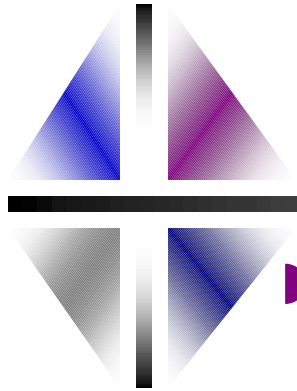




# NSF's Office of Inspector General

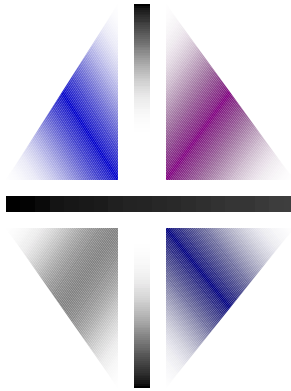
---

- ▶ What is an Office of Inspector General?
  - ▶ Jurisdiction
  - ▶ Issues addressed
  - ▶ Reporting structure
- ▶ Our staff : administrators, attorneys, auditors, criminal investigators, and scientists



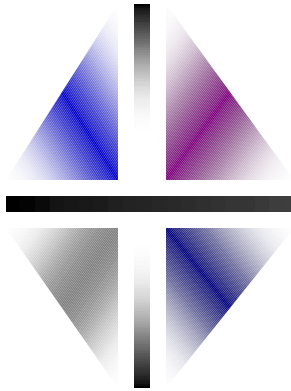
# Reference Materials

- ▶ A submission to NSF must be of the highest level of scholarship
- ▶ NSF Submission Certifications
- ▶ Research approvals (human subject, animal, material)
- ▶ Per Review Confidentiality
- ▶ Misconduct Policies and Materials
- ▶ Financial and administrative responsibilities
- ▶ Current and Pending support
- ▶ [www.nsf.gov/oig](http://www.nsf.gov/oig)



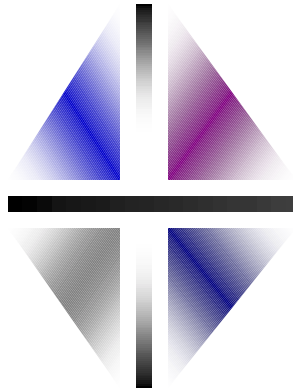
# Ethical Issues

- Data Selection
- Sharing and Using Ideas
- Balancing Priorities
- Making Financial Decisions
- Authorship and Acknowledgements
- Collaborations
- Conflicts of Interest
- Paraphrasing and Plagiarism
- Mentorship/Advisor Problems
- Merit Review
- Obtaining Oversight Reviews



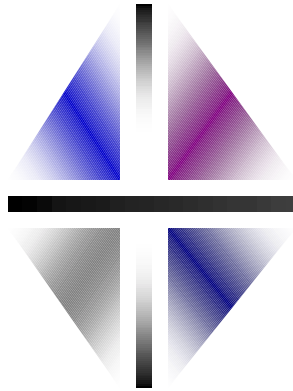
# Data Selection

- ▶ Full disclosure, cleaning, fudging, falsification, fabrication
- ▶ Share with whom, when, what restrictions and agreements?
- ▶ Who owns the data?
  
- ? PI takes project data that are essential for current analysis and won't return them.
- ? PI alters data because he anticipates it will be correct, it is not published.
- ? Graduate student fabricates spectra to obtain Ph.D.



# Sharing and Using Ideas

- ▶ NSF Policy on Sharing
  - ▶ Ideas are “in the air”, a continuum, unique,
  - ▶ Agreements, seminars and meetings
  - ▶ Sharing manuscripts, proposals
  - ▶ Shelby Amendment to FOIA
- 
- ? PI shared manuscript with another researcher who refined it, was named as a co-author and then used the manuscript in NSF proposal without PI.
  - ? Collaborator is slow to publish results with samples that are subsequently shared with another group. Latter effort lead to a publication.



# Balancing Your Priorities

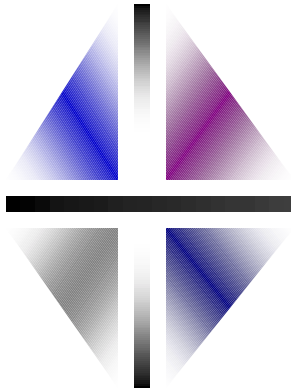
- ▶ Teaching Responsibilities
  - ▶ Department Responsibilities
  - ▶ Research Commitments
- 
- ? PI fails to disclose all funding on Current and Pending Support statement.
  - ? PI asserts that institution will not provide facilities needed for research and is demanding too much time for teaching responsibilities.



# Making Administrative and Financial Decisions

---

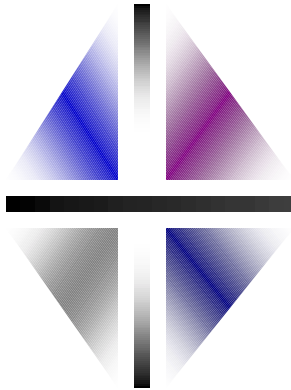
- ▶ NSF's GC-1
  - ▶ Understanding what you can and can't buy
  - ▶ Cost sharing and start-up
- 
- ? PI fires research associate, and associate reports firing to OIG.
  - ? PI purchases personal books and uses telephone for personal business.



# Responsible Authorship

- ▶ Prior agreements on what merits authorship or acknowledgments (people, funding)
  - ▶ Order of authors
  - ▶ Whose intellectual property?
  - ▶ Who is responsible for content?
  - ▶ Copyright
  - ▶ Duplicate or salami publications
- ? PI fires research associate, and associate reports firing to OIG.
- ? Student provides samples to testing facility for analysis and finds that analyses are used by facility staff in meeting presentation.

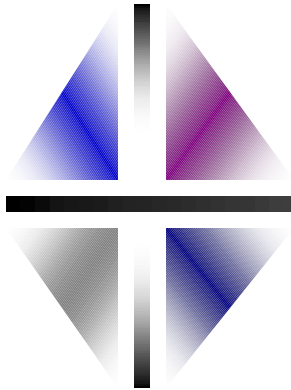




# Collaborations

---

- ▶ Written agreements on work, authorship, proprietary nature, subsequent use
- ? PI shares manuscript with colleague, who edits and becomes co-author and subsequently uses manuscript as part of sole authored proposal to NSF.
- ? Co-PI helps develop submitted collaborative proposal, the sequel to which relies on co-PI's information but which is submitted without co-PI.
- ? New researcher shares ideas with professor who invited researcher to come to university and present seminar. Professor subsequently uses ideas in his own proposal that competes with researcher's.



# Conflicts of Interest

---

- ▶ Balancing and Disclosing Financial and Commitment conflicts
  - ▶ What are conflicts?
  - ▶ SBI R vs. basic research awards
  - ▶ Working with industry
- 
- ? PI has research grant and a funded SBI R grant and has graduate students working on SBI R grant.
  - ? PI uses research grant to cover costs of his personal business.
  - ? Industry wants PI to conduct work related to research grant but puts stipulations on how data may be used or published.

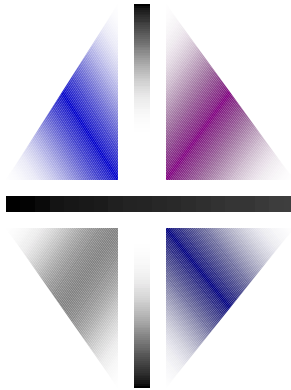


# Paraphrasing and Plagiarism

---

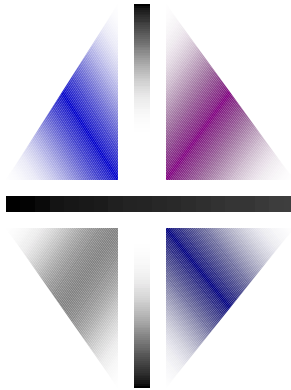
- ▶ Background, methods, research plan and ideas
- ▶ Common knowledge, limited usage, adequate citation

- ? PI copies methodology from another grant proposal because there are only limited ways of describing process.
- ? PI copies material into background section of proposal without attribution or offset.
- ? How much can you copying without attribution and offset before it becomes misconduct? When must you provide attribution?
- ? PI copies several paragraphs of text and has an introductory sentence stating, "Jones' lab has discovered that....."



# Mentor/Advisor Problems

- ▶ He/she took my idea
- ▶ I took "my" data/notebook
  
- ? Graduate student has a falling out with advisor and finds that data and ideas are used by advisor in publication that fails to provide authorship or acknowledgment to student.
- ? Graduate student leaves laboratory either happily or unhappily and takes laboratory notebooks with him/her.
- ? Graduate student believes that mentor is fabricating data.



# Merit Review

---

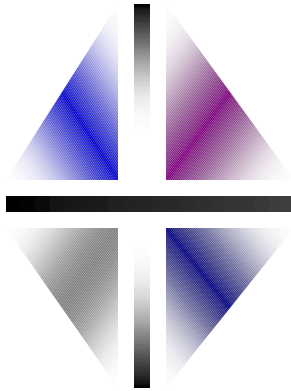
- ▶ Confidentiality, sharing proposals
  - ▶ When is it intellectual theft?
  - ▶ What if you recognize theft or plagiarism?
- 
- ? PI shares proposal received for review with research staff.  
Member of staff uses text and idea in proposal in own submission.
  - ? Reviewer has ideas that will improve research proposed in proposal  
and contacts PI with suggestions and request to do research.
  - ? Reviewer discusses panel process and proposals to class at home  
institution (or with PIs that submitted proposals).



# Obtaining Oversight Reviews

---

- ▶ Human / animal / biohazards reviews and permits
  - ▶ Collection permits
- 
- ? PI makes agreements about awardee oversight and fails to ensure that it occurs feeling that he/she can provide sufficient oversight.
  - ? PI collects endangered species and imports into US without permits.



# Allegations Reviewed (%)

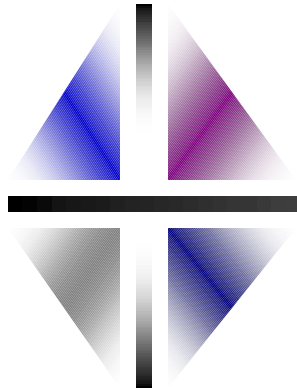
✓ Intellectual theft	24	Fabrication in proposal	3
✓ Verbatim plagiarism	16	Data sharing	3
✓ False statements (CV& CPS)	9	Impeding research progress	3
NSF procedures	8	Conflicts of interests	2
✓ Falsification in a proposal	7	✓ Duplicate submissions	2
✓ Peer review violation	7	✓ Mishandled investigation	1
✓ Mentoring or colleague abuse	6	✓ Data tampering	1
Retaliation	4	✓ Human subjects	1
✓ Fraud	3	Animal welfare	0.1
		Recombinant DNA	0.1

## Findings of Misconduct as of April 2000:

\* 12% Fabrication \* 67% Plagiarism

\* 12% Falsification \* 9% Other

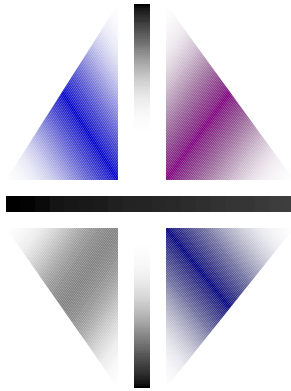
✓ **Indicates a finding**



# Encountering a Dilemma

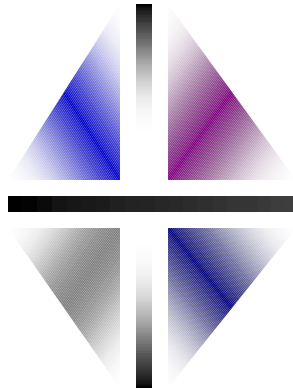
- ▶ What policy covers the case?
- ▶ What would you do?
- ▶ Who would you talk to?





# Your University's Policies

- ▶ Conflicts of interest
- ▶ Misconduct in Science
- ▶ Grievances
- ▶ Student Behavior
- ▶ Scope (Definition)
- ▶ Your contact point?
- ▶ Handling/Process
- ▶ Actions
- ▶ Who is decision-maker and manager of process?
- ▶ Federal Policies in absence of or supplementing University Policies



# How to Contact Us?

---

- ▶ Internet: [www.oig.nsf.gov](http://www.oig.nsf.gov)
- ▶ E-mail: [oig@nsf.gov](mailto:oig@nsf.gov)
- ▶ Telephone: 703-292-7100
- ▶ Anonymous: 1-800-428-2189
- ▶ Write: 4201 Wilson Blvd., Suite 1135  
Arlington, VA 22230