

CONFLICT OF INTEREST POLICY FOR SETI INSTITUTE

The SETI Institute is dedicated to maintaining high standards of integrity and ethical conduct in the course of performing research and research related activities including research compliance. The Institute has adopted Federal regulations (42 CFR Part 50 Subpart F and 45 CFR Part 94) on Promoting Objectivity in Research. These regulations describe the actions an individual and an organization must take to promote objectivity in research. The **regulations apply to all federally funded grants, cooperative agreements, research contracts and subawards** where the originating sponsor is a federal agency (but do **not** apply to Phase 1 Small Business Innovation Research or Small Business Technology Transfer program grants).

Definitions

SETI Team Member means: an employee, board member, volunteer, sub-awardee or consultant.

Institutional Responsibilities means: A SETI Team Member or Investigator's professional activities on behalf of SETI Institute (e.g., administration, research, or consulting).

Investigator means: The Principal Investigator or Project Director and any other person, regardless of title or position, who is responsible for the design, conduct, or reporting of research funded by award, or proposed for such funding, which may include, for example, collaborators, consultants, or administrative staff.

Significant Financial Interest (SFI) means:

1. A financial interest of a SETI Team Member (which also includes those of the Team Member's spouse and dependent children) consists of any of the following financial interests **that reasonably appear to be related to the SETI Team Member's Institutional Responsibilities**.
 - a. **With regard to any publicly traded entity**, a significant financial interest exists 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 for the SETI Team Member, SETI Team Member's spouse, and dependent children, exceeds \$5,000. For purposes of this definition, remuneration includes salary and any payment for services not otherwise identified as salary (e.g., consulting fees, honoraria, paid authorship); equity interest includes any stock, stock option, or other ownership interest, as determined through reference to public prices or other reasonable measures of fair market value.
 - b. **With regard to any non-publicly traded entity**, a significant financial interest exists 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 SETI Team Member (or the SETI Team Member's spouse or dependent children) holds any equity interest (e.g., stock, stock option, or other ownership interest).
 - c. **With regard to intellectual property rights and interests** (e.g., patents, copyrights), a significant financial interest exists upon receipt of income of greater than \$5,000 related to such rights and interests.
 - d. **With regard to third party reimbursed or sponsored travel** (i.e., that which is paid on behalf of the SETI Team Member and/or the SETI Team Member's spouse/dependent children) of greater than \$5,000 that is related to the SETI Team Member's institutional responsibilities (e.g., administrative, teaching, research, or clinical activities) must be disclosed to SETI Institute. The details of this disclosure will include at a minimum, the purpose of the trip, the identity of the sponsor/organizer,

the destination, and the duration. This disclosure requirement excludes travel paid for by SETI Institute and does not apply to travel that is reimbursed or sponsored by a U.S. federal, state, or local government agency, a U.S. 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.

2. The term Significant Financial Interest **does not** include the following types of financial interests:
 - a. Salary, royalties, or other remuneration paid by SETI Institute to the SETI Team Member if the SETI Team Member is currently employed or otherwise appointed by SETI Institute, including intellectual property rights assigned to SETI Institute and agreements to share in royalties related to such rights;
 - b. Income from investment vehicles, such as mutual funds and retirement accounts, as long as the SETI Team Member does not directly control the investment decisions made in these vehicles;
 - c. Income from seminars, lectures, or teaching engagements sponsored by a U.S. 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; or
 - d. Income from service on advisory committees or review panels for a U.S. 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.

Disclosure

Upon joining the Institute and annually thereafter, every SETI Team Member must submit an updated disclosure of Significant Financial Interests as defined above to the Designated Official. Each such disclosure must include any information that was not previously disclosed to the Institute pursuant to this Policy and must include updated information regarding any previously disclosed SFI (i.e., the updated value of a previously disclosed equity interest).

Prior to the submission of a new application to a federal agency for funding, SETI Team Members must certify that there have been no material changes or additions since their most recent Disclosure or provide to SETI Institute's Designated Official an up-to-date listing of their Significant Financial Interests (and those of their spouse and dependent children), as defined above. Any new SETI Team Member, who, subsequent to the submission of an application to a federal agency for funding from a federal agency, or during the course of the research project, plans to participate in the project, must similarly disclose their SFI to the designated official promptly and prior to participation in the project.

Each SETI Team Member who is participating in research under an award from a federal agency must submit an updated disclosure of SFI (including reimbursed travel) within thirty (30) days of discovering or acquiring (e.g., through purchase, marriage, or inheritance) a new SFI.

The Director of Human Resources, the Chief Financial Officer, and the Chief Executive Officer serve as the Institute's Designated Officials and others may be assigned in the future. Unless you have been informed otherwise, the Director of Human Resources has each been initially assigned as your Designated Official.

Training Requirements

All SETI Team Members must complete training on SETI Institute's Conflict of Interest Policy by completing the

National Institutes of Health Financial Conflict of Interest tutorial located here:

https://grants.nih.gov/grants/policy/coi/tutorial2018/story_html5.html .

All SETI Team Members must print a certification of completion at the end of training, retain it for audit purposes, and submit a copy to the Designated Official.

In addition, SETI Team Members must complete the training at least every four years or when any of the following circumstances apply:

1. SETI Institute revises this Policy, or procedures related to this Policy, in any manner that affects the requirements of SETI Team Members (training is to be completed within the timeframe specified in communications announcing such changes);
2. A SETI Team Member is new to SETI Institute's research under a federally funded award (training is to be completed prior to his/her participation in the research); or
3. SETI Institute finds that a SETI Team Member is not in compliance with this Policy, or a management plan issued under this Policy (training is to be completed within 30 days in the manner specified by the Designated Official).

Review of Disclosures by SETI Institute's Designated Official

A senior member of SETI Institute staff, the "Designated Official", will conduct reviews of disclosures. The Designated Official will review any SFI that has been identified in a disclosure. These interests will be compared to each research award on which the SETI Team Member is identified as responsible for the design, conduct, or reporting of the research to determine if the SFI is related to the award and, if so, whether the SFI creates a Financial Conflict of Interest (FCOI) related to that research award.

Guidelines for Determining "Relatedness" and Financial Conflict of Interest

The Designated Official will determine whether a SETI Team Member's SFI is related to research under a federally funded award and, if so, whether the SFI is a financial conflict of interest (FCOI). A SETI Team Member's SFI is related to the research under the award when the Designated Official reasonably determines that the SFI could be affected by the research conducted under the award or is in an entity whose financial interest could be affected by the research. The Designated Official may involve the SETI Team Member in the determination of whether an SFI is related to the research supported by an award.

An FCOI exists when the Designated Official reasonably determines that the SFI could directly and significantly affect the design, conduct, or reporting of federally funded research.

In determining if a SETI Team Member's SFI is related to the research under a federally funded award, and if so, whether the relationship creates a FCOI, the Designated Official will consider the role of the SETI Team Member and the opportunity (if any), to bias the results, the nature of the research being proposed, and the value of the SFI in relation to the size and value of the entity. In addition, the Designated Official may also consider the following factors:

1. Whether the research is of a basic or fundamental nature directed at understanding basic scientific processes; or
2. Whether the degree of replication and verification of research results is such that immediate commercialization or clinical application is not likely; or

3. Whether the goal of the research is to evaluate an invention linked to the SFI (such as where the SFI is a patent, or an interest in a company that has licensed the invention); or
4. Where the research involves human subjects, whether there are double blind conditions or the involvement of a data and safety monitoring board; or
5. Where the SFI is in a privately held company, whether the SETI Team Member's SFI could result in the researcher having influence over company decisions, or whether the research could have a significant impact on the company's business or financial outlook (excluding Phase I SBIRs and STTRs); or
6. The magnitude of the SFIs (e.g., the amount of consulting, or the percentage or value of equity); or
7. Where the SFI is in the sponsor of the research, and the sponsor is a licensee of the Discloser's technology, the amount of commercialization payments received by a SETI Team Member from that technology, both currently or in the future; or
8. The number and nature of relationships a SETI Team Member has with an entity. Multiple entanglements can create a relationship with an outside entity that is stronger than the sum of the parts;
9. Whether the goal of the research is to validate or invalidate a particular approach or methodology that could affect the value of the SFI; or
10. Whether other scientific groups are independently pursuing similar questions; or
11. Whether sufficient external review of the research conducted, and the reporting of research results exist to mitigate undue bias; or
12. Whether the goal of the project is a comparative evaluation of a technology in which a SETI Team Member has an SFI; or
13. Whether the project involves a subaward to an entity in which a SETI Team Member has an SFI.

Management of Significant Financial Interests that Pose Financial Conflict(s) of Interest

If a conflict of interest exists, the Designated Official will determine by what means – such as the individual's recusal from decisions affecting the conflicting entity, abstention from the external activity, modification of the activity, and/or monitoring of the activity by a subcommittee – the conflict should be avoided or managed in order to mitigate undue bias. In making those determinations, the Designated Official will be guided by the principles discussed in this Policy. The Designated Official will also take into consideration whether the SETI Team Member's ongoing role is necessary to continue advancing the research, based upon the factors such as the uniqueness of their expertise and qualifications.

Examples of conditions that might be imposed to manage a financial conflict of interest include, but are not limited to:

- a. Public disclosure of financial conflicts of interest (e.g., when presenting or publishing the research);
- b. For research projects involving human subjects research, disclosure of financial conflicts of interest directly to human participants;
- c. Appointment of an independent monitor capable of taking measures to protect the design, conduct, and reporting of the research against bias resulting from the financial conflict of interest;
- d. Modification of the research plan;
- e. Change of personnel or personnel responsibilities, or disqualification of personnel from participation in all or a portion of the research;
- f. Reduction or elimination of the financial interest (e.g., sale of an equity interest);
- g. Severance of relationships that create financial conflicts;
- h. For research projects involving human subjects research, use of a data and safety monitoring board;
- i. Double-blind conditions;

- j. Provisions to conduct the work simultaneously at multiple sites;
- k. Written disclosure of the conflict to all individuals working on the research project;
- l. Annual reports on the research progress to the Designated Official.

If the Designated Official determines that a conflict exists, they will communicate their determination and the means they have identified for eliminating or managing the conflict in writing to the relevant SETI Team Member and the appropriate direct supervisor. The Designated Official will keep a record of the disclosure and other relevant information for at least three years. If the Designated Official prescribes monitoring of the activity, they will describe what monitoring shall be performed and what records are to be kept.

No expenditures on a federally funded award will be permitted until the SETI Team Member has complied with the Disclosure requirements of this Policy and has agreed, in writing, to comply with any plans determined by the Designated Official necessary to manage the Conflict of Interest. The Designated Official will communicate in writing with the SETI Team Member to notify them of the existence and the nature of a Financial Conflict of Interest and whether the conflict has been managed, reduced, or eliminated. No expenditures can be incurred until the SETI Team Member has reported the FCOI to the federal agency. The SETI Team Member will notify SETI Institute when expenditures for a new award are expected to begin and the Contracts Department will confirm that the required disclosures have been completed and expenditures may commence.

The Designated Official will keep a record of each SETI Team Member's disclosures of financial interests and the Designated Official's review of, and response to, such disclosure and all actions under this policy. Such records will be maintained and kept for at least three years from the date the final expenditures report is submitted and in accordance with the terms and conditions of the award and relevant regulations.

Public Accessibility to information Related to Financial Conflicts of Interest

Prior to the expenditure of any funds under a federally funded award, SETI Institute will ensure public accessibility, via a publicly accessible website or by written response to any requestor within five business days of a request of information concerning any SFI disclosed that meets the following three criteria:

1. The Significant Financial Interest was disclosed and is still held by the senior/key personnel. Senior/key personnel are the PD/PI and any other person identified as senior key personnel by SETI Institute in the award application, progress report or any other report;
2. SETI Institute has determined that the Significant Financial Interest is related to the research funded through an award; and
3. SETI Institute has determined that the Significant Financial Interest is a financial conflict of interest.

The information that SETI Institute will make available via a publicly accessible website or in a written response to any requestor within five days of request will include, at a minimum, the following:

- a. The SETI Team Member's name;
- b. The SETI Team Member's title and role with respect to the research project;
- c. The name of the entity in which the SFI is held;
- d. The nature of the SFI; and
- e. The approximate dollar value of the SFI in the following ranges: \$0- \$4,999; \$5,000-9,999; \$10,000 - \$19,999; amounts between \$20,000-\$100,000 by increments of \$20,000; amounts above \$100,000 by increments of \$50,000), or a statement that the interest is one whose value cannot be readily determined through reference to public prices or other reasonable measures of fair market value.

If SETI Institute uses a publicly accessible website to comply with the public disclosure requirements of the regulations, the information posted will be updated at least annually, and within sixty days of receipt or identification of information concerning any additional SFI of the senior/key personnel for the federally-funded research project that had not been previously disclosed, or upon the disclosure of a Significant Financial Interest of senior/key personnel new to the federally-funded research project, if it is determined by the designated official that the Significant Financial Interest is related to the research and is a financial conflict of interest.

If SETI Institute responds to written requests for the purposes of public accessibility, it will ascertain from the Investigator that the information provided is current as of the date of the correspondence, and will note in its written response that the information is subject to updates, on at least an annual basis and within 60 days of the SETI Institute's identification of a new financial conflict of interest, which should be requested subsequently by the requestor.

Information concerning the Significant Financial Interests of an individual, as limited by this Policy, will remain available, for responses to written requests or for posting via SETI Institute's publicly accessible website for at least three years from the date that the information was most recently updated.

Reporting of Financial Conflicts of Interest

Prior to the expenditure of any funds under an award funded by a federal agency, SETI Institute will provide to the agency an FCOI report compliant with federal regulations regarding any SETI Team Member's Significant Financial Interest found to be conflicting and will ensure that the Investigator has agreed to and implemented the corresponding management plan. While the award is ongoing (including any extensions with or without funds), SETI Institute will provide the funding agency an annual FCOI report that addresses the status of the FCOI and any changes in the management plan.

For any Significant Financial Interest that is identified as conflicting subsequent to an initial FCOI report during an ongoing federally-funded research project (e.g., upon the participation of an Investigator who is new to the research project), SETI Institute will provide to the agency, within 45 days, an FCOI report regarding the financial conflict of interest and ensure that SETI Institute has implemented a management plan and the SETI Team Member has agreed to the relevant management plan.

Failure to Comply with SETI Institute's Conflict of Interest Policy Applicable to a Federally Funded Award

When an FCOI is not identified or managed in a timely manner, including, for example, because the underlying Significant Financial Interest is not disclosed timely by an Investigator or, because an FCOI was not timely reviewed or reported by SETI Institute; or because a SETI Team Member failed to comply with a management plan; then SETI Institute will within 90 days:

- a. Complete a retrospective review of the SETI Team Member's activities and the research project to determine any bias in the design, conduct or reporting of research;
- b. Document the retrospective review consistent with the regulation;
- c. Document SETI Institute's determination as to whether any research, or portion thereof, conducted during the period of time of the SETI Team Member's non-compliance with this Policy or a Financial Conflict of Interest management plan, was biased in the design, conduct, or reporting of such research.



Thereafter, SETI Institute shall submit FCOI reports annually to the agency, in accordance with the regulation and terms and conditions of the award agreement. Depending on the nature of the Financial Conflict of Interest, SETI Institute may determine that additional interim measures are necessary with regard to the SETI Team Member's participation in the research project between the date that the Financial Conflict of Interest is identified and the completion of SETI Institute's independent retrospective review.

Failure to Comply with This Policy

No expenditures of funds on an award supported by a federally funded agency will be permitted unless the SETI Team Members have complied with the disclosure requirements of this Policy and have agreed, in writing, to comply with any Designated Official-approved FCOI management plan.