10. Changing the design, methodology or results of a study in response to pressure from a funding source</td>
<td>15.5</td>
<td>20.6</td>
<td>9.5 **</td>
</tr>
<tr>
<td>Other behaviours</td>
<td>Mid-career (%)</td>
<td>Early-career (%)</td>
<td>Significance</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
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<tr>
<td>11. Publishing the same data or results in two or more publications</td>
<td>4.7</td>
<td>5.9</td>
<td>3.4 **</td>
</tr>
<tr>
<td>12. Inappropriately assigning authorship credit</td>
<td>10.0</td>
<td>12.3</td>
<td>7.4 ***</td>
</tr>
<tr>
<td>13. Withholding details of methodology or results in papers or proposals</td>
<td>10.8</td>
<td>12.4</td>
<td>8.9 **</td>
</tr>
<tr>
<td>14. Using inadequate or inappropriate research designs</td>
<td>13.5</td>
<td>14.6</td>
<td>12.2</td>
</tr>
<tr>
<td>15. Dropping observations or data points from analyses based on a gut feeling</td>
<td>15.3</td>
<td>14.3</td>
<td>16.5</td>
</tr>
<tr>
<td>16. Inadequate record keeping related to research projects</td>
<td>27.5</td>
<td>27.7</td>
<td>27.3</td>
</tr>
</tbody>
</table>

Note: Significance of $\chi^2$ tests of differences between mid- and early-career scientists are noted by ** ($P < 0.01$) and *** ($P < 0.001$).
Resources

• Tufts University. 2003. “Academic Integrity @ Tufts.” [link](http://studentservices.tufts.edu/dos)

• Dartmouth College. “Sources: Their Use and Acknowledgement.” [link](http://www.dartmouth.edu/~sources/)

• Long Island University. “Citation Style for Research Papers.” [link](http://www.liunet.edu/cwis/cwp/library/workshop/citation.htm)
More Resources
