

Research Financial Conflict of Interest Policy

Effective Date: 2/1/2023

Introduction

The Donald Danforth Plant Science Center (the "Center") recognizes its responsibility to ensure that research and educational activities are proposed and conducted in an unbiased, objective manner and that public trust is preserved. The Center strives to ensure that the integrity of the Investigator, the Center, and the research and training activities are not compromised or perceived to be compromised by considerations of personal gain or financial benefit. Investigators must ensure the integrity of their research pursuits by taking steps to avoid conflict of interest, or even the appearance of conflict of interest. This policy is designed to help Investigators identify situations that present real or potential conflicts of interest and to provide the Center and the Investigator with a procedure that, if observed, will allow all such situations to be identified and either managed or eliminated.

Definitions

Research Conflict of Interest

A conflict of interest can be either financial or non-financial, and may result in a conscious or subconscious bias in the conduct or interpretation of research. In research, the term conflict of interest refers especially to situations in which the judgment of an Investigator (defined below) in the design, conduct, or reporting of research could be influenced or biased by a financial interest or other personal consideration. The bias could affect collection, analysis, and interpretation of data, hiring of staff, procurement of materials, sharing of results, choice of protocol, and the use of statistical methods. An Investigator will be deemed to have a Conflict of Interest if the Investigator or any member of that person's immediate family (spouse and dependent children), has a Significant Financial Interest (defined below) in other outside activities that are related in any way to the research being conducted by the Investigator at the Center.

Other Conflicts of Interest

An Investigator may also hold a position at the Center that allows him or her to influence Center decisions, or he or she been entrusted with the authority to make decisions for the Center outside of the specific realm of their research. In those cases, a conflict of interest also exists when the personal or professional concerns of an Investigator will, in fact or in appearance, affect his or her ability to put the welfare of the Center before the Investigator's personal benefit.

For purposes of this policy, an Investigator shall also be deemed to have a conflict of commitment to the Center, and therefore a Conflict of Interest, when they are devoting a substantial amount of time on behalf of or to a third party as an employee, consultant, or in some other capacity, whether paid or not. A substantial amount of time is defined as a commitment or combination of commitments totaling greater than 20%, or one day per week, of the Investigator's effort during a 12-month period.

Identification of Conflicts of Interest

Identifying conflict of interest is not a simple task. An Investigator has a conflict of interest if it is perceived or appears that his or her judgment and discretion in research or in other matters affecting the Center is or may be influenced by considerations either of personal gain or financial benefit. The following is a partial list of activities or actions that could create a material conflict of interest or the appearance of a conflict that should be managed or eliminated.

- Consulting activities;
- The purchase of goods or services, for sponsored projects or other research, from businesses in which the Investigator, or his or her family, has a Significant Financial Interest or, as a result of such purchase, may directly benefit:
- Receipt of gifts, gratuities, loans, or special favors;
- Trips or speaker's fees from research sponsors, vendors currently doing business with the Center, or vendors seeking to do business with the Center;
- Receipt of significant compensation for a position in a company or for consulting with a company, or holding significant equity in a company, that supports research of the Investigator;
- Receipt of significant compensation for a position in a company or for consulting with a company, or holding significant equity in a company if that company operates in the field of research of the Investigator;
- Holding of an ownership interest by the Investigator, or the Investigator's family, in any real or personal property leased or purchased by the Center;
- Holding of a significant equity, royalty or debt instrument interest by the Investigator, or the Investigator's family, in any entity providing to the Center financial support, including research or other support or services, when such support will benefit the Investigator or persons supervised, directly or indirectly, by the Investigator;

- Receipt, directly by the Investigator from non-Center sources, of cash, services, or equipment provided in support of the Investigator's activities at the Center;
- Receipt of in-kind support or resources from a foreign or domestic entity, including use of facilities or instrumentation.
- Any position or scientific appointment, including titled academic, professional, or institutional appointments whether or not remuneration is received, and whether full-time, part-time, or voluntary (including adjunct, visiting, or honorary.
- Memberships on boards of directors, committees, advisory groups (or similar bodies) of governmental, for-profit or not-for-profit entity.

The following statements identify factors that increase the risk that a situation will have inherent potential for conflict of interest and that the conflict of interest will be material:

- The risk of conflict of interest increases with the magnitude of the personal compensation received or expected;
- A critical threshold is crossed when an Investigator's relationship with a
 company expands to include a research program. A conflict of interest is then
 possible at the most fundamental levels of research, including design of
 experiments and data collection. Additional possible conflicts may arise with
 respect to the Investigator's obligations to the Center or to other research
 sponsors. The Center must also consider its responsibilities to ensure
 appropriate use of Center resources, protection of ownership rights, and
 compliance with requirements of research sponsors;
- The risk of conflict of interest is inherently great when an Investigator holds equity rather than receiving personal cash compensation from a company. To the extent that the research outcome can influence equity value, and to the extent that the Investigator can profit thereby, holding of equity may jeopardize research integrity;
- The involvement of trainees/students in research supported by a company creates risk that academic training will be compromised. The primary goal of training must be to further academic development, and the trainee must have the freedom to publish in a timely fashion and to pursue academic goals upon leaving the program;
- Investigators in positions of leadership in the institution have a greater risk of conflict of interest. Adverse consequences are magnified when decisions are made by those with a high level of responsibility.

Conflict of Interest Defined

Investigator

Investigator refers to the Principal Investigator, project director, co-principal investigators/co-project directors, and any other person who is responsible for the

design, conduct, or reporting of research or educational activities applied for or funded through a grant, cooperative agreement or contract by the Center, NIH, NSF or other third party sponsor.

Requirements also apply to Investigators working for sub-grantees/contractors/ subcontractors/collaborators on all new applications and awards for grants, cooperative agreements or contracts funded by NIH, NSF or any other sponsoring agency that has FCOI requirements for subrecipients. For the purpose of this policy, we will refer to all applicable parties as Investigators.

Family

For purposes of this policy, family is defined as a spouse, domestic partner, parent, grandparent, child, or spouse of a child, sibling (including half-brother or sister) or spouse of a sibling, of the Investigator.

Significant Financial Interest

Anything of monetary value, including but not limited to:

- Salary or other payments for services (e.g., consulting fees or honoraria);
- With regard to any publicly traded entity, if the value of any remuneration received from the entity in the twelve months preceding the disclosure and the value of any equity interest in the entity as of the date of disclosure, when aggregated, exceeds \$5,000;
- With regard to any non-publicly traded entity, if the value of any remuneration received from the entity in the twelve months preceding the disclosure, when aggregated, exceeds \$5,000, or when the Investigator (or the Investigator's spouse or dependent children) holds any equity interest (e.g., stock, stock option, or other ownership interest)
- Intellectual property rights and interest (e.g., patents, copyrights) upon receipt of income related to such rights and interest;
- Occurrence of any reimbursed or sponsored travel (i.e., that which is paid on behalf of the Investigator and not reimbursed to the Investigator so that the exact monetary value may not be readily available), related to the institutional responsibilities.

It should be noted that Significant Financial Interest excludes:

- Salary, royalties, or other remuneration from the Institution if currently employed or otherwise appointed by the Institution;
- Intellectual property rights assigned to the Center and agreements to share in royalties related to such rights;
- Any ownership interest in the Institution held by the Investigator, if the Institution is a commercial or for-profit organization
- Income from investment vehicles, such as mutual funds and retirement accounts, as long as the Investigator does not directly control the investment decisions made in these vehicles:

- Income from seminars, lectures, or teaching engagements sponsored by a Federal, state, or local government agency, an Institution of higher education as defined at 20 U.S.C. 1001(a), an academic teaching hospital, a medical center, or a research institute that is affiliated with an Institution of higher education;
- Income from service on advisory committees or review panels for a Federal, state, or local government agency, an Institution of higher education as defined at 20 U.S.C. 1001(a), an academic teaching hospital, a medical center, or a research institute that is affiliated with an Institution of higher education;
- Travel that is reimbursed or sponsored by a Federal, state or local government agency, an institute of higher education, an academic teaching hospital, a medical center, or a research institute that is affiliated with an institution of higher education and/or is expected to amount to less than \$5,000 in the aggregate per entity.

Conflict of Interest Committee ("Committee")

A Committee of the Board of Directors is established to assess the adequacy of and monitor compliance with the Center's Conflict of Interest Policies. The Committee will also actively oversee and manage potential conflicts of interest at the Board and Officer levels. The President of the Center will have a seat on the Committee. The Committee will report to the Board regarding matters of conflict of interest. Reporting shall occur on an annual basis, or more frequently as needed.

Research Integrity Officer ("RIO")

Individual responsible for reviewing financial disclosures and potential conflicts of interest disclosed by Investigators. The RIO works with the President to determine whether a conflict of interest exists, to determine and carry out a course of action to manage, reduce or eliminate such conflict, and to report to the Committee with respect to Research Conflicts of Interest. The RIO serves as the compliance officer responsible for reporting to Federal Agencies. This position shall be held by a Senior Member (PI) who is not otherwise an officer of the Center.

Administration Point of Contact ("POC")

Individual and point of contact responsible for gathering financial disclosures and potential conflicts of interest to determine whether a conflict of interest exists. The POC works with the President and RIO to determine and carry out a course of action to manage, reduce or eliminate such conflict and report to the Committee with respect to Research Conflicts of Interest. The POC position is currently held by the Vice President of Finance.

Training

Each Investigator must complete Financial Conflict of Interest training prior to engaging in research and at least every four years or immediately if any of the following circumstances apply:

- There are changes to this policy that affect the Investigator;
- The Investigator is new to the Center;
- The Center determines an Investigator is not in compliance with either this
 policy or a conflict of interest management plan established based on this
 policy.

Disclosures of Conflict of Interest and Policy Acknowledgment

All Investigators subject to this policy shall disclose Significant Financial Interests related to their research or related to any of the Investigator's other responsibilities at the Center. Disclosures will be made using the Financial Disclosure Form available on the Integrity of Research site on the Center's intranet. Disclosures shall be made directly to the POC, in accordance with the requirements of this policy or by government regulation or policy.

1. Newly Hired Investigators

During the recruiting process, faculty candidates shall be provided a copy of this policy. The financial disclosures required by the policy should be requested from a candidate prior to hiring and potential conflicts of interest should be addressed in accordance with this policy prior to a formal letter of employment. Upon hire, each Investigator shall be required to complete the Financial Disclosure Form and sign a statement affirming receipt of the policy, understanding of its contents, and agreement to comply with the policy.

2. Applications

Submit by the time of a sponsored research application to NIH, NSF or other sponsor, a list of his/her known Significant Financial Interest (and those of his/her family) or a certification that none exist.

3. Updates

During the period of award, the Investigator(s) shall update all financial disclosures to the Center including notifying the POC within thirty (30) days of a new Significant Financial Interest being discovered or acquired.

4. Annually

Financial Disclosure Forms and the most recently updated copy of this policy shall be distributed annually to Investigators. Each Investigator shall complete

the Financial Disclosure Form and return the form by January 31 of each calendar year. The POC shall review the completed Financial Disclosure forms for completeness and may request additional information as necessary to clarify the reported disclosures.

At any time, an Investigator may submit a request to the POC and RIO for review and approval of arrangements that create a potential conflict to avoid costly consequences of after-the-fact review.

5. Research Travel Financial Disclosure Form

Individuals must disclose the occurrence of reimbursed or sponsored travel greater than \$5,000, that appear to be related to their institutional responsibilities and are paid for by an entity other than DDPSC, U.S. federal, state, or local government agencies, or other U.S. institutions of higher education, academic teaching hospitals, medical centers, or research institutes affiliated with an institution of higher education. Travel must be disclosed upon completion of the travel activity using the Research Travel Financial Disclosure Form found on the Integrity of Scientific Research Space on Workvivo.

Travel includes, for instance, registration fees, accommodations, transportation costs, and meals. Outside entities may include, but are not necessarily limited to, professional societies, foreign institutions of higher education, for-profit entities, and non-profit entities.

Management or Elimination of Conflicts of Interest

The President of the Center ultimately has responsibility for the administration of this policy and its requirements. As such, the President may take additional steps beyond those outlined here or implement further review procedures as he or she deems necessary to meet his or her responsibility. These steps may include, but are not limited to, consultation with senior faculty or a faculty committee within the Center or individuals outside the Center with specialized expertise in a specific area of research or other area of interest (e.g., intellectual property maters or governance).

The following process will be followed to determine a course of action for the management or elimination of situations that present material conflicts of interest. The course of action will depend upon the Center's assessment of the degree of risk in the situation and the appearance that the integrity of the Investigator, or the Center, may be compromised by considerations of personal gain or financial benefit.

The RIO and POC shall review all potential conflicts of interest reported by Investigators related to the conduct of research and determine if a conflict of interest

exists or if the potential for the appearance of a conflict exists. A conflict of interest exists when a Significant Financial Interest could directly or indirectly affect the design, conduct, or reporting of research funded by either the Center, Federal Agencies, or other sponsors. When a conflict of interest is identified, the RIO and POC shall work with the President and Investigator to develop and propose a course of action to manage, reduce, or eliminate the conflict of interest as required by the Center's policy.

The proposed course of action will include, as necessary, required reporting to or consulting with the appropriate Federal Agency or Sponsor.

The President will meet with the Investigator to review the proposed course of action. If it is thought that the conflict cannot be adequately managed, the PI may be asked to divest the financial interest or sever relationship that creates a conflict or disqualify himself/herself from participation in the research that would be affected. The agreed upon course of action shall be formally documented, referred to as the financial conflict of interest management plan, and signed by the President and the Investigator as evidence of their agreement within sixty (60) days from the date the conflict was identified by the Investigator.

All potential conflicts shall be presented to the Committee at a formal meeting held during the first two weeks of March each year (prior to the annual audit). The Committee shall review all potential conflicts of interest and the conclusions and proposed actions regarding actual conflicts of interest and those that have the potential for the appearance of a conflict. The Committee can request more information or propose modifications and changes to the proposed action plans and shall approve or disapprove the course of action agreed upon by the President, the Investigator and RIO. The Committee Chair will be informed of potential conflicts when they are identified outside of the formal annual disclosure process and will determine whether to review with the full Committee. The Committee may refer matters involving compensation from third parties to the Compensation Committee of the Board for review and approval of such arrangements.

I. Reporting Conflicts of Interest

To the extent required by law, the Center shall report conflict disclosures and their resolution to appropriate governmental agencies.

A) Prior to the Center's expenditure of any funds under an award, the Center must report to the federal agency the existence of a conflict plus the value of the financial interest or a statement that a value cannot be readily determined, the nature of the FCOI, a description of how the FCOI relates to federally-funded research, and key elements of the Institution's management plan; B) For any conflict that the Center identifies subsequent to the initial report under an award, the Center must report such and manage, reduce, or eliminate it, at least on an interim basis, within sixty (60) days of identification.

The Center shall provide updated reports annually to the relevant federal agency detailing the status of the conflict of interest and any changes to the management plan.

NIH Oversight

The NIH oversees compliance with regulations by reviewing all reports of conflict. The Center is required to make information available, upon request, to the NIH regarding all conflicts identified by the Center and how those interests have been managed, reduced, or eliminated to protect the research from bias.

NSF Oversight

The Center is required to keep NSF's Office of the General Counsel (OGC) appropriately informed if a conflict of interest is unable to satisfactorily manage and research will proceed without the imposition of conditions or restrictions when a conflict of interest exists. The OGC will conduct a review once notified of an unmanageable conflict of interest by a grantee.

At any time, the federal agency may:

- Request additional information regarding all conflicting interests identified by the Center and how those interests have been managed, reduced, or eliminated to protect the research from bias;
- Inquire into the Center's procedures and actions regarding conflicts in research funded by the NIH, including a requirement for submission, or review on site, of all records pertinent to compliance with the regulation;
- After its review of information and records, may determine that suspension of funding is necessary until the matter is resolved.

II. Public Accessibility

The Center will make the Financial Conflict of Interest Policy available via the publicly accessible Danforth Center website. The Center will update all information posted at least annually. The website shall also provide appropriate contact information to request information regarding identified financial conflicts of interest (i.e. Investigator's name, title, nature of the significant financial interest, approximate dollar value, or that the value cannot be readily determined through reasonable measures of fair market value). A response to any written request shall be provided within five (5) business days of the request. Written responses shall note that the information provided is current as of the date of the correspondence and is subject to updates on an annual basis and within sixty (60) days of the Center's identification of a new financial conflict of interest, which should be requested subsequently by the requestor.

III. Noncompliance

If a financial conflict of interest is not identified or managed in a timely manner, including failure by the Investigator to disclose a conflict, failure by the Center to review or manage such a conflict, or failure by the Investigator to comply with the financial conflict of interest management plan, the Center will complete a retrospective review to determine whether any NIH funded research was biased in the design, conduct, or reporting of such research, within 120 days of the Center's determination of noncompliance.

Investigators are responsible for complying with the Center's policies and procedures, and for disclosing all required information to the Center. Violations of the requirements of this policy by any Investigator shall, if not resolved, subject the Investigator to sanctions or other actions permitted by Center policy.

In the event that an Investigator's failure to comply with this policy has biased the design, conduct, or reporting of research, the Center must promptly notify the NIH of the corrective action taken or to be taken. The NIH will review the situation and, as necessary, take appropriate action, or refer the matter to the Center for further action, which may include directions on how to maintain appropriate objectivity in the funded project.

The Center will keep NSF's Office of the General Counsel appropriately informed if the Center finds that it is unable to satisfactorily manage a conflict of interest.

Appeals Process

Unresolved disagreements between Investigators and the RIO concerning the application of this policy shall be referred for final resolution to the Conflict of Interest Committee.

IV. Prohibition of Illegal Activity and Corruption

Activities which are in violation of federal, state, or local law, including the offering or acceptance of a bribe or kickback, are strictly prohibited.

V. Confidentiality

To every extent possible, the Center shall maintain confidentiality of information provided by Investigators. Due to laws and governmental regulations, the Center may be required to disclose such information outside of the Center.

VI. Record Retention

Records of individual disclosures and training, the Center's review of, and response to the disclosures, and actions taken by the Center, including any management plans or retrospective reviews, will be retained by for at least three years past the end of the relationship of the individual with the Center, or three years past the date termination or completion of the grant to which they relate or until the resolution of any NSF action involving those records, , whichever is longer. Records will be made accessible as needed to the POC, RIO, President, and Conflict of Interest Committee.

VII. Regulatory Authority

This policy implements the requirements of 42 CFR 50 and 45 CFR 94; where there are substantive differences between this policy and the requirements of such regulations, the requirements of such regulations shall take precedence.

VIII. Effective Date

This policy, effective January 1, 2010, and amended August 24, 2012, January 1, 2017, November 2, 2020, and December 1, 2022 replaces all previously written conflict of interest policies. This policy may be amended by the Center whenever changes of substance or procedures are required, and in particular to comply with governmental requirements. The Center shall inform Investigators of any such required changes and arrange for the dissemination of information concerning amendments made to the policy, as practical.

IX. Interpretation

Questions concerning the interpretation or applicability of this policy should be directed to the POC.

Revisions

Version	Date	Description	Updated By:	Approved By:
1.0	01/01/2010			
2.0	01/01/2017			
3.0	02/03/2020	Updated language, and definition; Updated COI Committee Definition; added Research Travel Financial Disclosure	Finance & HR	Hal Davies

4.0	11/2/2020	Updated Investigator definition; added language for application certifications; replaced public website disclosures of FCOIs with written requests for information	Finance	
5.0	11/28/2022	Updated to included educational activities proposed or funded, added NSF Oversight activities, and expanded on record retention period requirements	Finance	
6.0	2/1/2023	Formatting update		_