RESEARCH MISCONDUCT

2019-2020
RESEARCH MISCONDUCT – WHAT IS IT?
DEFINITION OF RESEARCH MISCONDUCT:

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

- 42 CFR part 93, 2 CFR part 910, 45 CFR part 689
**FABRICATION**
Making up results and recording or reporting them

**FALSIFICATION**
Manipulation of research materials, equipment, or processes, or changing or omitting results such that the research is not accurately represented in the record

**PLAGIARISM**
The appropriation of another’s ideas, processes, results, or words without giving proper credit
THE PURPOSE OF RESEARCH MISCONDUCT POLICIES

- To establish definitions for research misconduct
- To outline procedures for reporting and investigating misconduct
- To provide protection for whistleblowers and persons accused of misconduct
Public concern over research misconduct initially arose in the early 1980s.

In December 2000 the U.S. Office of Science and Technology Policy adopted a federal policy on research misconduct.

HHS, NSF, and other federal agencies require all funded institutions to address research misconduct and to develop requirements for responsible conduct of research training.
PUBLIC HEALTH SERVICE POLICIES ON RESEARCH MISCONDUCT

- Implements legislative and policy changes applicable to research misconduct
- Covers any entity that applies for a research, research training, or research-related grant or cooperative agreement with the Public Health Service (PHS) including all HHS agencies (e.g., NIH, CDC, CMMS)
Criteria for Research Misconduct

- Represents a significant departure from accepted practices
- Has been committed intentionally, or knowingly, or recklessly
- Proven by a preponderance of evidence
What is NOT Misconduct

- Honest, unintentional error
- Scientific disagreement
WHY DOES MISCONDUCT HAPPEN?

- Perceived pressure (e.g., publish or perish)
- Opportunity
- Personal problems
- Character issues
- Cultural differences
- Institutional culture
TOP TEN POOR BEHAVIORS

1. Falsifying or “cooking” research data
2. Ignoring major aspects of human-subjects requirements
3. Not properly disclosing involvement in firms whose products are based on one’s own research (conflict of interest)
4. Having relationships with students, research subjects, or clients that may be interpreted as questionable
5. Using another’s ideas without obtaining permission or giving due credit (plagiarism)
6. Unauthorized use of confidential information in connection with one’s own research
7. Failing to present data that contradict one’s own previous research
8. Circumventing certain minor aspects of human-subjects requirements
9. Overlooking others’ use of flawed data or questionable interpretation of data
10. Changing the design, methodology or results of a study in response to pressure from a funding source (falsification)
RESEARCH MISCONDUCT

OTHER DETRIMENTAL RESEARCH PRACTICES

- Publishing the same data or results in two or more publications
- Inappropriately assigning authorship credit
- Withholding details of methods or results in papers or proposals
- Using inadequate or inappropriate research designs
- Dropping observations or data points from analyses based on a gut feeling that they were inaccurate
- Inadequate record-keeping related to research projects
RESEARCH MISCONDUCT

U.S. OFFICE OF RESEARCH INTEGRITY (ORI) RECOMMENDATIONS

- Adopt zero tolerance policy for research misconduct
- Protect whistleblowers
- Clarify how to report
- Train mentors
- Model ethical behavior
- Create culture of ethics
MENTOR RESPONSIBILITIES

- Ensure all trainees (post-docs, grad students, undergrads) are aware of the responsible conduct of research
  - Define the Relationship
    - Role of trainee
    - Publication/authorship
    - Serving as PI or co-PI
  - Obligation to report
INSTITUTIONAL PROCEDURES REQUIRED TO QUALIFY FOR FEDERAL FUNDING

- Designation of an individual authorized to receive and investigate allegations of misconduct (RIO)
- Provisions for an initial inquiry to determine if allegations have merit
- Provisions for a formal investigation to determine the truth of the allegations
- Designation of an individual authorized to adjudicate the conclusions of the investigation and impose administrative actions to redress the misconduct or to vindicate the person charged (DO)
- Provisions for reporting findings to federal funding agency
VIRGINIA TECH REQUIREMENTS (Policy 13020)

- Establish policies and procedures for investigating and reporting instances of alleged research misconduct
- Respond to allegations
- Promote a culture of responsible conduct of research
- Provide assurances necessary to permit Virginia Tech to participate in federally supported research
- Provide annual report to federal agencies
INVESTIGATING RESEARCH MISCONDUCT
HOW IS MISCONDUCT IDENTIFIED?

- Suspected and reported by a colleague, team member, student, etc.
- Failure to confirm research results by own lab or others
- During peer-review process
- Post-publication
WHO MUST REPORT MISCONDUCT?

How is it reported?

- All members of the Virginia Tech community who observe or have information about research misconduct are required to report it.

- Contact the University Research Integrity Officer (RIO)
  https://www.research.vt.edu/research-integrity-office.html
WHO IS INVESTIGATED AND WHO IS HELD ACCOUNTABLE?

- **Investigated:** All authors who are involved in the specific project in question

- **Held accountable:**
  - Primary author
  - Other authors whose results are found culpable
  - Principal investigator
CONSEQUENCES (IF MISCONDUCT IS SUBSTANTIATED)

- Withdrawal or correction of all pending and published papers and abstracts affected by the misconduct
- Reprimand, removal from project, rank and salary reduction, dismissal
- Restitution of funds to the granting agency
- Ineligibility to apply for federal grants for years or forever – i.e., the end of your research career
INVESTIGATION PROCESS

1. Allegations reported to and assessed by RIO
2. RIO reviews allegations, sequesters research records, and, if allegations are credible, forwards to inquiry committee
3. Inquiry report is made and if investigation is substantiated records are forwarded to investigation committee
4. Initial draft reviewed by RIO and DO (Provost), and final report sent to all parties (respondent, complainant, RIO, DO, and funding agency)
5. Institutional decision, administrative action, and federal response
PROCEDURE FOR RESPONDING TO ALLEGATIONS OF MISCONDUCT IN RESEARCH

Research misconduct allegations reported

Assessment of credibility and applicability

Credible and applicable

Further investigation warranted

Inquiry committee

Further investigation unwarranted

End

Not credible or applicable

End

Investigation committee

No findings

End

Findings

Further reporting
Responsibility in Research Conduct

- The Office of Research Integrity (ORI) defines research integrity as “adherence to rules, regulations, guidelines, and commonly accepted professional codes or norms.”
- Research integrity is essential to ensure the reliability of research results and to preserve public support for research.
Contact Us

integrity@vt.edu
Referrals of Research Misconduct
Submit allegations to RIO (falsification, fabrication, plagiarism in research)
Within 7 days RIO performs assessment of allegation

Is allegation within definition of misconduct in research?

Yes

Does allegation warrant inquiry?

Yes

End

No

Non-sponsored research and respondent is either staff, graduate student, or undergraduate student

Refer to appropriate university unit

Undergraduate Honor System

Graduate Honor System

Committee on Faculty Ethics

Not sufficiently credible and specific

No

Yes

HHS or other sponsor

Anonymous

Virginia Tech official
PROCEDE FOR RESPONDING TO ALLEGATIONS OF MISCONDUCT IN RESEARCH

RIO initiates Inquiry Process

- Resolve conflicts of interest within the committee
- Provide written notification to Respondent

RIO convenes Inquiry Committee
- 1 standing member
- 1 CFE member
- Members and experts as appointed by RIO for the case

RIO charge to committee
- Brief on allegation
- Plan on Inquiry

Inquiry Committee initiates inquiry process
- Interviews
- Examine research records
- Evaluate evidence

Prepare Initial Inquiry Report
- Review by RIO for compliance with policy
- Modification as appropriate in consultation with RIO

Research records

Obtain custody

Within 10 days

Respondent

Provide written notification

Objection to members (within 10 days)

Within 10 days

60 calendar days for completion
PROCEDURE FOR RESPONDING TO ALLEGATIONS OF MISCONDUCT IN RESEARCH

Report to Include
• Name and position of Respondent
• Description of allegations
• Contract/funding source information
• Basis for recommendation including list of research records reviewed
• Attach Respondent’s and Complainant’s comments
• Name and titles of committee members
• Whether any action should be taken in investigation not recommended

Is investigation warranted?
(majority vote of Inquiry Committee)

Prepare Final Inquiry Report

Within 60 days of start of inquiry process unless extension is granted

No

No Investigation
• Retain records for 7 years
• Provide notices
• Provide guidance to Respondent if needed

Discuss comments on report
(Inquiry Committee, RIO, and DO)

Revise Initial Inquiry Report
(if required)

Respondent review

10 days for comments

Complainant review

10 days for comments

Yes

Provide guidance to Respondent if needed
PROCEDURE FOR RESPONDING TO ALLEGATIONS OF MISCONDUCT IN RESEARCH

1. **Federal funding agency**
   - Decision to begin
   - Copy of report
   - Other information as requested

2. **Provide written notification**

3. **Secure additional records and evidence**

4. **Notify Respondent**
   - Allegations to be investigated as a result of inquiry
   - New allegations to be investigated within scope of initial allegations

5. **RIO charge to committee**
   - Brief on allegation
   - Discuss procedures and requirements

6. **RIO Convenes Investigation Committee**
   - 1 standing member
   - 1 CFE member
   - Members and experts as appointed by RIO for the case

7. **Investigation Committee initiates investigation process**
   - Resolve conflicts of interest within the committee

8. **Pursue investigation**
   - Interviews
   - Examine of research records and evidence
   - Pursue relevant new issues and leads

9. **Notify Respondent**
   - Allegations to be investigated as a result of inquiry
   - New allegations to be investigated within scope of initial allegations

10. **Secure additional records and evidence**

11. **Begin Investigation within 30 calendar days**

12. **Provide written notification**

13. **Respondent**
    - Objection to members (within 10 days)
PROCEDURE FOR Responding To Allegations OF Misconduct IN Research

1. Complainant review
   - Provide comments within 30 days
   - Describes allegations
   - Identifies respondent
   - Identifies and summarizes research records and evidence
   - Describes and documents any federal support
   - Describes policy and procedures used
   - Statement of findings for each allegation
   - Recommendations for corrective actions

2. Respondent review
   - Provide comments within 30 days
   - Plus copy of (or supervised access to) evidence

3. Draft Investigation Report
   - Describe allegations
   - Identifies respondent
   - Identifies and summarizes research records and evidence
   - Describes and documents any federal support
   - Describes policy and procedures used
   - Statement of findings for each allegation
   - Recommendations for corrective actions

4. Complainant review
   - Provide comments within 30 days
   - Plus copy of (or supervised access to) evidence

5. Discuss comments on report
   - (Investigation Committee, RIO, and DO)

6. Prepare Final Investigation Report
   - Is there misconduct in research?
   - Committee findings (Positive or Negative) (majority vote)

7. Plus copy of (or supervised access to) evidence
PROCEDURE FOR RESPONDING TO ALLEGATIONS OF MISCONDUCT IN RESEARCH

Within 120 days of start of investigation

Notice to Respondent and Complainant

Within 10 days

DO final determination
(Findings and administrative and corrective actions)

File appeal process

Within 120 days of start of appeal

No appeal

DO review

Recommendations to Investigation Committee and DO

RIO review

Procedural Noncompliance

Faculty Review Committee or appropriate grievance procedure

Final decision

Appeal
PROCEDURE FOR RESPONDING TO ALLEGATIONS OF MISCONDUCT IN RESEARCH

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Institutional administrative action

- Restoration of respondent’s reputation

Misconduct

- Appropriate administrative and corrective actions
  - Withdrawal or correction of publications
  - Removal of person from project
  - Restitution to sponsor
  - Other internal institutional actions

Protection of complainants, witnesses, and committee members

Final decision (continued)

RIO provides written notifications

- Notice to other sponsors
- Respondent
- Others as appropriate (paper, magazine)
- Complainant

DO determination

Notice to federal agency

- Within 120 days of start of investigation or appeal process
  - Final Investigation Report with attachments
  - Statement of whether institution accepts findings (or outcomes of appeal)
  - Statement of whether institution found misconduct
  - Description of any pending or completed administrative and corrective actions

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No misconduct

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