



National Science Foundation

MEMORANDUM

DATE: August 18, 2021

TO: Federal Bureau of Investigation

FROM: Rebecca L. Keiser, Chief of Research Security Strategy and Policy (CRSSP)

SUBJECT: Foreign Interference in National Science Foundation Funding and Grant Making Processes: A summary of findings from 2019 to 2021

For decades, open and collaborative fundamental research has served as a scientific and economic boon to the U.S. and the world. The science and engineering enterprise, however, is put at risk when other governments endeavor to benefit from it without upholding the values of openness, transparency and reciprocal collaboration. Some governments are actively sponsoring activities that pose risks to this system, such as foreign-government-sponsored talent recruitment programs that incentivize behavior that is inconsistent with these values.

The National Science Foundation (NSF) recognizes this threat and has taken action to mitigate threats while also reinforcing that collaboration, including international collaboration, is integral to our continued scientific advancement. In 2019 NSF commissioned the JASON advisory group, outside experts who specialize in both science and security, to conduct a study and recommend ways for NSF to protect research integrity and maintain balance between openness and security of scientific research. The report, [Fundamental Research Security](#), was published in December 2019 and serves as the underpinning for NSF's actions to mitigate these risks in concert with other agencies and stakeholders.

Disclosure and Transparency

The main issues encountered related to foreign interference in NSF-funded research are often associated with instances of lack of disclosure of appointments, affiliations and current and pending support from external funding sources. Transparency and disclosure are needed to properly assess risk, which is essential for NSF to make sound funding decisions. When information is deliberately omitted or concealed, the grant-making process is compromised.

Disclosures are made in the Biographical Sketch(es) and Current and Pending Support sections of the grant proposal. The integrity of this information is essential to assessing qualifications of the Principal Investigator (PI) and is used in selecting the merit review panel.

1. The Biographical Sketch is used to assess how well qualified the individual, team, or organization is to conduct the proposed activities.
2. The Current and Pending Support Information is used to assess the capacity of the individual to carry out the research as proposed, as well as to help assess any potential overlap/duplication with the project being proposed.
3. Collaborators and other affiliations are listed in a separate, single copy document included as part of the proposal submission packet.

Conflicts of Interest and Conflicts of Commitment

The other main category of foreign interference is with conflicts of interest and conflicts of commitment. NSF defines a “conflict of interest” as a situation in which an individual who is responsible for the design, conduct, or reporting of research or educational activities funded or proposed for funding by NSF (or the individual’s spouse or dependent children) has a significant financial interest or financial relationship that would reasonably appear to be affected by the proposed research or educational activity.

Organizations define a “conflict of commitment” as a situation in which an individual accepts or incurs conflicting obligations between or among multiple employers or other entities. Many organizations have policies that view conflicts of commitment as conflicting commitments of time and effort, including obligations to dedicate time in excess of organizational or funding agency policies or commitments. Other types of conflicting obligations, including obligations to improperly share information with, or withhold information from, an organization/employer, can also threaten research security and integrity, and are an element of a broader concept of conflicts of commitment. Note, NSF treats the withholding of information as noncompliance with its disclosure requirements.

NSF’s Concerted Efforts with the Office of Inspector General

The agency collaborates with the Office of Inspector General (OIG) to:

- Refer concerns of waste, fraud, and abuse to OIG,
- Take administrative action when recommended by OIG, and
- Work with organizational awardees on PI reassignments and other actions, if needed.

NSF’s collaborative, well-established relationship with the OIG has been an important aspect of our response to threats to NSF-funded research from foreign interference. The OIG has made recommendations for administrative action by NSF, as appropriate, throughout the lifecycle of

its investigations, particularly for cases related to foreign funding. That is, a given case may result in award suspensions, award terminations, government-wide suspensions of PIs and entities, and/or government-wide debarments, based on OIG recommendations. The scope of the administrative actions are appropriately tailored to the risk to NSF, based on the information developed by the OIG's investigation at the time of the action is taken.

Administrative Actions

NSF has taken a range of actions against individuals and entities associated with foreign talent programs or organizations receiving foreign funding, based on recommendations by the OIG. In many cases, actions were taken based on grant fraud or other wrongful conduct (or allegations thereof) before any foreign affiliation was surfaced to NSF. To date:

- **Award Suspension:** NSF has suspended approximately 24 awards.
 - *Note: Suspensions were lifted for a small subset of these awards based on OIG recommendations or responsive actions taken by the organization (e.g., removal of PI under OIG investigation).*
- **Award Termination:** NSF has terminated approximately 16 awards.
- **Final Payment Cancelled:** NSF has cancelled final payment to 1 organization on 1 award.
- **Government-wide Suspensions:** NSF has imposed government-wide suspensions on 9 researchers and 4 entities.
- **Debarment:** NSF has debarred 4 researchers and 2 entities.
- **Voluntary Exclusions:** Following notices of proposed debarments by NSF, 5 researchers and 1 entity agreed to voluntary exclusions.
- **Bar on Serving as a Reviewer, Panelist, or Consultant:** NSF has barred 5 researchers from serving as reviewers.

Collectively, collaborations with the OIG to date, have resulted in:

- Grant Funds Recovered by NSF: \$7.9M
- Number of Actions Taken: ~30
 - *Note: These are approximate numbers due to pending cases.*
- Number of Organizations of Higher Education/Small Businesses Involved: ~21
- Number of Researchers Involved: ~23

CASE STUDY 1: Failure to Respond to an OIG Subpoena related to Foreign Funding and Affiliations

- An NSF-funded PI is employed by a U.S. organization.
- NSF OIG receives information, including at least open-source information, that the researcher participates in a foreign talent plan and serves as faculty member at a foreign organization.
- While required under NSF's Proposal and Award Policies and Procedures Guide ("PAPPG"), the PI does not disclose any information about foreign funding/affiliations in NSF proposals.
- NSF OIG issues a subpoena; the researcher produces some documents, including a partial application to a foreign talent program, but, according to the OIG, the production is insufficient.
- On the OIG's recommendation, NSF suspends the PI's awards to the U.S. organization.
- The researcher, although represented by counsel, resigns from the U.S. organization, and leaves the United States, but fails to fully respond to the subpoena.
- On the OIG's recommendation, NSF imposes a government-wide debarment on the researcher (including a bar on serving as a reviewer, advisor, or consultant) for a fixed term in view of the researcher's failure to respond to the OIG's subpoena (e.g., through court action contesting the subpoena or full production of documents) and in view of information indicating that the researcher failed to fully disclose current and pending support in proposals to NSF. At the end of the debarment period, NSF will consider the decision to determine if an extension is necessary to protect the public interest.
- As the PI is no longer involved in the NSF-funded research, NSF lifts the suspension of the awards.

Outcome: While there were no formal proceedings instituted against the researcher in Federal court, NSF took three types of actions, award suspension, debarment, and lifting of award suspension, at different stages of the OIG's investigation. The actions were appropriately tailored to the risk to NSF in view of the information available at the time the action was taken.

CASE STUDY 2: Failure to Report Extended Absences and to Respond to an OIG Subpoena

- The OIG receives information that an abstract cites an NSF award for support but lists only authors from foreign organizations. One of the co-authors is the PI for the cited award, which was made to a U.S. organization at which the PI is a faculty member.

- Publicly available information indicates that, in succession over a brief period of time, the PI's proposal is funded, the PI is selected as a foreign talent plan participant, and the PI begins extended leave to visit family in a foreign country. The term of the extended leave corresponds to the time the PI is listed as having a foreign appointment.
- During this same time, the PI also returns to the United States to serve as an NSF panelist.
- The PI does not disclose foreign support or appointments to NSF or their organization.
- The OIG subpoenas the PI for information about employment outside of the U.S. organization. The PI declines, citing restrictions by the PI's foreign employer.
- Based on an OIG recommendation, NSF suspends the award. The organization agrees to terminate, while also returning the funds received after the PI went on leave.
- On the OIG's recommendation, NSF also imposes a bar on the PI serving as an NSF reviewer, advisor, or consultant.

Outcome: During the lifecycle of the OIG's investigation, NSF and the organization took different actions to mitigate risk to NSF, including award suspension and termination, repayment of funds, and imposition of a reviewer bar.

CASE STUDY 3: Grant Fraud involving Foreign Talent Plan Participant

- A professor at a U.S. organization founds a company that relies exclusively on federal grants to fund research, including NSF SBIR/STTR funding.
- The professor/founder also begins working as a paid researcher at a foreign organization.
- NSF OIG receives information that the company does not maintain required records in order to effectively administer the awards and that the awardee provided false information to NSF about its records systems.
- Additional information developed by the DOJ/NSF OIG indicates that the funded research had already been completed at the professor/founder's foreign organization.
- As the investigation develops, NSF, on the OIG's recommendations, suspends awards, terminates awards, and withholds final payment and reduces an award amount.
- DOJ files a criminal complaint against the professor/founder.
- Based on the OIG's recommendation, NSF imposes a government-wide suspension on the professor/founder and related companies.

- Evidence is presented at trial indicating that grant funds obtained would be used for research the professor/founder knew had already been done in overseas. The professor/founder intended to use the grant funds for other company projects rather than for the projects for which the funds were requested. To obstruct the investigation, the professor/founder submitted falsified timesheets to government investigators.
- Information becomes available at trial that the professor/founder is a foreign talent plan participant, including the talent plan contract.
- DOJ prosecution results in criminal conviction of the professor/founder of one count of conspiracy to defraud the United States, three counts of making false statements, and one count of obstruction by falsification.
- Based on a recommendation by the OIG after the professor/founder's conviction, NSF imposes government-wide debarment and reviewer bar on the professor/founder and related company for a fixed period.

Outcome: During a multi-year investigation, NSF took several administrative actions, well before filings in Federal court, based on recommendations by the OIG, encompassing award suspensions, terminations, withholding final payment/reduction of an award amount, and government-wide suspensions. These actions were appropriately tailored to mitigate risk to NSF. The investigation resulted in a criminal conviction. Thereafter, on the OIG's recommendation, NSF imposed a government-wide debarment in view of the risk to NSF and the professor/founder's lack of present responsibility.

Conclusion

NSF's research security initiatives seek to:

- Coordinate with U.S. government interagency partners
- Communicate and build awareness with the scientific community
- Share knowledge and best practices
- Improve transparency and clarification for disclosure
- Mitigate risk through assessment and analysis to better understand the scale and scope