
Subject: Policy on Misconduct in Research

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1. Purpose

The university endorses high ethical standards in conducting research to ensure public trust in the integrity of research results. The university recognizes that deception in research erodes the credibility of an institution and the confidence of those who might benefit from the research. The university will take all reasonable and practical steps to foster a research environment that promotes the responsible conduct of research, research training, and activities related to that research or research training, discourages research misconduct, and deals promptly with allegations or evidence of possible research misconduct.

2. Policy

2.1 General Principles

It is the responsibility of each institutional member to be diligent in conducting all research in a manner that is consistent with ethical standards and to avoid any activities that could lead to fabrication, falsification, or plagiarism in research. Any instance of observed, suspected, or apparent research misconduct should be reported, so that it may be thoroughly investigated and promptly resolved by the university.

The university officials responsible for implementation of this policy and their roles are described in Appendix A. These officials include Thomas J. Inzana, the Research Integrity Officer (RIO), Thanassis Rikakis, the Deciding Official (DO) and Provost, the Inquiry Committee, and the Investigation Committee. The website for the University Office of Research Integrity (<http://www.research.vt.edu/research-integrity-office/index.php>) is available through the website of the Office of the Vice President for Research (<http://www.research.vt.edu/>).

2.2 Activities Covered

The university will follow this policy in addressing all allegations of misconduct in research. *Misconduct in research* (or research misconduct) means fabrication, falsification, or plagiarism in proposing, performing, or reviewing research; or in reporting research results. *Fabrication* is making up data or results and recording or reporting them. *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. *Plagiarism* is the appropriation of another person's ideas, processes, results, or words, including those of a student, colleague or mentor, without giving appropriate credit. It does not include authorship or credit disputes.

At Virginia Tech, self-plagiarism is considered unethical behavior. Therefore, it is not covered by this policy but is addressed in the Faculty Handbook and Graduate Catalog.

Research misconduct does not include honest error or differences in opinion, disputes about authorship, and disputes over authorship except those involving plagiarism. It does not include issues relating to sexual harassment, personnel management, fiscal errors, or the reporting of poor effort. It also does not include abuse or improper procedures with laboratory animals or human subjects.

Misconduct in non-research activities and other ethical violations are not included in this policy and are covered by separate policies. Ethical misconduct of faculty is covered by section 2.7.1 of the Faculty Handbook, which describes the Principles of Ethical Behavior. The Virginia Tech Faculty Handbook is available through the website of the Office of the Provost (<http://www.provost.vt.edu/>). Violations of ethical conduct by graduate students are guided by the constitution of the Graduate Honor System available at the website for the Virginia Tech Graduate School (<http://graduateschool.vt.edu/>). Violations of ethical conduct by undergraduates are guided by the university's Undergraduate Honor System as outlined in their constitution (available on-line at <http://www.honorsystem.vt.edu/>). Standards of conduct and performance, as well as procedures for dealing with alleged violations of unacceptable conduct and grievance procedures for classified or university staff, are detailed in the Commonwealth of Virginia Employee Handbook, available at the Virginia Tech Office of Human resources website (<http://www.hr.vt.edu>).

This policy applies only to allegations of research misconduct that occurred within six years of the date the university, or a research sponsor, received the allegation, subject to grandfather clauses and exceptions in applicable federal regulations.

All University research members involved in sponsored research, research training or activities related to that research or research training, including those applying for sponsored support, are notified of the University's misconduct in research policy (policy 13020) through the University Policy Website (<http://www.policies.vt.edu>) and the Office of

Research Integrity website <http://www.research.vt.edu/research-integrity-office/index.php> within the Office of the Vice President for Research (<http://www.research.vt.edu/>). In addition, training in research misconduct that is described in policy 13020 is provided through various scientific integrity and ethics courses, and upon request to departments and groups, and at new faculty orientation. In addition, a brochure on research misconduct is available on the Office of Research Integrity website <http://www.research.vt.edu/research-integrity-office/index.php> and is distributed each year to Associate Deans in the Colleges to distribute to faculty, students, and staff engaged in research.

The University RIO will submit an annual report with the Public Health Service (PHS) Office of Research Integrity (ORI) indicating that an administrative policy to respond to allegations of research misconduct has been established, that this policy complies with PHS regulation 42 CFR Part 93, and that the institution has complied with this policy. Furthermore, the annual report will address whether our institution has received allegations of misconduct, conducted any inquiries, or investigated any allegations of research misconduct, as defined by PHS, during the calendar year reporting period. The definition of such misconduct would include the receipt of requests for funding or applications for funding from the PHS.

The ORI will be immediately notified if any of the following situations occur during a research misconduct proceeding: 1) there is urgent concern to protect human or animal subjects, or the health or safety of the public; 2) the resources or interests of the Department of Health and Human Services are in jeopardy; 3) the research activity of an individual or group should be suspended; 4) there is evidence that civil or criminal law has been violated; 5) in order to adequately protect the interests of people involved in a research misconduct proceeding, Federal action will be required; 6) the University will request that information from a research misconduct proceeding be made public prior to completion if it is believed that Health and Human Services (HHS) needs to take specific actions to protect evidence and the rights of those involved in the proceeding; and 7) the University believes it is in the best interest of the research community or the public that they be informed of the ongoing research misconduct proceedings.

2.3 Persons Covered

This policy applies to allegations of research misconduct (fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results) involving a person who, at the time of the alleged research misconduct, was employed by, was an agent of, or was affiliated by contract or agreement with the university and was engaged in research under the auspices of the university at the time of the occurrence of misconduct. In addition, any student engaged in sponsored research is covered by this policy.

2.4 Responsibility to Report Misconduct

All institutional members will report observed, suspected, or apparent research misconduct in accordance with the procedures implementing this policy. If an individual is unsure whether a suspected incident falls within the definition of research misconduct, he or she may meet with or contact a designated university official to discuss the suspected research misconduct informally, which may include discussing it anonymously and/or hypothetically. If the circumstances described by the individual are determined not to meet the definition of research misconduct by the University RIO, an inquiry will not be initiated and the individual or allegation will be referred to other offices or officials with responsibility for resolving the problem. At any time, an institutional member may have confidential discussions and consultations about concerns of possible misconduct with the designated official(s) and will be counseled about appropriate procedures for reporting allegations. An allegation is defined as disclosure of potential research misconduct by any of several means of communication, including a written or oral statement, or other means to a University or HHS official.

Anonymous allegations will be accepted provided that they are deemed credible and are adequately specific so as to be supported by the available evidence.

2.5 Cooperation with Research Misconduct Proceedings

Institutional members will cooperate with the university in the review of allegations and the conduct of inquiries and investigations. Institutional members have an obligation to provide evidence relevant to research misconduct allegations.

2.6 Confidentiality

Procedures implementing this policy shall limit disclosure of identities and information regarding misconduct allegations and proceedings to those with a need to know, consistent with a thorough, competent, objective and fair research misconduct proceeding, and in accordance with applicable law.

2.7 Protecting the Persons Involved

Institutional members may not retaliate against complainants, witnesses, or committee members. Institutional members should immediately report any potential or actual retaliation against complainants, witnesses, or committee members to an appropriate university official. Institutional officials will make all reasonable and practical steps to protect the positions and reputations of good faith complainants, witnesses, and committee members and protect them from retaliation by respondents and other institutional members.

Institutional officials shall make all reasonable and practical efforts to protect or restore the reputation of persons alleged to have engaged in research misconduct, but against whom no finding of research misconduct is made.

Consequences relating to allegations not made in good faith are addressed in the separate procedures document.

3. Research Misconduct Procedures

The procedure consists of five parts: (1) assessment, (2) inquiry, (3) investigation, (4) final decision, and (5) appeal. Section 4 of this policy document deals with the appeal process. Because legal requirements of research sponsors are varied and subject to change, it is the intent of this policy to establish basic principles that will apply to all research misconduct. The procedures shall be consistent with this policy and shall allow flexibility in complying with reporting, time, and other specific requirements imposed by differing laws or regulations. Detailed procedures are maintained on the website of the RIO at (<http://www.research.vt.edu/>).

3.1 Assessment

Allegations of research misconduct will be assessed to determine if they fall within the definition of research misconduct and if they are sufficiently credible and specific so that potential evidence of research misconduct may be identified. An inquiry must be conducted if these criteria are met. Allegations that do not proceed to inquiry but which indicate that other university policies might be violated shall be reported to the appropriate university officials or units for further review and/or action.

3.2 Inquiry

The purpose of the inquiry is to conduct an initial review of the available evidence to determine whether to conduct an investigation.

3.2.1 Notice to Respondent and Sequestration of Research Records

At the time of or before beginning an inquiry, the RIO must make a good faith effort to notify the Respondent (the person against whom an allegation of research misconduct is directed or who is the subject of a research misconduct proceeding) in writing. If the inquiry subsequently identifies additional Respondents, they must be notified in writing. On or before the date on which the Respondent is notified, or the inquiry begins, whichever is earlier, the RIO must take all reasonable and practical steps to obtain custody of all the research records and evidence needed to conduct the research misconduct proceeding.

The Respondent will be allowed to receive copies of any sequestered materials so that research progress can continue until a determination has been made.

3.2.2 Inquiry Committee

The Inquiry Committee is composed of a minimum of three voting members, consisting of a standing member as appointed by the RIO from the Standing Member Committee, a member appointed by the Committee on Faculty Ethics, and additional experts to be appointed by the RIO as necessary to evaluate specific allegations. The Inquiry Committee shall consist of an odd number of voting members. The standing member shall serve as the chair of the Inquiry Committee.

The Standing Member Committee is a pool of pre-selected faculty members that have been appointed by the RIO in concurrence with the Provost and the President of the Faculty Senate to serve on research misconduct inquiries and investigations.

At the first meeting of the Inquiry Committee, the RIO shall describe the purpose of the inquiry and the charge to the Committee. The inquiry process will be reviewed. Emphasis of the fair and objective manner in which the review is conducted is emphasized, and that none of the members of the committee have unresolved personal, professional, or financial conflicts of interest with the complainant, respondent, or any witnesses.

3.2.3 Inquiry Process

The Inquiry Committee will normally interview the Complainant (the person who in good faith makes an allegation of misconduct), the Respondent, and key witnesses as well as examining relevant research records and materials. The role of the Complainant is to make a good faith allegation of research misconduct, and provide evidence of such misconduct, oral or written or both, to the RIO. The Complainant should be available for interview by the Committee, in person or by phone, and review the draft inquiry report and comment on the report's contents. If possible, the meetings, particularly the meeting in which the material is first presented, will be tape recorded. Then, the Inquiry Committee will evaluate the evidence, including the testimony obtained during the inquiry. After consultation with the RIO, the committee members will decide, based upon a majority vote of the committee members, whether an investigation is warranted based on the criteria in this policy and applicable law. If there is an admission of guilt by the Respondent, the RIO will notify the ORI immediately.

3.2.4 Time for Completion

The inquiry, including preparation of the final inquiry report and the decision on whether an investigation is warranted, must be completed within 60 calendar days of initiation of the inquiry, unless the RIO determines that circumstances clearly warrant a longer period.

3.2.5 The Inquiry Report

A written inquiry report must be prepared that is supported by including the following information: (1) the name and position of the Respondent; (2) a description of the allegations of research misconduct; (3) the research sponsor, including, for example, grant numbers, grant applications, contracts and publications listing funding support; (4) the

basis for recommending or not recommending that the allegations warrant an investigation; (5) any comments on the draft report by the Respondent or Complainant.

3.2.6 Final Decision by the Inquiry Committee

The findings by the Inquiry Committee as contained in the final report constitute the final decision of the institution as to whether an investigation is warranted. The Inquiry Committee will vote to determine if an investigation is warranted. A record will be kept by the RIO of the outcome of the vote. The determination shall be by majority vote of the committee. The inquiry is completed when the Inquiry Committee makes this determination. The inquiry report will be submitted to ORI within 30 days of determining that an investigation is warranted by the RIO.

At the conclusion of the inquiry, if the decision is made not to investigate, the detailed documentation pertaining to why the institution chose not to conduct an investigation will be maintained for at least seven years to permit a later assessment by ORI.

The Office of Research Integrity will retain file documentation including the investigative report as well as supporting evidence such as tapes, transcripts and interviews for seven years following the close of the investigation. Documentation of appeals, if applicable, will also be retained by the Office of Research Integrity for seven years.

3.2.7 Notification to Research Sponsors

Within 30 calendar days of the decision by the Inquiry Committee that an investigation is warranted, the RIO will, as required by applicable law, provide the research sponsor(s) with the written decision and a copy of the inquiry report. The RIO will also notify those institutional officials who need to know of the decision.

3.3 Investigation

The investigation must begin within 30 calendar days after the determination that an investigation is warranted. The purpose of the investigation is to develop a factual record by exploring the allegations in detail and examining the evidence in depth, leading to recommended findings on whether research misconduct has been committed, by whom, and to what extent.

3.3.1 Notifying ORI, Research Sponsor, and Respondent; Sequestration of Research Records

On or before the date on which the investigation begins, the RIO must, as required by applicable law will: (1) notify the ORI that the decision has been made to begin an investigation, and provide the inquiry report; (2) notify the research sponsor of the decision to begin the investigation and provide such research sponsor a copy of the inquiry report; and (3) notify the Respondent in writing of the allegations to be investigated.

The RIO will, prior to or at the time the Respondent is notified of the allegations, take all reasonable and practical steps to obtain custody of, inventory, and sequester in a secure manner all research records and evidence needed to conduct the research misconduct proceeding that were not previously sequestered during the inquiry. Exceptions include research records or evidence that includes scientific instruments shared by a number of users. Copies of the data or evidence on such instruments will be kept in custody as long as those copies are substantially equivalent to the actual value of the instruments. The RIO will also take custody of any records that later become known or are relevant to the investigation.

3.3.2 Investigative Committee

The Investigation Committee is composed of a minimum of five voting members, consisting of two (2) standing members appointed by the RIO from the Standing Member Committee, a member appointed by the Committee on Faculty Ethics, and additional experts to be appointed by the RIO who have the appropriate expertise to evaluate the

evidence and issues related to the allegation, interview the principals and key witnesses, and conduct the investigation. The Investigation Committee shall consist of an odd number of voting members. The RIO shall appoint one of the standing members to serve as the chair of the Investigation Committee.

The RIO shall notify the Respondent in writing of the proposed committee membership. The Respondent shall have 10 calendar days to object to a proposed member based upon a personal, professional, or financial conflict of interest. The RIO shall make the final determination of whether a conflict exists and shall reappoint members to the Investigation Committee as necessary to mitigate the identified conflicts of interest.

3.3.3 Investigative Process

The Investigation Committee and the RIO must:

- Use diligent efforts to ensure that the investigation is thorough and sufficiently documented and includes examination of all research records and evidence relevant to reaching a decision on the merits of each allegation; Take reasonable steps to ensure an impartial and unbiased investigation to the maximum extent practical. Persons involved in the investigation process will have the appropriate scientific expertise and not have unresolved personal, professional, or financial conflicts of interest with anyone involved with the inquiry or the investigation;
- Interview each Respondent, Complainant, and any other available person who has been reasonably identified as having probative/pertinent information regarding any relevant aspects of the investigation, including witnesses identified by the Respondent, and record or transcribe each interview, provide the recording or transcript to the interviewee for correction, and include the recording or transcript in the record of the investigation; and
- Pursue diligently all significant issues and leads discovered that are determined relevant to the investigation, including any evidence of any additional instances of possible research misconduct, and continue the investigation to completion.

3.3.4 Time for Completion

The investigation is to be completed within 120 days of beginning it, including conducting the investigation, preparing the report of findings, providing the draft report for comment and sending the final report to research sponsor as required by applicable law. However, if the RIO determines that the investigation will not be completed within this 120-day period, he/she will submit a written request for an extension to the research sponsor as required by applicable law, setting forth the reasons for the delay. The RIO will ensure that periodic progress reports are filed with the research sponsor as required by applicable law, if the research sponsor grants the request for an extension and directs the filing of such reports.

3.3.5 Draft Investigation Report

The Investigation Committee and the RIO are responsible for preparing a written draft report of the investigation that:

- Describes the nature of the allegation of research misconduct, including identification of the Respondent (The Respondent's c.v. or resume may be included as part of the identification);
- Describes and documents the PHS sponsored research support, and other sponsored research support including, for example, the numbers of any grants that are involved, grant applications, contracts, and publications listing sponsor support;
- Describes the specific allegations of research misconduct considered in the investigation;
- Includes the institutional policies and procedures under which the investigation was conducted,
- Identifies and summarizes the research records and evidence reviewed and identifies any evidence taken into custody but not reviewed; and

- Includes a statement of findings for each allegation of research misconduct identified during the investigation. Each statement of findings must: (1) identify whether the research misconduct was falsification, fabrication, or plagiarism, and whether it was committed intentionally, knowingly, or recklessly; (2) summarize the facts and the analysis that support the conclusion and consider the merits of any reasonable explanation by the Respondent, including any effort by Respondent to establish by a preponderance of the evidence that he or she did not engage in research misconduct because of honest error or a difference of opinion; (3) identify the specific sponsored research support; (4) identify whether any publications need correction or retraction; (5) identify the person(s) responsible for the misconduct; and (6) list any current support or known applications or proposals for support that the Respondent has pending with research sponsors.

3.3.6 Comments on the Draft Report and Access to Evidence

The RIO must give the Respondent a copy of the draft investigation report for comment and, concurrently, a copy of, or supervised access to the evidence on which the report is based. The Complainant will also be given a copy of the draft investigation report, or relevant portions of it, for comment. The Complainant and Respondent will be allowed 30 calendar days from the date he/she received the draft report to submit comments to the RIO. The Complainant's and Respondent's comments must be included and considered in the final report.

3.3.7 Final Investigation Report

The Investigation Committee will discuss the comments provided by the Respondent and Complainant and, as necessary, consult with the RIO and the Provost. If necessary, the draft report will be modified in view of the comments and discussions. The RIO will assist the Investigation Committee in finalizing the investigation report, including ensuring that the Respondent's and Complainant's comments are considered by the committee and included as attachments to the report.

The final report will include the information as required by section 3.3.5 as well as the committee's positive or negative findings of research misconduct. Such findings shall be determined by majority vote of the committee.

3.4 Final Decision

The RIO will transmit the final investigation report to the DO (Provost) who will consult with the committee on any questions the Provost has regarding the committee's findings. The Provost may return the report to the Investigation Committee with a request for further fact-finding or analysis. Based on the findings in the Investigation Report, the Provost will determine in writing the final disposition of the case including the recommended administrative actions.

3.4.1 Notice to ORI and Research Sponsor of Institutional Findings and Actions

The RIO must, if required by applicable law, complete the investigation within the 120 day period, or the 120-day period for completion of any appeal, and submit the following to the ORI and to the sponsor: (1) a copy of the final investigation report with all attachments and any appeal; (2) a statement of whether the institution accepts the findings of the investigation report or the outcome of the appeal; (3) a statement of whether the institution found misconduct and, if so, who committed the misconduct; and (4) a description of any pending or completed administrative actions against the Respondent.

If the investigation cannot be completed within 120 days, ORI will be asked for an extension in writing. If such an extension is granted, progress reports of the investigation will be submitted to ORI upon request.

Based on the findings, the RIO will work with journal editors on retractions of manuscripts that have been found to be fraudulent.

4. Appeals

A person found to have engaged in research misconduct may initiate an appeal process within 10 calendar days of his/her receipt of the Final Decision. An appeal may be either based upon noncompliance with the procedures or upon the findings or administrative actions. An appeal shall be in writing to the President and shall specifically identify the subject matter of the appeal and provide basis or evidence to support the appeal. The President will consult with the Provost, the RIO, the Investigation Committee and others as necessary in reviewing the Respondent's basis for appeal. The President shall provide the Respondent a written decision on the appeal and the actions to be taken. The decision of the President is the final resolution of the appeal.

5. Completion of the Research Misconduct Process

ORI will be notified in advance if the institution plans to close a case at the inquiry, investigation, or appeal stage as a result of the respondent admitting guilt, if a settlement with the respondent has been reached, or for any other reason, with the exception being the case is closed at the inquiry stage on the basis that an investigation is not warranted or a finding of no misconduct at the investigation stage, which must also be reported to ORI. It is understood that ORI may conduct an oversight review of the case and, if warranted, take appropriate action that may include:

- Approving or conditionally approving closure of the case;
- Directing completion of the investigation process;
- Referring the matter for further investigation by HHS;
- Taking any necessary compliance action.

All reasonable and practical steps will be taken to protect the positions and reputations of good faith complainants, witnesses, and committee members and protect them from retaliation by respondents and other institutional members. ORI will be notified of any facts that may be relevant to protect public health, Federal funds and equipment, and the integrity of the PHS supported research process;

6. Definitions

Definitions are found in Appendix A: Detailed Procedures for Responding to Allegations of Misconduct in Research.

7. References

Appendix A: Detailed Procedures for Responding to Allegations of Misconduct in Research;
(<http://www.research.vt.edu/>).

Department of Health and Human Services, Public Health Service Policies on Research Misconduct: 42 CFR Parts 50 and 93

8. Approval and Revisions

The Vice President for Research is charged with the responsibility to periodically review the policy and procedures and propose changes as needed for consideration by university governance.

Approved by the University Council on May 7, 2007

Approved by the President, Charles W. Steger, on May 7, 2007

Approved by the Board of Visitors on August 27, 2007

- Revision 1

Updated text to reference required training in responsible conduct of research for research projects sponsored by the Public Health Service.

Updated to identify the Research Integrity Officer (RIO) and Deciding Official (DO) by name.

Added reference to retaliation protection.

Added references to reporting requirements for the Office of Research Integrity, in the National Institutes of Health.

Expanded the definition of “allegation” to include verbal as well as written communication.

Added reference to procedures for anonymous allegations.

Added reference to the RIO’s responsibility for determining if evidence meets the criteria for an inquiry.

Added references regarding the procedures for conducting inquiries, investigations, and post case responsibilities.

Added verbiage regarding length of time an investigative report should be retained and by which university office (Section 3.2.6).

Approved July 30, 2014 by Vice President for Research, Robert W. Walters.

- Revision 2

Updated to recognize self-plagiarism as unethical behavior.

This revision is consistent with the definition of self-plagiarism identified by the Federal Office of Research and Integrity as of April, 2015.

Approved by the Commission on Research on April 8, 2015

Approved by University Council on May 4, 2015

Approved August 16, 2015 by Interim Vice President for Research, Dennis R. Dean