

Investigating Research Misconduct Across International Borders: Principles and Practices



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Office of Inspector General

- Created by Inspector General Act of 1978
- Mission: prevent, detect, and investigate **fraud, waste and abuse**
- **Prevent** ---strong, active outreach program to research communities
- **Detect** --- proactively look for vulnerabilities; open access via hotline
- **Investigate** --- all allegations:
 - civil / criminal cases
 - administrative cases
 - research misconduct

Prevention

- Risk-based Compliance and Ethics Programs
 - Leadership – tone at the top
 - Management - accountability
 - Systems
 - Training
 - Enforcement
 - MEASURES for success

- Educate, Educate, Educate





Prevention: Research Integrity Risk Areas

- ❑ Data acquisition, management, sharing and ownership
- ❑ Conflict of interest and commitment
- ❑ Human subjects
- ❑ Animal welfare
- ❑ Research misconduct
- ❑ Publication practices and responsible authorship
- ❑ Mentor / trainee responsibilities
- ❑ Merit or peer review
- ❑ Collaborative science
- ❑ Compliance with rules and regulations
- ❑ Financial management
- ❑ Laboratory management skills (people / supplies)

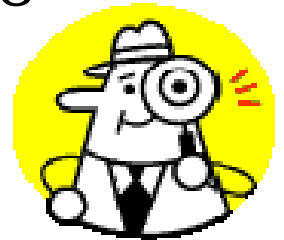


Prevention: Modes of Instruction

- Outreach from oversight bodies
 - <http://www.nsf.gov/oig/pubs.jsp>
- Electronic mechanisms
 - CDs, websites
 - Optional / required
- Funding agencies monitoring mentoring
 - NIH and NSF requirements to report mentoring activities
- University training as part of systemic compliance and ethics programs

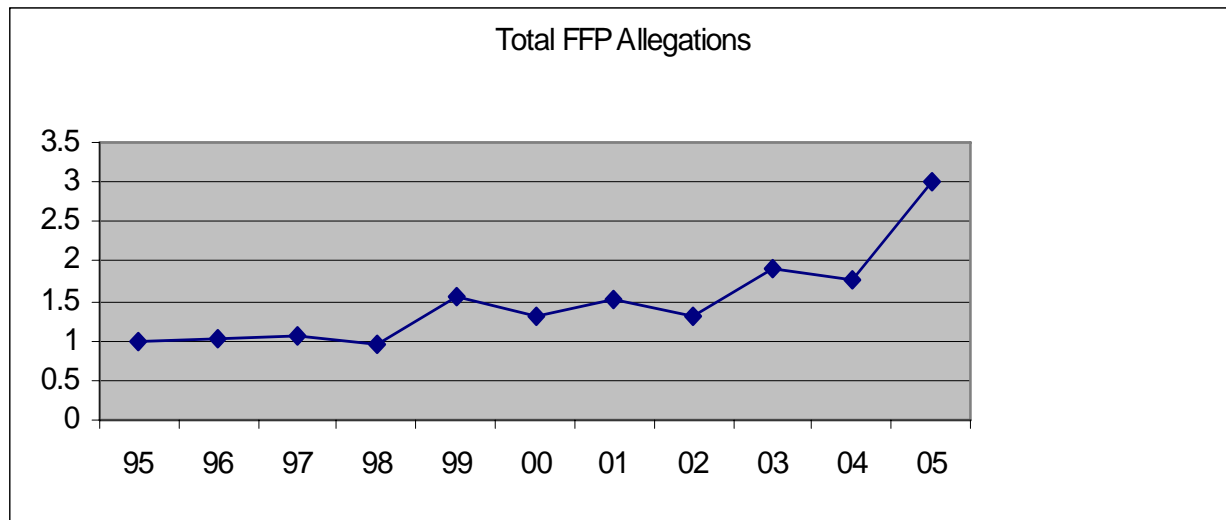
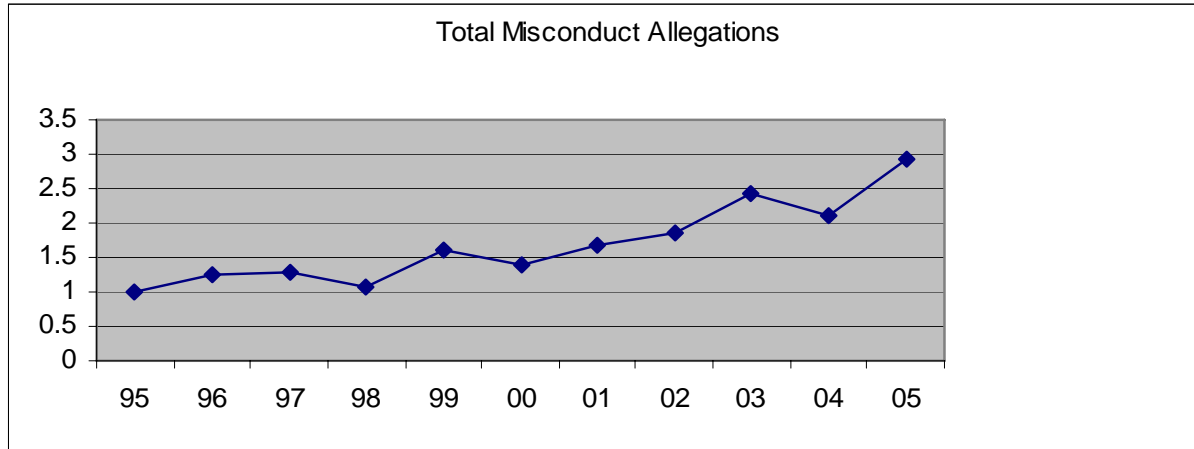
Detection

- Allegation receipt
 - Trusted, confidential, anonymous, supported by evidence
 - Ombudsman
 - Hotlines (telephone, e-mail)
- Proactive Strategies
 - Conduct focused review in identified risk areas
 - Plagiarism detection software
 - Agreed-upon dispute resolution strategies
 - “Precollaborative” agreements



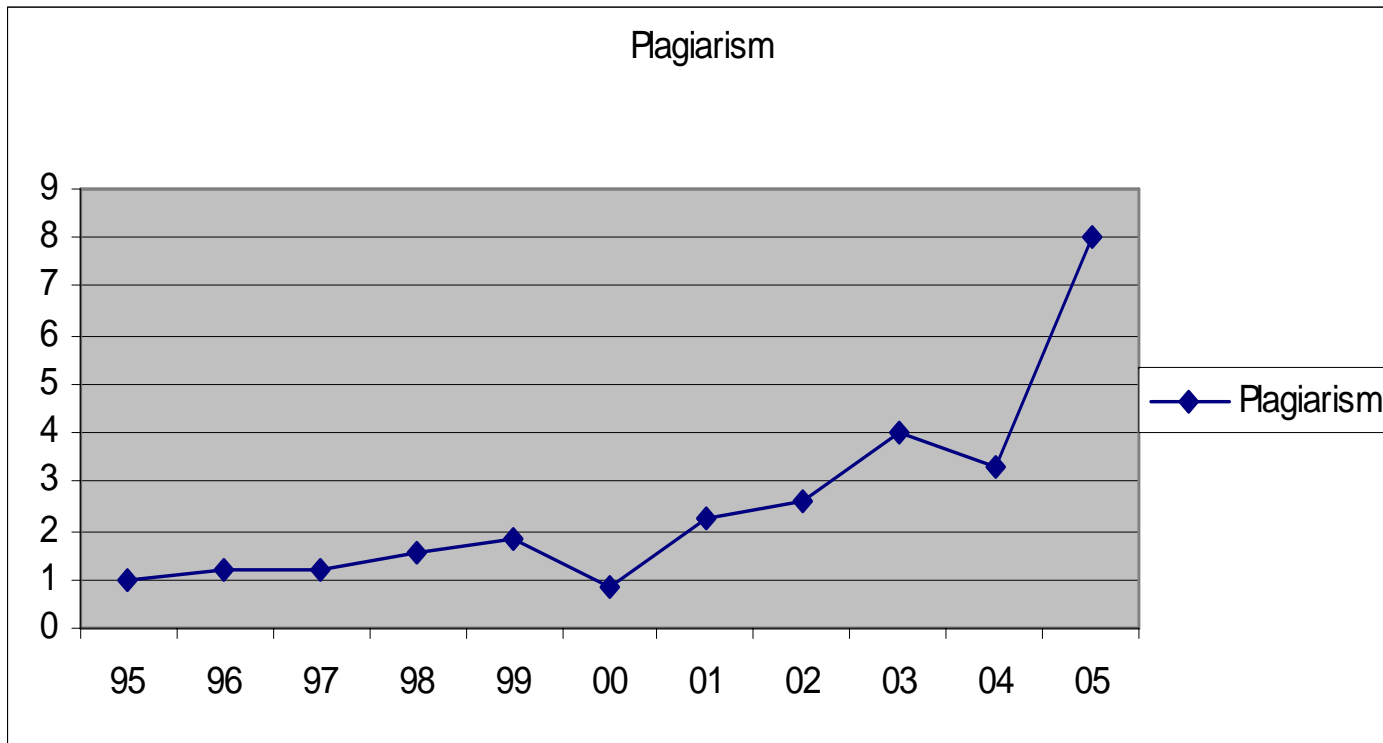
Detection: Trends

(x=year, y= relative increase, base year 1995)



Detection: Trends

(x =year, y = relative increase, base year 1995)



When you start looking, you can find interesting things!

Investigation - Principles

- Adhere to established policies and procedures
 - Act, intent, burden of proof, seriousness
 - Community standards; assessment by peers
- Fair
- Confidential
- Evidence-based
- Separation of Investigation and Adjudication
- Consistent enforcement and equitable penalties
- Agreed-upon fact-finding process / techniques



Research Misconduct

□ Plagiarism

- Papers, proposals
- Verbatim block or patch
- Violation of peer review
- Collaborative efforts

□ Fabrication /Falsification

- Verification of data in
 - Papers
 - Proposals
 - Theses, Dissertations

Federal Actions

Reprimand
Certification
Assurance
Ethics class, teach / attend
Bar peer review
Award restrictions
Award termination
Debarment (public action)

International RM Pressure Points

- Peer Review Violations
 - Confidential proposals shared across borders, ideas stolen,
 - Joint investigation?

- Misuse / Misallocation of award funds
 - International collaboration but funds are not allocated fairly
 - Joint investigation?

- Fabrication / falsification in data resulting from international collaborations
 - Joint investigation?

- Plagiarism in papers / proposals resulting international collaborations
 - Joint investigation and consistent training?

- Samples or intellectual content of native knowledge used without permission
 - Joint Investigation?

International Challenges



- Prevention – uniform expectation for training in risk areas
- Detection – fear-free reporting of concerns
- Investigation – consistent application of rules, procedures, and principles; fair; objective
- Coordination – identification of oversight bodies, early reporting and coordination, fair and consistent action



Global Science Forum: Draft Consensus Document

Six Conclusions:

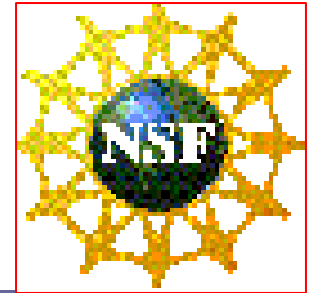
- Risk-based (cause-based) training programs
- Consistent deterrence by all facets of scientific enterprise
- Principles for effective whistleblowing systems
- Principles for “misconduct” managers
- Principles for effective investigations

Call for international dialog to ensure consistent international fact-finding efforts

Questions?



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