Research Misconduct

1 Definitions of Research Misconduct

Research Misconduct is defined as fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results.

Federal Policy on Research Misconduct

Office of Science and Technology Policy (OSTP), December 6, 2000, 65 FR 76260

- *Research, as defined herein, includes all basic, applied, and demonstration research in all fields. This includes, but is not limited to, research in economics, education, linguistics, medicine, psychology, social sciences, statistics, and research involving human subjects or animals.
- The University of Pittsburgh definition of misconduct includes misrepresentation of credentials.
- Other unethical or sloppy research practices are often referred to as research impropriety.

1.1 Definitions of Research Misconduct – Fabrication

Fabrication is making up data or results and recording or reporting them

OSTP Policy

- Do not fake an experimental result in order to substantiate your hypothesis.
- Do not be tempted to inflate your results so as to have a good case to make in a grant proposal or in a dossier for promotion or a job application.
- Do not anticipate results when preparing an abstract or grant proposal in the expectation that your predicted results will be achieved before the conference presentation is made or the grant proposal is reviewed.
- Do not cover up the absence of results of a required pre-admission test in a clinical trial by making up test results.
- Do not forge a clinical subject's response to a questionnaire in a misguided attempt to avoid burdening the subject.

1.2 Definitions of Research Misconduct – Falsification

Falsification is manipulating research materials, equipment or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.

OSTP Policy

- The research record is defined as the record of data or results from the research and includes, for example, laboratory records, both physical and electronic, research proposals, progress reports, abstracts, theses, oral presentations, internal reports, journal articles, and books.
- Negative results, as well as positive, should be reported.
- Selection of collected data for analysis must be based on a statistical protocol prepared before data are collected.
- Purposely altering an instrument to give incorrect readings, for your experiments or for those of another researcher, is as serious an offense as purposely writing down erroneous observations.
- Misrepresentation of one's educational background is considered to be falsification.
- Exaggeration of one's bibliography by claiming unpublished work as a publication is considered to be falsification.
- Papers should not be listed in a manuscript or proposal as submitted unless they have actually been submitted, not merely on the basis of expectation of submitting.
- Papers should not be listed as in press unless they have passed all editorial review and have been scheduled for publication.
- The use of data from a subject found retrospectively not to have satisfied all the protocol requirements for admission to a clinical study may be made only in accordance with validated biostatistical criteria, and the use of these data must be justified in any report or publication.
- Photo-images must not be manipulated without clear explanations of what was done.

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1.4 Definitions of Research Misconduct – Plagiarism

Plagiarism is the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.

OSTP Policy

- The ideas, results, or words of another should be clearly attributed in your manuscript.
- Citation to the work of another should be made at the point where the work is cited and should not be relegated to a non-footnoted general reference in the bibliography.
- Extensive use of the words of another author should be enclosed with quotation marks or should be formatted in indented paragraphs, with appropriate citation.
- It is improper to plagiarize an historical introduction, a review article, or methodological background from another author as well as to plagiarize research results.
- You may not use for your own purposes the ideas you find in a proposal or manuscript that you are reviewing.
- The publication by a supervisor of the work of a junior colleague or part of a student's thesis or dissertation, without attribution, is plagiarism.
- The editor of a collection of individually written chapters does not have the right to use the contributions of the individual authors without attribution.
- It is improper to include in a manuscript findings previously published by the same author or the same research group without citing the earlier publication.
- The concept of plagiarism may be applied not only to research but also to educational or other scholarly activity.

2 Standards of Proof

A finding of research misconduct requires that:

- There be a significant departure from accepted practices of the relevant research community.
- The misconduct be committed intentionally, or knowingly, or recklessly.

- The allegation be proven by a preponderance of the evidence.
- Research misconduct does not include honest error or differences of opinion.

3 Locus for Dealing with Allegations of Misconduct

3.1 U.S. GOVERNMENT

Office of Research Integrity (ORI), Public Health Service -

For policies and reports, consult: http://ori.dhhs.gov

Office of Inspector General, National Science Foundation -

For reports, consult:

http://www.nsf.gov/publications; Under Publication Types select Reports; Under NSF Organizations, select Office of Inspector General. Click View, and find Semiannual Reports to Congress.

Other Sponsoring Agencies:

3.2 UNIVERSITY OF PITTSBURGH

Academic Deans

Research Integrity Officer

1710 Cathedral of Learning

Phone: 412-624-3007

Fax: 412-624-1606

 The University's Research Integrity Officer is the designated institutional liaison with all federal agencies on research misconduct matters.

4 Duty to Report

 Reporting suspected misconduct is a shared and serious responsibility of all members of the academic community.

- Reporting is not an act of betrayal but is a positive act performed in an attempt to contribute to the quality and integrity of scholarship.
- Allegations shall not be made capriciously, but symptoms of evidence of misconduct shall not be ignored.
- Allegations of misconduct shall be communicated confidentially, and preferably in writing, to the dean of the school in which the misconduct is suspected or to the Research Integrity Officer (RIO).
- It is not the obligation of the complainant (whistleblower) to prove the allegation. If the matter deserves follow-up, an appropriately constituted panel will be designated to conduct the inquiry or investigation.
- Alleged violations of regulations designed to protect human subjects in research should be reported to the Institutional Review Board (IRB), at 412-383-1480.
- Alleged violations of regulations designed to protect animals used in experimentation should be reported to the Institutional Animal Care and Use Committee (IACUC), 412-383-2014, and/or the Director of the Division of Laboratory Animal Resources (DLAR), 412-648-8950.
- Problems initially reported to the IRB that may have implications of possible research misconduct may be reported by the IRB to the RIO or to the relevant dean.
- Problems uncovered in an internal Quality Assurance or external audit may be referred to the RIO if there are implications of possible research misconduct.

5 Protection of a Complainant (Whistleblower)

- The University will exercise all reasonable measures to provide protection against retaliation for a complainant who makes a good-faith allegation or engages in good-faith cooperation with the investigation of such allegations.
- *Good faith means having a belief in the truth of one's allegation or testimony that a reasonable person in the complainant's or witness' position could have based upon the information known to the complainant or witness at the time the allegation was made. An allegation or cooperation with an investigation is not in good faith if made with knowing or reckless disregard of information that would negate the allegation or testimony.

- For a Whistleblower Bill of Rights, recommended by the federal Commission on Research Integrity (1995), see Section II.D. of the Commission Report, at:
- http://ori.dhhs.gov/documents/report_commission.pdf
- Anyone who feels that retaliatory action has been taken against him/her for having lodged a complaint or cooperated with an inquiry or investigation may invoke the first step in the University Grievance Procedures

http://www.pitt.edu/HOME/PP/policies/02/02-03-01.html

- If a settlement is not achieved in the first step, the grievant may request the appointment of a Grievance Panel by presenting a written complaint to the Research Integrity Officer.
- If there is a finding of retaliation, the Provost shall take corrective action, which may include redress of any disadvantage suffered by the grievant and sanctions against the person(s) found to have committed the retaliation.
- Disciplinary action may be taken against a complainant who is found by the dean to have made an allegation not in good faith but out of capriciousness or malice or with reckless disregard of known facts that would disprove the allegation. The dean's finding may be appealed.

6 Procedures for Dealing with Allegations - The Inquiry

- The Research Integrity Officer, in consultation with the dean, shall make a
 preliminary assessment of the allegation to determine whether it falls
 within the definition of Research Misconduct.
- A matter that does not fall within the definition of Research Misconduct but concerns alleged violations of other regulations may be dealt with directly by the dean or may be referred to another office that could have jurisdiction, such as the IRB or IACUC.
- If the allegation falls within the definition of Research Misconduct and sufficient evidence exists or may be obtained to warrant an inquiry the dean, in consultation with the Research Integrity Officer, shall appoint and charge one or more qualified and objective persons (the Inquiry Panel) to conduct a confidential inquiry.

- The inquiry consists of information-gathering and preliminary fact-finding
 to determine whether a formal investigation is warranted. Primary
 research records may be examined, experts may be consulted, and
 witnesses may be invited to give testimony. After receiving the report of
 the inquiry report and any written comments from the respondent (the
 accused), the dean recommends either that a formal investigation be
 conducted or that the matter be closed without a finding of misconduct.
- If the activities of the respondent are found to involve research impropriety but not misconduct, the dean will take corrective or disciplinary measures.
- The individual or office, such as the IRB or IACUC, that initially reported the possibility of research misconduct will be notified of the outcome of the inquiry.

7 Procedures for Dealing with Allegations -The Investigation

- An investigative panel consists of five objective peers, a majority of whom come from a school other than that in which the respondent holds a primary appointment.
- The respondent shall be informed of the allegations.
- The panel may examine the research records and consult witnesses at a hearing. Confidentiality is maintained throughout, except that the respondent has an opportunity to question witnesses who are called to give testimony.
- The respondent may be accompanied to the hearing by an adviser, who
 may but need not be a lawyer, who may consult with him but may not
 present the case to the panel.
- The respondent may question witnesses and may present evidence in defense against the allegations.
- An audiotape or stenographic record of the hearing procedures shall be made.
- The investigative panel writes a report to the dean, with a copy to the respondent, and recommends whether a finding of research misconduct be made. The respondent may make written comments on the report before the dean makes a final decision.

Follow-Up

- Absent a finding of misconduct, the matter is closed.
- If research impropriety is found but not research misconduct, the dean may take corrective or disciplinary measures.
- If misconduct is found, the respondent is subject to sanctions following a short period of time to allow for an appeal. (See Sections <u>6.8</u> and <u>6.9</u>.)
- The complainant shall be informed of the outcome related to the complainant's role and information supplied.
- It is the responsibility of the Research Integrity Officer to report to the federal sponsoring agency the initiation of an investigation (but not of an inquiry), the findings of an investigation, and the final administrative actions taken as a result of the investigation. Relevant regulatory agencies, such as the FDA and OHRP, will also be notified in accordance with their requirements.

8 Internal Sanctions for Misconduct

Sanctions may include but are not limited to the following:

- A reprimand
- A requirement that letters of apology be written.
- Notification of editors and withdrawal or correction of abstracts, manuscripts, or papers
- Monitoring of future research
- Required participation in an educational program
- Removal from the project in question
- Notification and restitution to a sponsoring agency as appropriate
- Limitations on future role as an investigator
- Notification of future or prospective employers
- Notification of the IRB or IACUC, as appropriate
- Notification of affected institutions of the respondent's previous or current affiliation, co-authors, or other affected third parties

- Probation, suspension, or salary adjustment
- Notification of state or professional licensing boards
- Initiation of steps that could lead to a change of student or employment status including dismissal from a degree program or loss of tenure, or to revocation of a degree

9 External Sanctions for Misconduct

A sponsoring or regulatory federal agency, after allowing for appeal, may impose additional sanctions:

- Publication of a summary of the case in the Federal Register and/or other publications
- Prohibition from serving on advisory panels for a stated period
- Restrictions on role in future federally-supported research
- Debarment from receiving federal research funds
- Assessment of a fine
- Imprisonment for fraud