

APPLIES TO: All DDPSC SCIENTIFIC STAFF

TITLE: **RESEARCH INTEGRITY POLICY**

I. Introduction

Federal regulations require that institutions applying for or receiving federal research funding have an established administrative process for reviewing, investigating, and reporting allegations of research misconduct. The following policy outlines the Donald Danforth Plant Science Center's (DDPSC) process for responding to allegations of research misconduct in all areas of research, regardless of the funding source.

The goals of this policy are to resolve allegations of research misconduct as rapidly and fairly as possible, to protect the rights and integrity of the respondent, the complainant, and all others involved in research misconduct proceedings, and to outline the processes by which research sponsors and others will be informed regarding the status of allegations of misconduct in research, in accordance with applicable laws and regulations.

DDPSC defines research misconduct as 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 or differences in interpretations of data.

A finding of research misconduct requires that:

- A. There be a significant departure from the accepted practices of the relevant research community; and
- B. The research misconduct be committed intentionally, or knowingly, or recklessly; and
- C. The allegation be proven by a preponderance of evidence.

II. Organizational Structure

- A. The Research Integrity Panel (RIP) is responsible for implementing research misconduct proceedings at DDPSC as outlined herein. The RIP is comprised of the President, the Vice President of Research (VPR), and the Research Integrity Officer (RIO), who shall serve as the chair of the Panel. Together, the RIP shall:
 1. Assess an allegation to determine whether it falls within the definition of research misconduct and is sufficiently credible to warrant an inquiry.
 2. Oversee all research misconduct proceedings.
 3. Appoint additional individuals to assist in research misconduct proceedings as needed.
 4. Assist all DDPSC personnel to comply with applicable policies, laws, and regulations related to research misconduct proceedings.

5. Notify individuals and entities of research misconduct proceedings on a need-to-know basis.
 6. Establish and maintain records for all research misconduct proceedings.
- B. For each allegation of research misconduct found to warrant an inquiry, the RIP shall convene the Committee on Research Integrity (CRI). The CRI works to resolve cases of alleged research misconduct against staff, students, and/or faculty members at DDPSC.
1. The CRI is comprised of five members, including the three members of the RIP as well as the Point of Contact (VP of Finance) and the Vice President of Human Resources (VPHR).
 2. At any time during the research misconduct proceedings, the RIP may solicit help from additional individuals from within or outside DDPSC including but not limited to legal counsel, scientists, or consultants with relevant expertise.
 3. All committee members shall be carefully selected in order to minimize either the substance or the appearance of personal or professional conflicts of interest.

III. Inquiry and Investigation Procedure

A. Complaints

1. All members of the DDPSC community are expected to report observed, suspected, or apparent research misconduct. All complaints of research misconduct from sources inside or outside DDPSC will be considered.
2. An individual should direct a complaint of research misconduct to the RIO or as outlined within the DDPSC Policy on Ethical Conduct, Section 7.1. Any member of the DDPSC community who receives an allegation or admission of research misconduct shall promptly forward it to the RIO.
3. If an individual is concerned about possible research misconduct or is unsure whether an incident qualifies as research misconduct, he or she may contact the RIO to discuss the suspected misconduct informally and confidentially.

B. Assessment

1. Upon receiving an allegation of research misconduct, the RIO will convene the RIP, which will immediately assess the allegation to determine whether it:
 - a. Falls within the definition of research misconduct and
 - b. Is sufficiently credible and specific so that potential evidence of research misconduct may be identified.
2. Absent a finding that the complaint is frivolous or insubstantial on its face or does not allege an instance of research misconduct, the RIP will promptly initiate the inquiry process.

C. Inquiry

1. To initiate the inquiry process, the RIP will:
 - a. Provide notice to the CRI. The RIP shall first notify CRI members of all allegations of research misconduct and the initiation of the inquiry process.

- b. Provide notice to the respondent. The RIP shall provide written notice to the respondent at the initiation of the inquiry. The notification will include a description of all allegations of research misconduct made against the respondent along with an explanation and documentation of DDPSC policies related to allegations of research misconduct.
- c. Sequester all original research records relevant to the allegation. At the time or before the respondent is notified of an allegation, the RIP, in conjunction with the VPHR, will take all reasonable and practical steps necessary to obtain custody, inventory, and secure all original research records and evidence relevant to the allegation. All DDPSC faculty and staff shall promptly provide any and all records and research material identified as relevant to the allegation. Copies of records and data will be provided if requested. All reasonable steps, consistent with time constraints and other obligations imposed by federal regulations, shall be taken to eliminate or minimize any disruption that might be created for ongoing research efforts. Failure to provide relevant records and data will subject an individual to sanctions pursuant to Section IV below.

2. Inquiry Responsibilities

- a. The purpose of the inquiry is to conduct a rapid, thorough, and unprejudiced preliminary evaluation of the available facts and circumstances underlying the allegations.
- b. The RIP is responsible for conducting the inquiry. If needed, the RIP may solicit help from additional individuals from within or outside DDPSC. Such individuals shall be carefully selected in order to minimize either the substance or the appearance of personal or professional conflicts of interest. Individuals who assist in an inquiry may continue to serve as members of the CRI for the duration of the case in question.
- c. The inquiry will conclude with a determination based on a preponderance of the evidence as to:
 - i. whether or not the conduct, if it did occur, would constitute research misconduct, and
 - ii. whether there is sufficient evidence of the alleged misconduct to warrant a full investigation.
- d. To make this determination, the RIP will review the evidence and conduct interviews of the complainant, the respondent, and any other key witnesses deemed necessary. At this stage the complainant's name may be kept confidential, but he/she must be made aware that as the process moves forward, the complainant's identity may have to be revealed in order to afford the respondent a full and fair opportunity to respond to the charges.
- e. The respondent may have an attorney present at all meetings, interviews, and other proceedings with the RIP to act as an advisor. Attorneys will not be permitted to actively participate in the proceedings.

3. Inquiry Determination

- a. The RIP will evaluate the relevant documentation and testimony of all individuals interviewed and shall create an Inquiry Report of findings and recommendations for further action (see Appendix A for the contents of the Inquiry Report). This report will indicate whether an investigation will be initiated or the complaint dismissed.
- b. A draft of this report shall be promptly provided to the respondent. The respondent shall be allowed five (5) working days from receipt of the draft report to provide written comments to the RIP. The RIP will then revise the report as appropriate and generate the final Inquiry Report. Any and all comments submitted by the respondent shall be made a part of the final version of the report.
- c. The RIP shall then provide a copy of the final Inquiry Report to the respondent, which will serve as the final determination of the inquiry. The report will indicate whether an investigation will be initiated or the complaint dismissed. If the complaint is dismissed, the RIP may still make recommendations for corrective actions or sanctions pursuant to Section IV below.
- d. If the RIP concludes that an investigation is not warranted, the complaint is dismissed. If the complaint is dismissed for any reason, the RIP will make diligent efforts to restore the respondent's reputation. Diligent efforts will also be made to protect the complainant from retaliation for his/her activities in cooperation with, or initiation of, the inquiry provided, however, such activities were not undertaken in bad faith.
- e. If the RIP determines that there is sufficient basis to warrant an investigation, a prompt and thorough investigation into the allegation shall be initiated within thirty (30) calendar days of the completion of the inquiry.
- f. Absent extraordinary circumstances, the inquiry shall be completed within sixty (60) calendar days of its initiation. Reasons for any delay must be documented in the Inquiry Report.

D. Investigation

1. On or before the date an investigation begins, the RIP will provide written notice to the research sponsor and/or regulatory agencies as required by federal regulations.
2. To initiate an investigation, the RIP will:
 - a. Convene the Committee on Research Integrity (CRI). The organizational structure of the CRI is detailed in Section II.B above. Each member of the CRI will receive a copy of the final Inquiry Report as well as copies of all relevant transcripts, evidence and other documentation.
 - b. Sequester any additional research records relevant to the allegation, in conjunction with the VPHR. Throughout the investigation, the RIP and the VPHR will exercise all rights and responsibilities related to the gathering of relevant records and data available under Section III.C.1.b. above. Failure of any DDPSC student, faculty member, or staff member

to provide all relevant records and data will subject the individual to sanctions pursuant to Section IV below.

3. Investigation Responsibilities

- a. The responsibility of the CRI is to determine whether, based on a preponderance of the evidence, research misconduct has occurred and to recommend what, if any, corrective actions and sanctions are warranted.
- b. The investigation shall include an examination of all relevant materials and documentation including, but not limited to research data, notebooks, primary research materials and proposals, publications, correspondence, memoranda, and interviews with all individuals involved.
- c. The respondent shall be permitted to have an attorney present to the same extent specified under Section III.C.3 with respect to the inquiry process.

4. Investigation Determination

- a. Upon completion of its investigation, the CRI shall, by majority vote, decide whether to dismiss the complaint or make a determination that research misconduct occurred.
- b. The CRI will then generate a draft report of its investigation and recommendations for further action, if any (see Appendix B for the contents of the CRI report). The RIP shall promptly submit the draft report to the respondent, who shall be allowed five (5) working days from receipt of the draft report to provide comments on the report. Based on the comments received, the CRI will revise the report as appropriate and generate the final CRI Report. Any and all comments submitted by the respondent shall be attached to the final report.
- c. The RIP will provide a copy of the final report to the respondent. The RIP will also provide a copy of the report to the appropriate research sponsor and/or regulatory agency as required by federal regulations.
- d. The investigation shall be carried through to completion within one hundred twenty (120) calendar days. Written approval is required if the investigation is to extend beyond this timeframe.
 - i. For sponsored research, the RIP will request an extension from the applicable research sponsor or regulatory agency as required by federal regulations.

IV. Imposition of Sanctions

- A. If the CRI determines that research misconduct has occurred or makes other recommendations for sanctions or other corrective actions against a respondent, the President is charged to determine and impose appropriate sanctions. Sanctions may range from a letter of reprimand, up to and including termination of contract. The President shall impose sanctions no later than thirty (30) calendar days after the CRI finalizes the CRI Report.
- B. In the event that allegations of research misconduct are made in bad faith or research misconduct proceedings are materially impeded by any DDPS student, faculty member,

or staff member, the President shall impose appropriate sanctions at any time during the proceedings.

- C. Federal agencies charged with oversight of research misconduct proceedings may impose additional sanctions for research misconduct found to have been committed against federally funded research projects.

V. Additional Responsibilities

A. Confidentiality

- 1. All those participating or involved in research misconduct proceedings shall not disclose any information regarding the allegations, the proceedings, or the identity of individuals involved in the proceedings except as necessary to the proper discharge of their responsibilities hereunder and as required by law.
- 2. Throughout the course of all research misconduct proceedings, the VPHR is charged to take all appropriate steps to assure the confidentiality of allegations and the proceedings and deliberations conducted thereto.

B. Protection

- 1. Throughout the course of all research misconduct proceedings, the VPHR is charged to take all appropriate steps to:
 - a. Protect the complainant and all witnesses from retaliation for their activities in cooperation with, or initiation of, the inquiry and/or investigation, provided, however, such activities were not undertaken in bad faith.
 - b. Protect individuals involved in resolution of research misconduct proceedings from retaliation for their activities in conducting the inquiry and/or investigation.

C. Cooperation, Notification, and Recordkeeping

- 1. The RIP will assure full and continuing cooperation with federal agencies charged with oversight of research misconduct proceedings as required by applicable federal regulations. This includes:
 - a. Keeping agencies informed regarding the status of research misconduct proceedings.
 - b. Reporting any proposed settlements, admissions of research misconduct, or institutional findings of misconduct that arise at any stage of the proceedings.
 - c. Complying with all record keeping requirements.
 - d. Providing relevant research records and records of research misconduct proceedings as requested and required.
 - e. Cooperation and assistance to carry out any federal administrative actions imposed.

D. Protective Actions

1. Throughout the course of all research misconduct proceedings, the RIP shall take appropriate actions to protect public health, research funds and equipment, and the integrity of the research process.
2. In accordance with federal regulations, the RIP will notify appropriate federal agencies immediately if the following conditions exist:
 - a. Risk to public health or safety
 - b. Research activities should be suspended
 - c. Reasonable indication of violations of civil or criminal law
 - d. Federal action is required to protect those involved in research misconduct proceedings
 - e. The research community or public should be informed or the proceedings may be made public prematurely

ORIGINAL ISSUE DATE: May 1, 2011

EFFECTIVE DATE OF REVISION:

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VI. Appendices

Appendix A: Contents of the Inquiry Report

1. Name and position of the respondent(s)
2. Description of the allegations of research misconduct
3. Sponsored project information for the associated research project including:
 - a. Grant numbers
 - b. Grant applications
 - c. Contracts
 - d. Publications listing support
4. The basis for recommending that the alleged actions warrant an investigation
5. Any comments on the report by the respondent

Appendix B: Contents of the Committee on Research Integrity (CRI) Report

1. Name and position of the respondent(s)
2. Description of the nature of the allegations of research misconduct
3. Sponsored project information for the associated research project including:
 - a. Grant numbers
 - b. Grant applications
 - c. Contracts
 - d. Publications listing support
4. Copy of the DDPSC Research Integrity Policy
5. Description of the specific allegations of research misconduct considered in the investigation
6. Identification and summary of relevant research records and evidence including:
 - a. Review of research records and evidence utilized in the investigation
 - b. Identification of any evidence taken into custody but not reviewed
 - c. Description of records and evidence not taken into custody and an explanation of why such evidence was not sequestered
7. Finding as to whether research misconduct did or did not occur for each allegation and, if misconduct was found:
 - a. Identify it as fabrication, falsification, or plagiarism and whether it was intentional, knowing, or in reckless disregard
 - b. Summarize the facts and the analysis supporting the conclusion and consider the merits of any reasonable explanation by the respondent and any evidence that rebuts the respondent's explanation

- c. Identify the specific support
 - d. Identify any publication that needs correction or retraction
 - e. Identify the person(s) responsible for the misconduct
 - f. List any current support or known application or proposal for support that the respondent(s) has pending with sponsoring agencies
8. Include and consider any comments made by the respondent on the draft report

Appendix C: Definitions

All definitions herein are applicable to DDPSC's Research Integrity Policy and Research Integrity Procedures documents only.

1. *Allegation*: a disclosure of possible research misconduct through any means of communication. The disclosure may be by written or oral statement or other communication to an institutional official.
2. *Conflict of interest*: the real or apparent interference of one person's interest with the interests of another person, where potential bias may occur due to prior or existing personal or professional relationships.
3. *Fabrication*: making up data or results and recording or reporting them.
4. *Falsification*: 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.
5. *Good faith*: having a belief in the truth of one's statements such that a reasonable person in the same position could have based on the information known to one at the time. An action is not in good faith if made with knowing or reckless disregard or willful ignorance of certain facts that would disprove said action.
6. *Plagiarism*: the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.
7. *Preponderance of the evidence*: proof by information that, compared with that opposing it, leads to the conclusion that the fact at issue is more probably true than not.
8. *Research*: a systematic experiment, study, evaluation, demonstration, or survey designed to develop or contribute to general knowledge (basic research) or specific knowledge (applied research).
9. *Research record*: the record of data or results that embody the facts resulting from scientific inquiry, including but not limited to primary research material, research proposals, laboratory records (physical and electronic), research animals, images, machines and equipment, progress reports, abstracts, theses, oral presentations, internal reports, journal articles, correspondence, and any documents and materials provided by the respondent in the course of a research misconduct proceeding.
10. *Respondent*: the person against whom an allegation of research misconduct is directed or who is the subject of a research misconduct proceeding.