



## **HOMWORK ASSIGNMENT:**

**Download, read and think about your own situation. Discuss the case studies with colleagues. Bring up ethical issues that concern you ( in confidence) as they come up in the course of your career.**

**On Being A Scientist:** Third Edition, 2009  
Committee on Science, Engineering  
and Public Policy, National Academies

**This free PDF was downloaded from:**  
<http://www.nap.edu/catalog/12192.html>



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## Responsible Conduct of Research

“ The scientific enterprise is built on a foundation of **trust**. Society trusts that scientific research results are an honest and accurate reflection of a researcher’s work. Researchers equally trust that their colleagues have gathered data carefully, have used appropriate analytic and statistical techniques, have reported their results accurately, and have treated the work of other researchers with respect. ”



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# Researchers' Obligations

- To other researchers: Honor the trust their colleagues place in them
- To oneself: Adhere to professional standards – build personal integrity
- To the public: Act in ways that serve the public



# Definitions

- Scientific Misconduct

Fabrication, falsification or plagiarism in proposing, performing, or reviewing research or in reporting research results

- Questionable Research Practices

Violation of standards other than fabrication falsification or plagiarism { discipline specific e.g. openness in sharing research materials, fairness in reviewing, honesty and respect for colleagues }



# Definitions

- Scientific Misconduct

Fabrication, falsification or plagiarism in proposing, performing, or reviewing research or in reporting research results – a significant departure from accepted practices, committed intentionally, knowingly or recklessly; proven by a preponderance of the evidence

NOT a difference of opinion



# Responsible Conduct of Research

- Advising and Mentoring
- Treatment of Data
- Mistakes and Negligence
- Research Misconduct
- Responding to Suspected Violations of Professional Standards
- Human Participants and Animal Subjects



# Responsible Conduct of Research

- Laboratory Safety in Research
- Sharing of Research Results
- Authorship and the Allocation of Credit
- Intellectual Property
- Competing Interests, Commitments and Values
- The Researcher in Society



# Research Policies at Harvard

- [http://www.provost.harvard.edu/policies\\_guidelines/](http://www.provost.harvard.edu/policies_guidelines/)
- <http://www.fas.harvard.edu/~research/policy/index.html>





# Harvard GSAS resources



[http://www.gsas.harvard.edu/  
current\\_students/  
what\\_to\\_do\\_if\\_you\\_need\\_help.php](http://www.gsas.harvard.edu/current_students/what_to_do_if_you_need_help.php)

[http://www.gsas.harvard.edu/current\\_students/  
scholarly\\_pursuits\\_2.php](http://www.gsas.harvard.edu/current_students/scholarly_pursuits_2.php)



**Thank You**  
**Q & A**

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Thursday, November 5, 2009