Section VI-VIII-A (Union College Policy for Investigating Scientific Misconduct) in the Faculty Manual (page 18) was deleted and replaced with the following policy under Section VI-VIII-B. The Table of Contents was not included in the Faculty Manual.

Union College Policy for Investigating and Responding to Allegations of Scientific Misconduct

CONTENTS

I. INTRODUCTION

1. General Policy

An underlying principle of all research is the quest for truth. The credibility of research must be above reproach if public trust is to be maintained. Misconduct in research undermines the public trust placed in the research enterprise of our Nation's colleges and universities, and wastes valuable public and private resources. Therefore, it is the policy of Union College to neither condone nor tolerate scientific research misconduct by any member of its community. While breaches in such standards are rare, these must be dealt with promptly and fairly by all parties in order to preserve the integrity of the research community and of this College. This document applies to allegations of research misconduct; "misconduct" as used herein, means fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results. Research misconduct does not include honest error or differences of opinion.

i. Fabrication is making up data or results and recording or reporting them;
ii. 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;
iii. Plagiarism is the appropriation of another person's ideas, processes, results or words without giving appropriate credit.

Union College promotes the responsible conduct of research and encourages any person affiliated with the institution involved in research activities to follow the Plan for Training in the Responsible Conduct of Research Training Plan[1].

2. Scope

This policy and the associated procedures apply to all individuals at Union College engaged in research, including that which is supported by or for which support is requested from the U.S. Public Health Service (PHS)[2]. This policy applies to any person paid by or under the control of the institution, such as scientists, trainees, technicians and other staff members, students, fellows, guest researchers, or collaborators at Union College. In the case of undergraduate students involved in alleged scientific misconduct, this policy and the associated procedures shall apply in those instances where: 1) the research in question is supported by federal agencies; or 2) the student independently submitted a manuscript for peer-reviewed publication, with the intent of influencing the science surrounding the topic, without the participation of the faculty research advisor. Student matters may also, as appropriate, be handled under the relevant academic integrity (Honor Code) guidelines.

[1] Union College students conducting sponsored research activities are required by the National Science Foundation to complete training in the Responsible Conduct of Research.
[2] Standards for inquiries and investigations into allegations of scientific misconduct are set forth in the Public Health Service's Code of Federal Regulations (C.F.R.) at Title 42 C.F.R. Part 50, Subpart A, entitled "Responsibility of PHS Awardee and Applicant Institutions for Dealing with and Reporting Possible Misconduct in Science."

This policy and associated procedures will normally be followed when an allegation of possible misconduct in science is received by an institutional official. Particular circumstances in an individual case may dictate variation from the normal procedure deemed in the best interests of Union College.

II. DEFINITIONS

Allegation means any written or oral statement or other indication of possible scientific misconduct made to an institutional official.

Conflict of interest means the real or apparent interference of one person's interests with the interests of another person, where potential bias may occur due to prior or existing personal or professional relationships.

Deciding Official (DO) means the institutional official who makes final determinations on allegations of scientific misconduct and any responsive institutional actions. The DO will not be the same individual as the Research Integrity Officer (RIO) and should have no direct prior involvement in the institution's inquiry, investigation, or allegation assessment.

Division III Representative to the FEC means a single faculty member appointed to represent their academic division (Biology, Chemistry, Geology, Mathematics, Physics, and Psychology) on the Faculty Executive Committee (FEC).

Division IV Representative to the FEC means a single faculty member appointed to represent their academic division (Bioengineering, Computer Science, Electrical & Computer Engineering, Engineering, and Mechanical Engineering) to the Faculty Executive Committee (FEC).

Faculty Executive Committee (FEC) means the committee comprised of a Chair, a Secretary, and four additional faculty members who shall be the four heads of the Academic Divisions responsible for, among several duties, revising the faculty constitution and bylaws to be in accord with the governance system and to establish orderly means to accomplish the business of the General Faculty

Good faith allegation means an allegation made with the honest belief that scientific misconduct may have occurred. An allegation is not in good faith if it is made with reckless disregard for or willful ignorance of facts that would disprove the allegation.

Inquiry means gathering information and initial fact-finding to determine whether an allegation or apparent instance of scientific misconduct warrants an investigation.[1]

Investigation means the formal examination and evaluation of all relevant facts to determine if misconduct has occurred and, if so, to determine the responsible person and the seriousness of the misconduct.[2]

Office of Research Integrity (ORI) is the office within the U.S. Department of Health and Human Services (DHHS) that is responsible for the scientific misconduct and research integrity activities of the U.S. Public Health Service.

PHS means the U.S. Public Health Service, an operating component of the DHHS.

PHS regulation means the Public Health Service regulation establishing standards for institutional inquiries and investigations into allegations of scientific misconduct, which is set forth at 42 C.F.R. Part 50, Subpart A, entitled "Responsibility of PHS Awardee and Applicant Institutions for Dealing with and Reporting Possible Misconduct in Science."

PHS support means PHS grants, contracts, or cooperative agreements or applications thereof.

Research Integrity Advisory Committee (RIAC) is a standing committee comprised of Union College faculty and staff who will assist the Research Integrity Officer (RIO) in identifying the appropriate individuals to serve on inquiry and investigation committees.

Research Integrity Officer (RIO) means the institutional official responsible for assessing allegations of scientific misconduct and determining when such allegations warrant inquiries and for overseeing inquiries and investigations.

Research record means any data, document, computer file, computer diskette, or any other written or non-written account or object that reasonably may be expected to provide evidence or information regarding the proposed, conducted, or reported research that constitutes the subject of an allegation of scientific misconduct. A research record includes, but is not limited to, grant or contract applications, whether funded or unfunded; grant or contract progress and other reports; laboratory notebooks; notes; correspondence; videos; photographs; X-ray film; slides; biological materials; computer files and printouts; manuscripts and publications; equipment use logs; laboratory procurement records; animal facility records; human and animal subject protocols; consent forms; medical charts; and patient research files.

Respondent means the person against whom an allegation of scientific misconduct is directed or the person whose actions are the subject of the inquiry or investigation. There can be more than one respondent in any inquiry or investigation.

Retaliation means any action that adversely affects the employment or other institutional status of an individual that is taken by an institution or an employee because the individual has in good faith, made an allegation of scientific misconduct or of inadequate institutional response thereto or has cooperated in good faith with an investigation of such allegation.

Scientific research means research activities conducted in the fields of science and engineering (S&E) consistent with the 2010 Classification of Instructional Programs (CIP 2010). S&E includes the following fields: agricultural sciences and natural resources sciences, biological and biomedical sciences, computer and information sciences, engineering, health and clinical sciences, mathematics and statistics, physical sciences, psychology, social sciences, and other science and engineering fields. For a detailed list of disciplines included in each of these fields, see Appendix A: Crosswalk of fields of S&E to the National Center for Education Statistics (NCES) 2010 Classification of Instructional Programs (CIP).

Scientific misconduct or misconduct in science means fabrication, falsification, plagiarism, or other practices that seriously deviate from those that are commonly accepted within the scientific community for proposing, conducting, or reporting research. It does not include honest error or honest differences in interpretations or judgments of data.[3]

Whistleblower means a person who makes an allegation of scientific misconduct.

III. RIGHTS AND RESPONSIBILITIES

1. Research Integrity Advisory Committee

The Research Integrity Advisory Committee (RIAC) is a standing committee comprised of Union College faculty and staff who will assist the Research Integrity Officer (RIO) in identifying the appropriate individuals to serve on inquiry and investigation committees. The RIO will consult with the RIAC to determine the various expertise and perspectives necessary for a fair inquiry and investigation.

Union College administrators and faculty serving on the RIAC include the:

- Dean of Studies
- Director of Undergraduate Research
- Director of Sponsored Programs
- Division III Representative to the Faculty Executive Committee (FEC)
- Division IV Representative to the Faculty Executive Committee (FEC)

2. Research Integrity Officer

Union's Dean of Academic Departments and Programs will serve as the Research Integrity Officer (RIO) who will have primary responsibility for implementation of the procedures set forth in this document. The RIO will be an individual well qualified to handle the procedural requirements involved and is sensitive to the varied demands made on those who conduct research, those who are accused of misconduct, and those who report apparent misconduct in good faith.

The RIO will consult with the Research Integrity Advisory Committee (RIAC) to identify appropriate individuals to be appointed to the inquiry and investigation committee, ensuring that necessary and appropriate expertise is secured to carry out a thorough and authoritative evaluation of the relevant evidence in an inquiry or investigation. The RIO will attempt to ensure that confidentiality is maintained.

The RIO will assist inquiry and investigation committees and all institutional personnel in complying with these procedures and with applicable standards imposed by government or external funding sources. The RIO is also responsible for maintaining files of all documents and evidence and for the confidentiality and the security of the files.

The RIO will report to ORI – and keep ORI updated on – any developments during the course of an inquiry or investigation that may affect current or potential DHHS funding for the individual(s) under investigation or that PHS needs to know to ensure appropriate use of Federal funds and otherwise protect the public interest.[4]

3. Whistleblower

The whistleblower will have an opportunity to testify before the inquiry and investigation committees, to review portions of the inquiry and investigation reports pertinent to his/her allegations or testimony, to be informed of the results of the inquiry and

investigation, and to be protected from retaliation. Also, if the RIO has determined that the whistleblower may be able to provide pertinent information on any portions of the draft report, then these portions will be given to the whistleblower for comment.

The whistleblower is responsible for making allegations in good faith, maintaining confidentiality, and cooperating with an inquiry or investigation. The whistleblower has an obligation to respect the reputation of the respondent by refraining from activities potentially harmful or damaging to the reputation of the respondent.

4. **Respondent**
The respondent will be informed of the allegations when an inquiry is opened and notified in writing of the final determinations and resulting actions. The respondent will also have the opportunity to be interviewed by and present evidence to the inquiry and investigation committees, and to review the draft inquiry and investigation reports.

The respondent is responsible for maintaining confidentiality and cooperating with the conduct of an inquiry or investigation. If the respondent is not found guilty of scientific misconduct, he or she has the right to request and receive institutional assistance in restoring his or her reputation.[5]

5. **Deciding Official**
The Vice President for Academic Affairs shall serve as the Deciding Official (DO), and will receive the inquiry and/or investigation report and any written comments made by the respondent or the whistleblower on the draft report. The DO will consult with the RIO or other appropriate officials and will determine whether to conduct an investigation, whether misconduct occurred, whether to impose sanctions, or whether to take other appropriate administrative actions.

IV. GENERAL POLICIES AND PRINCIPLES

1. **Responsibility to Report Misconduct**
All employees or individuals associated with Union College should report observed, suspected, or apparent misconduct in science to the RIO. If an individual is unsure whether a suspected incident falls within the definition of scientific misconduct, he or she may call the RIO to discuss the suspected misconduct informally.

At any time, an employee may have confidential discussions and consultations about concerns of possible misconduct with the RIO and will be counseled about appropriate procedures for reporting allegations. Should an individual observe or suspect scientific misconduct involving the RIO, the individual may contact any member of the Research Integrity Advisory Committee (RIAC) about appropriate procedures for reporting allegations.

Union College administrators and faculty serving on the RIAC include the:

- Dean of Studies

- Director of Undergraduate Research
- Director of Sponsored Programs
- Division III Representative to the Faculty Executive Committee (FEC)
- Division IV Representative to the Faculty Executive Committee (FEC)

2. **Cooperation with Research Misconduct Proceedings**
   Institutional members will cooperate with the RIO and other institutional officials in the review of allegations and the conduct of inquiries and investigations. Institutional members, including respondents, have an obligation to provide evidence relevant to research misconduct allegations to the RIO or other institutional officials

3. **Confidentiality**
   The RIO shall make all reasonable and practical efforts to maintain confidentiality, consistent with federal regulations and institutional policy, and to: (1) limit disclosure of the identity of respondents and complainants to those who need to know in order to carry out a thorough, competent, objective and fair research misconduct proceeding; and (2) except as otherwise prescribed by law, limit the disclosure of any records or evidence from which research subjects might be identified to those who need to know in order to carry out a research misconduct proceeding. The RIO should use written confidentiality agreements or other mechanisms to ensure that the recipient does not make any further disclosure of identifying information

4. **Protecting the Whistleblower[6], Witnesses, and Committee Members**
   The RIO will monitor the treatment of individuals who bring allegations of misconduct or of inadequate institutional response thereto, and those who cooperate in inquiries or investigations. The RIO will ensure that these persons will not be retaliated against in the terms and conditions of their employment or other status at the institution and will review instances of alleged retaliation for appropriate action.

   Employees should immediately report any alleged or apparent retaliation to the RIO. Institutional members may not retaliate in any way against complainants, witnesses, or committee members. Institutional members should immediately report any alleged or apparent retaliation against complainants, witnesses or committee members to the RIO, who shall review the matter and, as necessary, make all reasonable and practical efforts to counter any potential or actual retaliation and protect and restore the position and reputation of the person against whom the retaliation is directed.

   Also the institution will protect the privacy of those who report misconduct in good faith to the maximum extent possible. For example, if the whistleblower requests anonymity, the institution will make an effort to honor the request during the allegation assessment or inquiry within applicable policies and regulations and state and local laws, if any. The whistleblower will be advised that if the matter is referred to an investigation committee and the whistleblower's testimony is required, anonymity may no longer be guaranteed. Institutions are required to undertake diligent efforts to protect the positions and reputations of those persons who, in good faith, make allegations.[7]

5. **Protecting the Respondent**
   Inquiries and investigations will be conducted in a manner that will ensure fair treatment to the respondent(s) in the inquiry or investigation and confidentiality to the extent possible without compromising public health and safety or thoroughly carrying out the inquiry or investigation.[8]

6. **Cooperation with Inquiries and Investigations**
   Institutional employees will cooperate with the RIO and other institutional officials in the review of allegations and the conduct of inquiries and investigations. Employees have an obligation to provide relevant evidence to the RIO or other institutional officials on misconduct allegations.

V. CONDUCTING THE INQUIRY

1. **Preliminary Assessment**
   Upon receiving an allegation of scientific misconduct, the RIO will assess the allegation to determine whether the allegation falls within the definition of research misconduct, and is sufficiently credible, significant, and specific so that the potential evidence of research misconduct may be identified.

   The assessment period should be brief, preferably concluded within a week. In conducting the assessment, the RIO need not interview the complainant, respondent, or other witnesses, or gather data beyond any that may have been submitted with the allegation, except as necessary to determine whether the allegation is sufficiently credible, significant, and specific so that potential evidence of research misconduct may be identified. The RIO shall, on or before the date on which the respondent is notified of the allegation, obtain custody of, inventory, and sequester all research records and evidence needed to conduct the research misconduct proceeding.

   Preliminary Assessment of Allegations involving Undergraduates
   In the case of undergraduate students involved in alleged scientific misconduct, this policy and the associated procedures shall apply in those instances where: 1) the research in question is supported by federal agencies; or 2) the student independently submitted a manuscript for peer-reviewed publication, with the intent of influencing the science surrounding the topic, without the participation of the faculty research advisor. Student matters may also, as appropriate, be handled under the relevant academic integrity (Honor Code) guidelines.

2. **Initiation and Purpose of the Inquiry**
   Following the preliminary assessment, if the RIO determines that the criteria for an inquiry are met, he or she will immediately initiate the inquiry process. In initiating the inquiry, the RIO should identify clearly the original allegation and any related issues that should be evaluated. The purpose of the inquiry is to make a preliminary evaluation of the available evidence and testimony of the respondent, whistleblower, and key witnesses to determine whether there is sufficient evidence of possible scientific misconduct to

warrant an investigation. The purpose of the inquiry is **not** to reach a final conclusion about whether misconduct definitely occurred or who was responsible. The findings of the inquiry must be set forth in an inquiry report.

3. **Sequestration of the Research Records**
At the time of or before beginning an inquiry, the RIO must make a good faith effort to notify the respondent in writing, if the respondent is known. 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, inventory the records and evidence and sequester them in a secure manner, except that where the research records or evidence encompass scientific instruments shared by a number of users, custody may be limited to copies of the data or evidence on such instruments, so long as those copies are substantially equivalent to the evidentiary value of the instruments. The RIO may consult with ORI or other pertinent federal agencies for advice and assistance in this regard.

4. **Appointment of the Inquiry Committee**
The RIO will identify and appoint members of the inquiry committee. The inquiry committee should consist of individuals who do not have real or apparent conflicts of interest in the case, are unbiased, and have the necessary expertise to evaluate the evidence and issues related to the allegation, interview the principals and key witnesses, and conduct the inquiry. These individuals may be scientists, subject matter experts, administrators, or other qualified persons, and they may be from inside or outside the institution.

   The RIO shall notify the respondent of the names of the standing committee members to give the respondent an opportunity to object to a proposed member based upon a personal, professional, or financial conflict of interest. Objections must be filed within 10 calendar days. If an objection is filed, the RIO will determine whether to replace the challenged member or expert with a qualified substitute.

5. **Charge to the Committee and the First Meeting**
The RIO will prepare a charge for the inquiry committee that describes the allegations and any related issues identified during the allegation assessment and states that the purpose of the inquiry is to make a preliminary evaluation of the evidence and testimony of the respondent, whistleblower, and key witnesses to determine whether there is sufficient evidence of possible scientific misconduct to warrant an investigation as required by the PHS regulation. The purpose is not to determine whether scientific misconduct definitely occurred or who was responsible. At the committee's first meeting, the RIO will review the charge with the committee, discuss the allegations, any related issues, and the appropriate procedures for conducting the inquiry, assist the committee with organizing plans for the inquiry, and answer any questions raised by the committee. The RIO will be present or available throughout the inquiry to advise the committee as needed.

6. **Inquiry Process**
The inquiry committee will normally interview the whistleblower, the respondent, and key witnesses as well as examining relevant research records and materials. Then the inquiry committee will evaluate the evidence and testimony obtained during the inquiry. After consultation with the RIO, the committee members will decide whether there is sufficient evidence of possible scientific misconduct to recommend further investigation. The scope of the inquiry does not include deciding whether misconduct occurred or conducting exhaustive interviews and analyses.

VI. THE INQUIRY REPORT

1. **Elements of the Inquiry Report**
A written inquiry report must be prepared that includes the following information: (1) the name and position of the respondent; (2) a description of the allegations of research misconduct; (3) the external support pertinent to the allegation, including, for example, grant numbers, grant applications, contracts and publications listing the 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; (6) the names and titles of the committee members and experts who conducted the inquiry; (7) a summary of the inquiry process used; (8) a list of the research records reviewed; (9) summaries of any interviews; (10) and whether any other actions should be taken if an investigation is not recommended.

Institutional counsel may be asked to review the report for legal sufficiency. Modifications should be made as appropriate in consultation with the RIO and the inquiry committee.

2. **Comments on the Draft Report by the Respondent and the Whistleblower**
The RIO will provide the respondent with a copy of the draft inquiry report for comment and rebuttal and will provide the whistleblower, if he or she is identifiable, with portions of the draft inquiry report that address the whistleblower's role and opinions in the investigation.

   i. Confidentiality: The RIO may establish reasonable conditions for review to protect the confidentiality of the draft report;

   ii. Receipt of Comments: Within 10 calendar days of their receipt of the draft report, the whistleblower and respondent will provide their comments, if any, to the inquiry committee. Any comments that the whistleblower or respondent submits on the draft report will become part of the final inquiry report and record.[9] Based on the comments, the inquiry committee may revise the report as appropriate.

3. **Inquiry Decision and Notification**

   i. Decision by Deciding Official: The RIO will transmit the final report and any comments to the Deciding Official (DO), who will make the determination of whether findings from the inquiry provide sufficient evidence of possible scientific

misconduct to justify conducting an investigation. The inquiry is completed when the DO makes this determination, which will be made within 60 days of the first meeting of the inquiry committee. Any extension of this period will be based on good cause and recorded in the inquiry file;

ii. Notification: Within 30 calendar days of the DO's decision that an investigation is warranted, the RIO will also notify those institutional officials who need to know of the DO's decision. Where PHS funding is involved, the RIO will also provide ORI, or other pertinent agency as required by regulation, with the DO's written decision and a copy of the inquiry report. The RIO must provide the following information to ORI upon request: (1) the institutional policies and procedures under which the inquiry was conducted; (2) the research records and evidence reviewed, transcripts, or recordings of any interviews, and copies of all relevant documents; and (3) the charges to be considered in the investigation.

The RIO and DO shall determine what if any information to provide to the complainant at various stages in the process, balancing the complainant's legitimate interest in the proceeding, its progress, and its outcome, with the need to safeguard the integrity and confidentiality of the process.

iii. Documentation of Decision Not to Investigate: If the DO decides that an investigation is not warranted, the RIO shall secure and maintain for 7 years after the termination of the inquiry sufficiently detailed documentation of the inquiry to permit a later assessment by ORI, or any other pertinent agency as required by regulation, of the reasons why an investigation was not conducted.

4. Time Limit for Completing the Inquiry Report

The inquiry committee will normally complete the inquiry and submit its report in writing to the RIO no more than 60 calendar days following its first meeting,[10] unless the RIO approves an extension for good cause. If the RIO approves an extension, the reason for the extension will be entered into the records of the case and the report.[11] The respondent also will be notified of the extension.

VII. CONDUCTING THE INVESTIGATION

1. Purpose of the Investigation

The purpose of the investigation is to explore in detail the allegations, to examine the evidence in depth, and to determine specifically whether misconduct has been committed, by whom, and to what extent. The investigation will also determine whether there are additional instances of possible misconduct that would justify broadening the scope beyond the initial allegations. This is particularly important where the alleged misconduct involves clinical trials or potential harm to human subjects or the general public or if it affects research that forms the basis for public policy, clinical practice, or public health practice. The findings of the investigation will be set forth in an investigation report.

2. Sequestration of the Research Records

The RIO will immediately sequester any additional pertinent research records that were not previously sequestered during the inquiry. This sequestration should occur before or at the time the respondent is notified that an investigation has begun. The need for additional sequestration of records may occur for any number of reasons, including the institution's decision to investigate additional allegations not considered during the inquiry stage or the identification of records during the inquiry process that had not been previously secured. The procedures to be followed for sequestration during the investigation are the same procedures that apply during the inquiry.

3. Appointment of the Investigation Committee

The RIO, in consultation with other institutional officials as appropriate, will appoint an investigation committee and the committee chair within 10 days of the notification to the respondent that an investigation is planned or as soon thereafter as practicable. The investigation committee should consist of at least three individuals who do not have real or apparent conflicts of interest in the case, are unbiased, and have the necessary expertise to evaluate the evidence and issues related to the allegations, interview the principals and key witnesses, and conduct the investigation.[12] These individuals may be scientists, administrators, subject matter experts, or other qualified persons, and they may be from inside or outside the institution. Individuals appointed to the investigation committee may also have served on the inquiry committee.

The RIO will notify the respondent of the proposed committee membership within 5 days. If the respondent submits a written objection to any appointed member of the investigation committee or expert, the RIO will determine whether to replace the challenged member or expert with a qualified substitute.

4. Charge to the Committee and First Meeting

a. Charge to the Committee

The RIO will define the subject matter of the investigation in a written charge to the committee that describes the allegations and related issues identified during the inquiry, defines scientific misconduct, and identifies the name of the respondent. The charge will state that the committee is to evaluate the evidence and testimony of the respondent, whistleblower, and key witnesses to determine whether, based on a preponderance of the evidence, scientific misconduct occurred and, if so, to what extent, who was responsible, and its seriousness.

During the investigation, if additional information becomes available that substantially changes the subject matter of the investigation or would suggest additional respondents, the committee will notify the RIO, who will determine whether it is necessary to notify the respondent of the new subject matter or to provide notice to additional respondents.

b. The First Meeting

The RIO, with the assistance of institutional counsel, will convene the first meeting of the investigation committee to review the charge, the inquiry report, and the

prescribed procedures and standards for the conduct of the investigation, including the necessity for confidentiality and for developing a specific investigation plan. The investigation committee will be provided with a copy of these instructions and, where PHS funding is involved, the PHS regulation.

5. **Investigation Process**
The investigation committee will be appointed and the process initiated within 30 days of the completion of the inquiry, if findings from that inquiry provide a sufficient basis for conducting an investigation.[13]

The investigation will normally involve examination of all documentation including, but not necessarily limited to, relevant research records, computer files, proposals, manuscripts, publications, correspondence, memoranda, and notes of telephone calls.[14] Whenever possible, the committee should interview the whistleblower(s), the respondents(s), and other individuals who might have information regarding aspects of the allegations.[15] Interviews of the respondent should be tape recorded or transcribed. All other interviews should be transcribed, tape recorded, or summarized. Summaries or transcripts of the interviews should be prepared, provided to the interviewed party for comment or revision, and included as part of the investigatory file.[16]

VIII. THE INVESTIGATION REPORT

1. **Elements of the Investigation Report**
The final report submitted to ORI must describe the policies and procedures under which the investigation was conducted, describe how and from whom information relevant to the investigation was obtained, state the findings, and explain the basis for the findings. The report will include the actual text or an accurate summary of the views of any individual(s) found to have engaged in misconduct as well as a description of any sanctions imposed and administrative actions taken by the institution.[17]

2. **Comments on the Draft Report**

a. Respondent
The RIO will provide the respondent with a copy of the draft investigation report for comment and rebuttal. The respondent will be allowed 10 days to review and comment on the draft report. The respondent's comments will be attached to the final report. The findings of the final report should take into account the respondent's comments in addition to all the other evidence.

b. Whistleblower
The RIO will provide the whistleblower, if he or she is identifiable, with those portions of the draft investigation report that address the whistleblower's role and opinions in the investigation. The report should be modified, as appropriate, based on the whistleblower's comments.

c. Institutional Counsel

The draft investigation report will be transmitted to the institutional counsel for a review of its legal sufficiency. Comments should be incorporated into the report as appropriate.

d. Confidentiality
In distributing the draft report, or portions thereof, to the respondent and whistleblower, the RIO will inform the recipient of the confidentiality under which the draft report is made available and may establish reasonable conditions to ensure such confidentiality. For example, the RIO may request the recipient to sign a confidentiality statement or to come to his or her office to review the report.

3. Institutional Review and Decision

Based on a preponderance of the evidence, the DO will make the final determination whether to accept the investigation report, its findings, and the recommended institutional actions. If this determination varies from that of the investigation committee, the DO will explain in detail the basis for rendering a decision different from that of the investigation committee in the institution's letter transmitting the report to ORI. The DO's explanation should be consistent with the PHS definition of scientific misconduct, the institution's policies and procedures, and the evidence reviewed and analyzed by the investigation committee. The DO may also return the report to the investigation committee with a request for further fact-finding or analysis. The DO's determination, together with the investigation committee's report, constitutes the final investigation report for purposes of ORI review.

When a final decision on the case has been reached, the RIO will notify both the respondent and the whistleblower in writing. In addition, the DO will determine whether law enforcement agencies, professional societies, professional licensing boards, editors of journals in which falsified reports may have been published, collaborators of the respondent in the work, or other relevant parties should be notified of the outcome of the case. The RIO is responsible for ensuring compliance with all notification requirements of funding or sponsoring agencies.

4. Transmittal of the Final Investigation Report to ORI

After comments have been received and the necessary changes have been made to the draft report, the investigation committee should transmit the final report with attachments, including the respondent's and whistleblower's comments, to the DO, through the RIO.

5. Time Limit for Completing the Investigation Report

An investigation should ordinarily be completed within 120 days of its initiation,[18] with the initiation being defined as the first meeting of the investigation committee. This includes conducting the investigation, preparing the report of findings, making the draft report available to the subject of the investigation for comment, submitting the report to the DO for approval, and submitting the report to the ORI.[19]

IX. REQUIREMENTS FOR REPORTING TO ORI

1. Allegations and Admissions of Scientific Misconduct when PHS Funding is Involved

a. An institution's decision to initiate an investigation must be reported in writing to ORI, on or before the date the investigation begins.[20] At a minimum, the notification should include the name of the person(s) against whom the allegations have been made, the general nature of the allegation as it relates to the PHS definition of scientific misconduct, and the PHS applications or grant number(s) involved.[21] ORI must also be notified of the final outcome of the investigation and must be provided with a copy of the investigation report.[22] Any significant variations from the provisions of the institutional policies and procedures should be explained in any reports submitted to ORI.

b. If an institution plans to terminate an inquiry or investigation for any reason without completing all relevant requirements of the PHS regulation, the RIO will submit a report of the planned termination to ORI, including a description of the reasons for the proposed termination.[23]

c. If the institution determines that it will not be able to complete the investigation in 120 days, the RIO will submit to ORI a written request for an extension that explains the delay, reports on the progress to date, estimates the date of completion of the report, and describes other necessary steps to be taken. If the request is granted, the RIO will file periodic progress reports as requested by the ORI.[24]

d. When PHS funding or applications for funding are involved and an admission of scientific misconduct is made, the RIO will contact ORI for consultation and advice. Normally, the individual making the admission will be asked to sign a statement attesting to the occurrence and extent of misconduct. When the case involves PHS funds, the institution cannot accept an admission of scientific misconduct as a basis for closing a case or not undertaking an investigation without prior approval from ORI.[25]

e. The RIO will notify ORI at any stage of the inquiry or investigation if:

- There is an immediate health hazard involved;[26]
- There is an immediate need to protect Federal funds or equipment;[27]
- There is an immediate need to protect the interests of the person(s) making the allegations or of the individual(s) who is the subject of the allegations as well as his/her co-investigators and associates, if any;[28]
- It is probable that the alleged incident is going to be reported publicly; or[29]
- The allegation involves a public health sensitive issue, *e.g.*, a clinical trial; or
- There is a reasonable indication of possible criminal violation. In this instance, the institution must inform ORI within 24 hours of obtaining that information.[30]

X. INSTITUTIONAL ADMINISTRATIVE ACTIONS

Union College will take appropriate administrative actions against individuals when an allegation of misconduct has been substantiated.[31]

If the DO determines that the alleged misconduct is substantiated by the findings, he or she will decide on the appropriate actions to be taken, after consultation with the RIO. The actions, determined through the College's campus disciplinary process when appropriate, may include:

- Withdrawal or correction of all pending or published abstracts and papers emanating from the research where scientific misconduct was found.
- Removal of the responsible person from the particular project, letter of reprimand, special monitoring of future work, probation, suspension, salary reduction, or initiation of steps leading to possible rank reduction or termination of employment;
- Restitution of funds as appropriate

XI. OTHER CONSIDERATIONS

1. **Termination of Institutional Employment or Resignation Prior to Completing Inquiry or Investigation**
   The termination of the respondent's institutional employment, by resignation or otherwise, before or after an allegation of possible scientific misconduct has been reported, will not preclude or terminate the misconduct procedures.

   If the respondent, without admitting to the misconduct, elects to resign his or her position prior to the initiation of an inquiry, but after an allegation has been reported, or during an inquiry or investigation, the inquiry or investigation will proceed. If the respondent refuses to participate in the process after resignation, the committee will use its best efforts to reach a conclusion concerning the allegations, noting in its report the respondent's failure to cooperate and its effect on the committee's review of all the evidence.

2. **Restoration of Respondent's Reputation**
   If the institution finds no misconduct and ORI concurs, after consulting with the respondent, the RIO will undertake reasonable efforts to restore the respondent's reputation. Depending on the particular circumstances, the RIO should consider notifying those individuals aware of or involved in the investigation of the final outcome, publicizing the final outcome in forums in which the allegation of scientific misconduct was previously publicized, or expunging all reference to the scientific misconduct allegation from the respondent's personnel file. Any institutional actions to restore the respondent's reputation must first be approved by the DO.

3. **Protection of the Whistleblower and Others**[32]
   Regardless of whether the institution or ORI determines that scientific misconduct occurred, the RIO will undertake reasonable efforts to protect whistleblowers who made allegations of scientific misconduct in good faith and others who cooperate in good faith with inquiries and investigations of such allegations. Upon completion of an investigation, the DO will determine, after consulting with the whistleblower, what steps, if any, are needed to restore the position or reputation of the whistleblower. The RIO is responsible for implementing any steps the DO approves. The RIO will also take appropriate steps during the inquiry and investigation to prevent any retaliation against the whistleblower.

4. **Allegations Not Made in Good Faith**
   If relevant, the DO will determine whether the whistleblower's allegations of scientific misconduct were made in good faith. If an allegation was not made in good faith, the DO will determine whether any administrative action should be taken against the whistleblower.

5. **Interim Administrative Actions**
   Institutional officials will take interim administrative actions, as appropriate, to protect Federal funds and ensure that the purposes of the Federal financial assistance are carried out.[33]

XII. RECORD RETENTION

After completion of a case and all ensuing related actions, the RIO will prepare a complete file, including the records of any inquiry or investigation and copies of all documents and other materials furnished to the RIO or committees. The RIO will keep the file for three years after completion of the case to permit later assessment of the case. ORI or other authorized DHHS personnel will be given access to the records upon request.[34]

APPENDIX A: FIELDS OF S&E

Crosswalk of fields of S&E to the National Center for Education Statistics (NCES) 2010 Classification of Instructional Programs (CIP)

Agriculture sciences and natural resources sciences:
Agricultural economics
Animal sciences
Fishing and fisheries sciences
Food science and technology
Forestry
Natural resources conservation and research (includes environmental science)
Natural resources economics
Plant sciences
Soil sciences
Wildlife and wildlands science

Biological and biomedical sciences:
Anatomical sciences
Animal biology
Biochemistry
Bioinformatics
Biology
Biomathematics
Biophysics
Biotechnology
Botany
Cell biology
Cellular biology
Ecology
Evolution
Genetics
Human nutrition
Immunology
Microbiological sciences
Molecular biology
Molecular medicine
Neurobiology
Neurosciences
Pathology
Pharmacology
Physiology
Plant biology
Population biology
Toxicology
Zoology
Biological and biomedical sciences, other

Computer and information sciences:
Computer science
Computer software and media applications
Computer systems networking and telecommunications
Information science

Engineering:
Aeronautical engineering
Aerospace engineering
Agricultural engineering
Architectural engineering
Astronautical engineering
Automation engineering
Biochemical engineering
Bioengineering
Biological engineering
Biomedical engineering
Biosystems engineering
Ceramic sciences and engineering
Chemical engineering
Civil engineering
Computer engineering, general
Construction engineering
Electrical, electronics and communications engineering
Electromechanical engineering
Engineering chemistry
Engineering physics
Engineering science
Environmental engineering
Environmental health engineering
Forest engineering
Geological engineering
Geophysical engineering
Industrial engineering
Manufacturing engineering
Marine engineering
Materials engineering
Mechanical engineering
Mechatronics
Medical engineering
Metallurgical engineering
Mining and mineral processing
Naval architecture
Nuclear engineering

Ocean engineering
Operations research
Paper science and engineering
Petroleum engineering
Plastics engineering
Polymer engineering
Robotics
Surveying engineering
Systems engineering
Textile sciences and engineering
Engineering, other

Health and clinical sciences:
Allied health diagnostic, intervention, and treatment
Clinical laboratory science/research
Clinical nursing
Communication disorders sciences
Dentistry
Informatics
Kinesiology and exercise science
Medical clinical sciences
Medical illustration
Medical laboratory science/research
Medicine
Nursing research
Optometry
Oral sciences
Osteopathic medicine
Osteopathy
Pharmaceutical sciences
Pharmacy
Podiatric medicine
Podiatry
Public health
Registered nursing
Rehabilitation and therapeutic subfields
Veterinary biomedical sciences
Veterinary medicine

Mathematics and statistics:
Applied mathematics
Mathematics
Statistics
Mathematics and statistics, other

Physical sciences, group 1:
Astronomy
Astrophysics
Atmospheric sciences
Chemistry
Earth sciences
Geological sciences
Materials sciences
Meteorology
Oceanography
Physics

Psychology:
Applied psychology
Clinical psychology
Counseling psychology
Research and experimental psychology
Psychology, other

Social sciences:
Anthropology
Archeology
Criminalistics
Criminal justice
Criminal science
Criminology
Demography
Economics
Forensic science and technology
Geography and cartography
International relations
National security studies
Police science
Political science and government
Population studies
Sociology
Urban affairs
Social sciences, other

END NOTES

[1] 42 C.F.R. § 50.102.

[2] 42 C.F.R. § 50.102.

[3] 42 C.F.R. § 50.102.

[4] 42 C.F.R. § 50.103(d)(12).

[5] 42 C.F.R. § 50.103(d)(13).

[6] 42 C.F.R. § 50.103(d)(2).

[7] 42 C.F.R. § 50.103(d)(13).

[8] 42 C.F.R. § 50.103(d)(3).

[9] 42 C.F.R. § 50.103(d)(1).

[10] 42 C.F.R. § 50.103(d)(1).

[11] 42 C.F.R. § 50.103(d)(1).

[12] 42 C.F.R. § 50.103(d)(8).

[13] 42 C.F.R. § 50.103(d)(7).

[14] 42 C.F.R. § 50.103(d)(7).

[15] 42 C.F.R. § 50.103(d)(7).

[16] 42 C.F.R. § 50.103(d)(7).

[17] 42 C.F.R. § 50.104(a)(4); 42 C.F.R. § 50.103(d)(15).

[18] 42 C.F.R. § 50.104(a)(2).

[19] 42 C.F.R. § 50.104(a)(2).

[20] 42 C.F.R. § 50.104(a)(1).

[21] 42 C.F.R. § 50.104(a)(1).

[22] 42 C.F.R. § 50.103(d)(15).

[23] 42 C.F.R. § 50.104(a)(3).

[24] 42 C.F.R. § 50.104(a)(5).

[25] 42 C.F.R. § 50.104(a)(3).

[26] 42 C.F.R. § 50.104(b)(1).

[27] 42 C.F.R. § 50.104(b)(2).

[28] 42 C.F.R. § 50.104(b)(3).

[29] 42 C.F.R. § 50.104(b)(4).

[30] 42 C.F.R. § 50.104(b)(5).

[31] 42 C.F.R. § 50.103(d)(14).

[32] 42 C.F.R. § 50.103(d)(14).

[33] 42 C.F.R. § 50.103(d)(11).

[34] 42 C.F.R. § 50.103(d)(10).