

# GAO: Research Integrity & Foreign Influence Project Updates

**Council on Governmental Relations Meeting**

October 21, 2021

1-2:15 p.m. EDT



U.S. GOVERNMENT ACCOUNTABILITY OFFICE

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# Kim Gianopoulos and Drew Lindsey





# International Affairs and Trade Team



- The International Affairs and Trade team leads GAO's oversight of efforts to advance and protect U.S. foreign policy and international economic interests in a complex and challenging global environment.

# Why did GAO do this work?



Jointly requested by Senators Charles Grassley and John Cornyn, and Representative Ralph Norman.

- Request split into two projects:
  - First phase completed in May 2020.
  - Second phase to be completed in early 2022.

# How do foreign students and scholars benefit U.S. research?



- Foreign students and scholars make **significant contributions** to U.S. research.
- Foreign students and scholars are involved in developing **cutting-edge** civilian and defense-related technologies.

# What are the potential threats?

- Risk that some foreign students and scholars will transfer sensitive information gained through their research in the U.S. back to their home countries.
- Foreign intelligence services, including China, Iran, Russia, and North Korea, continue to target U.S. research institutions.



Source: Daniel R. Coats, Director of National Intelligence, *Worldwide Threat Assessment of the U.S. Intelligence Community*, testimony before the Senate Select Committee on Intelligence, 116th Cong. 1st sess., January 29, 2019.



# FBI's China Initiative

- FBI launched the China Initiative in late 2018
- Goals include:
  - Developing an enforcement strategy concerning non-traditional collectors that are being coopted into transferring technology contrary to U.S. interests;
  - Educating colleges and universities about potential threats to academic freedom and open discourse from influence efforts on campus.

**China is implicated in about 80% of all economic espionage charges brought by the Department of Justice and there is some connection to China in about 60% of all federal, criminal trade secret theft cases.**

Department of Justice China Initiative



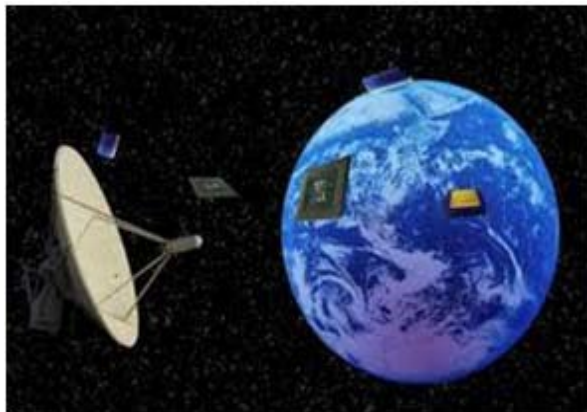
# What are export controls?

- Export controls regulate the shipment, transfer or disclosure of controlled items, technical data, and software
- Export controls are aimed at protecting the national security, economic interests, and foreign policy of the United States

Physical Exports



Technical Data Transfer



Software Export



Deemed Exports



# What is a deemed export?

- An export is “deemed” to take place when technology or source code is released to a foreign national within the United States or abroad. This release is considered to be an export to that person's home country.





# Fundamental research exclusion

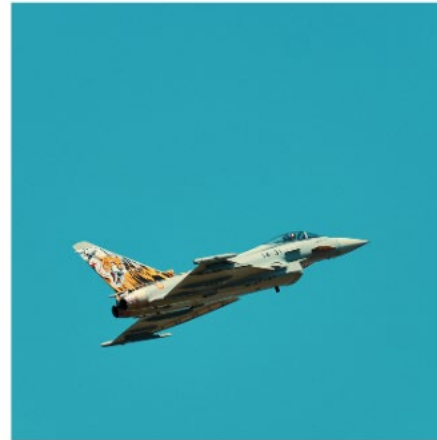


- NSDD-189
- “Fundamental research' means basic and applied research in science and engineering, the results of which ordinarily are published and shared broadly within the scientific community, as distinguished from proprietary research and from industrial development, design, production, and product utilization, the results of which ordinarily are restricted for proprietary or national security reasons.”

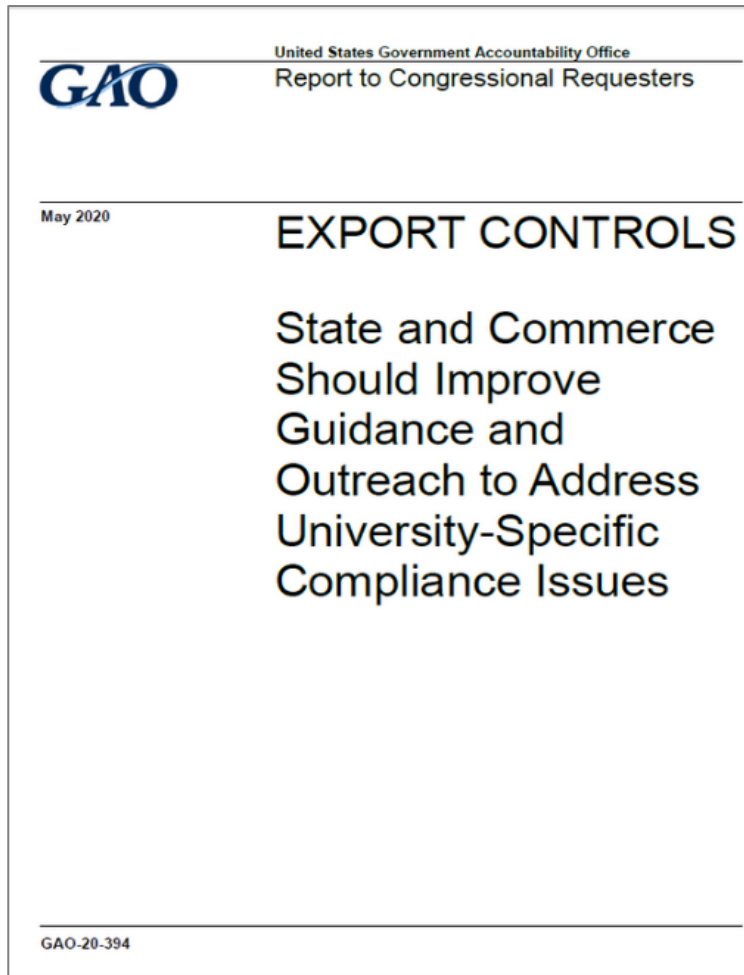


# Implementation of U.S. export control laws

- State controls the export of sensitive military items, known as defense articles and defense services.
- Commerce controls the export of U.S.-origin items with both commercial and military applications (known as “dual-use” items).



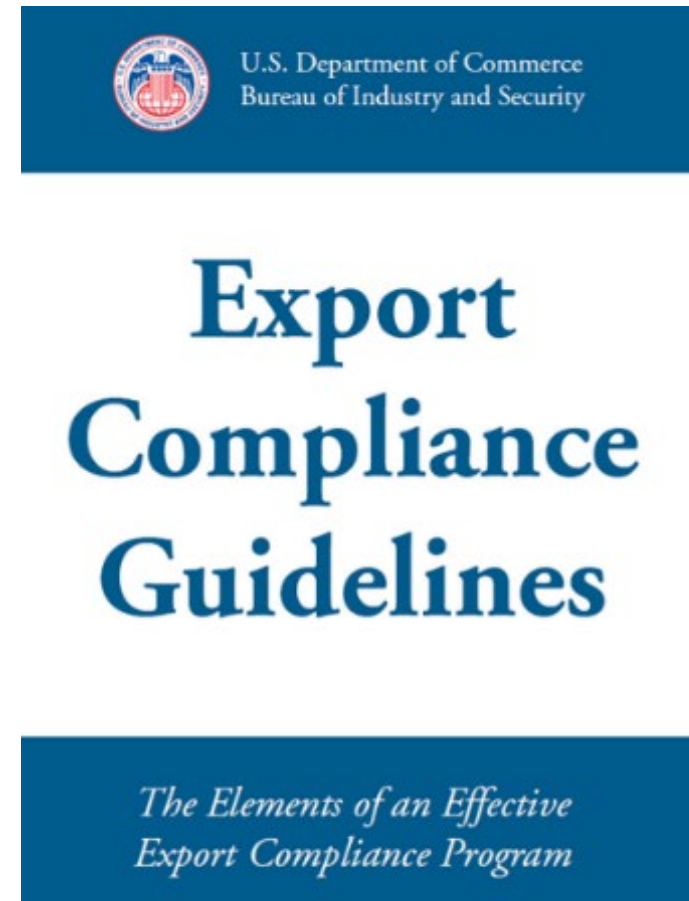
# May 2020 Report



1. Extent to which State and Commerce have provided guidance and outreach that supports U.S. universities' understanding of export controls
2. Challenges U.S. universities face working with other federal agencies
3. Extent to which universities compliance practices align with State and Commerce guidelines

# Objective 1: Agency guidance to universities

- To what extent do State and Commerce provide guidance and outreach that supports U.S. universities understanding of and compliance with export control regulations?
- Methodology:
  - Interviews
  - Review agency guidance/outreach materials



# Objective 1: Key findings

- State and Commerce have provided guidance and conducted outreach, but universities expressed concerns about their adequacy for addressing university-specific issues
  - Difficult to understand how to implement industry-focused guidance
  - Export compliance environment for industry typically differs from that for academia because industry is focused on **creating proprietary technologies** and academia is primarily focused on **expanding knowledge through collaborative research.**





## Objective 2: University challenges working with other agencies

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- What export-control related challenges do U.S. universities face working with or obtaining guidance from other federal agencies?
- Other federal agencies:
  - Enforcement agencies
  - Grant-making agencies
- Methodology: interviews

## Objective 2: Key findings

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- Three main challenges:
  - Threat briefings by enforcement agencies are not as useful as they could be
  - DOD officials inconsistently interpret export control regulations and misunderstand fundamental research.
  - Inconsistent reporting requirements for financial and other conflicts of interest

# Objective 3: University compliance practices

- To what extent do the export compliance policies and practices developed by U.S. universities align with State's and Commerce's export compliance guidelines?



Source: GAO. | GAO-20-394

# Objective 3: Methodology

- Developed a list of eight elements critical for an effective compliance program.
- Conducted site visits to 9 U.S. universities

















































































**Table 3: Description of the Eight Elements of an Effective Export Compliance Program**




Element	Description
Management commitment and organizational structure	Entities should have public management support for their compliance program, sufficient resources to conduct compliance activities, and a clear organizational structure identifying individuals responsible for compliance.
Risk assessment <sup>a</sup>	Entities should assess and identify preventable risks and build safeguards to control these risks.
Export authorization and tracking export-controlled items	Entities should develop processes to (1) ensure the organization makes correct export decisions, including identifying when U.S. government authorization is required prior to exporting; (2) track and protect any export-controlled items being used or developed by the organization; and (3) screen all parties associated with an export transaction against the U.S. proscribed/restricted parties lists prior to exporting.
Recordkeeping	Entities should develop processes for maintaining relevant export control-related records in accordance with recordkeeping requirements.
Training	Entities should provide export control-related training to all employees involved in exports.
Internal audits	Entities should conduct periodic audits of their export control compliance program to assess its effectiveness and integrity.
Reporting and addressing violations	Entities should develop clear procedures outlining the actions employees should take in the event that potential noncompliance is identified. Entities should also develop processes for identifying and addressing the root cause of any noncompliant activity.
Export compliance manual	Entities should document export control compliance processes, roles and responsibilities, etc., in a manual to help the entity implement its compliance program.

Source: GAO analysis of separate export compliance guidelines for an effective export compliance program developed by the Department of State's Directorate of Defense Trade Controls (DDTC) and the Department of Commerce's Bureau of Industry and Security (BIS). | GAO-20-394



# Objective 3: Key findings

		Elements of an effective export compliance program							
									
Average research expenditures		Management commitment	Risk assessment	Export authorization	Record-keeping	Training	Internal audits	Reporting violations	Export compliance manual
University 1	High								
University 2	High								
University 3	High								
University 4	Medium								
University 5	Medium								
University 6	Medium								
University 7	Low								
University 8	Low								
University 9	Low								

-  Fully aligns
-  Partially aligns
-  Does not align

- **High tier:** universities with average expenditures of \$750 million or more.
- **Medium tier:** universities with average expenditures over \$250 million and below \$750 million.
- **Low tier:** universities with average expenditures between \$15 million and \$250 million.

# Recommendations

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- **State** and **Commerce** should provide universities with additional **guidance and outreach** to address university-specific export control issues.
- **State** should revise its existing export compliance guidelines to include information regarding the need for periodic risk assessments.
- **DOD** should take steps to ensure that program officers who write solicitations for research projects and contracting officers who write contracts to fund research projects interpret export control requirements consistently.

# Current work

- Enforcement of deemed export controls at U.S. universities
  1. Challenges U.S. agencies face enforcing regulations controlling deemed exports at U.S. universities
  2. Extent to which U.S. agencies assess universities' risk of unauthorized deemed exports to prioritize their outreach to universities
  3. Extent to which U.S. agencies coordinate their efforts to enforce deemed export regulations at U.S. universities
- Expected issuance early 2022



# Read our report online

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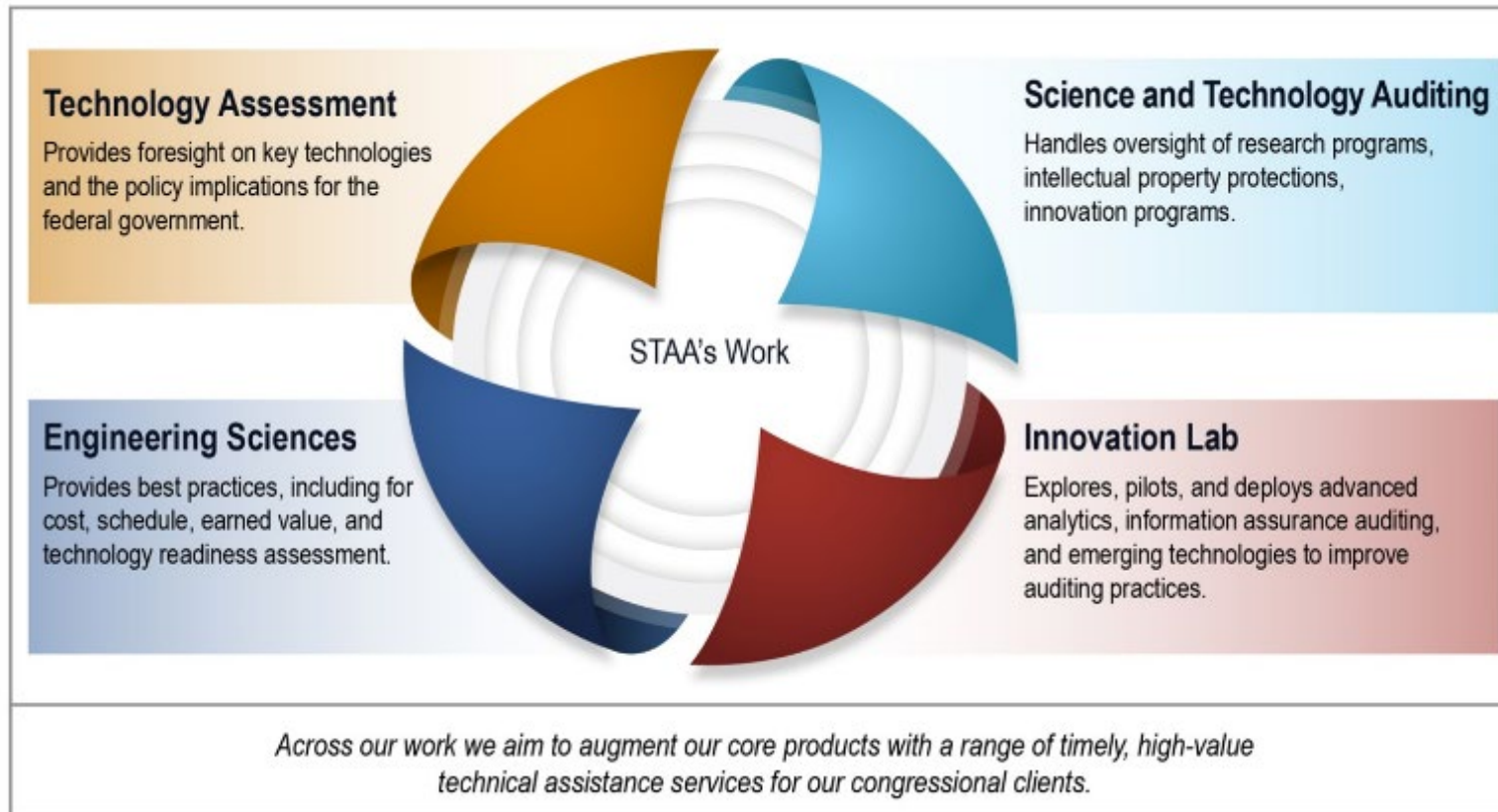
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# Candice Wright and Farahnaaz Khakoo- Mausel



# Science, Technology Assessment, and Analytics (STAA) Team



# Foreign Influence in Federal Research



United States Government Accountability Office

Testimony Before the Subcommittees on Investigations and Oversight and Research and Technology Committee on Science, Space, and Technology House of Representatives

For Release on Delivery  
Expected at 10:00 a.m. ET  
Tuesday, October 5, 2021

## FEDERAL RESEARCH

### Agency Actions Needed to Address Foreign Influence

Statement of Candice N. Wright, Director,  
Science, Technology Assessment, and Analytics



A Century of Non-

GAO-22-105434



United States Government Accountability Office

Testimony  
Before the Committee on Health,  
Education, Labor and Pensions,  
U.S. Senate

For Release on Delivery  
Expected at 10:00 a.m. ET  
Thursday, April 22, 2021

## FEDERAL RESEARCH

### NIH Should Take Further Action to Address Foreign Influence

Statement of Candice N. Wright, Acting Director,  
Science, Technology Assessment, and Analytics



A Century of Non-Partisan Fact-Based Work



United States Government Accountability Office

Report to the Chairman, Committee on  
Finance, U.S. Senate

December 2020

## FEDERAL RESEARCH

### Agencies Need to Enhance Policies to Address Foreign Influence

GAO-21-130

# The threat

## OSTP Examples of Foreign Conflicts of Interest in U.S. Research



In a June 2020 presentation, the White House Office of Science and Technology Policy (OSTP) highlighted incidents of researchers failing to disclose required information to grant funding agencies. The failure to disclose such information can lead to undue foreign influence on the integrity of research, national security, and economic security. These cases highlight both financial and non-financial conflicts of interest and behaviors that may violate the policies of grant-making agencies or U.S. law.

In one incident, a researcher at a university who received \$10 million in grants from the National Institutes of Health over an 11 year period failed to disclose a membership in a foreign government talent recruitment program (a non-financial conflict of interest). Moreover, the researcher did not disclose to the agency that he was the founder and primary shareholder of a publicly traded foreign biotechnology company (a financial conflict of interest).

In another incident, a researcher at a university applied for Department of Energy and National Science Foundation grants to fund research at his U.S. company. The researcher did not disclose an employment agreement with a foreign university (a non-financial conflict of interest).

Source: GAO review of information provided by The White House Office of Science and Technology Policy. Centers for Disease Control and Prevention, Public Health Image Library, Chief Petty Officer Jerrold Diederich/ U.S. Army Africa (photo) | GAO-21-130

- Some individuals and foreign governments violate core principles of integrity and pose risks to the U.S. research enterprise.



# Why GAO did this study

- U.S. government expends over \$40 billion in science and engineering research at universities each year.
- Recent reports by GAO and others have noted challenges faced by the research community to combat undue foreign influence
- GAO was asked to review federal agency and university Conflicts of Interest (COI) policies and disclosure requirements.
- GAO reviewed the five largest grant-making agencies—Departments of Defense and Energy, the National Aeronautics and Space Administration (NASA), the National Institutes of Health (NIH), and the National Science Foundation (NSF).

# Types of conflicts of interest

**Conflict of interest (financial conflict of interest):** A situation in which an individual, or the individual's spouse or dependent children, has a financial interest or financial relationship that could directly and significantly affect the design, conduct, reporting, or funding of research.

**Conflict of commitment (non-financial conflict of interest):** A situation in which an individual accepts or incurs conflicting obligations between or among multiple employers or other entities. This may include conflicting commitments of time and effort, including obligations to dedicate time in excess of institutional or funding agency policies and commitments.

# Tools to combat threat of foreign influence

Two tools agencies may use to address foreign influence are:

- Conflict of interest **policies**
- **Requirements** to disclose information that may indicate conflicts



Key Finding

Agencies’ Policies and Disclosure Requirements Generally Focus on Financial Conflicts

Conflict of Interest Policies at Five Largest Grant-Making Agencies

Elements of Conflict of Interest (COI) Policies at Agencies with the Most Federal Research Expenditures at Universities

	National Institutes of Health	National Science Foundation	National Aeronautics and Space Administration	Department of Defense	Department of Energy
Agency-wide conflict of interest policy	Yes	Yes	Yes	No Agency-wide COI Policy	
Policy addresses financial conflicts of interest	Yes	Yes	Yes		
Policy addresses non-financial conflicts of interest	No	No	No		

Source: GAO analysis of agency documents. | GAO-21-130



## Key finding

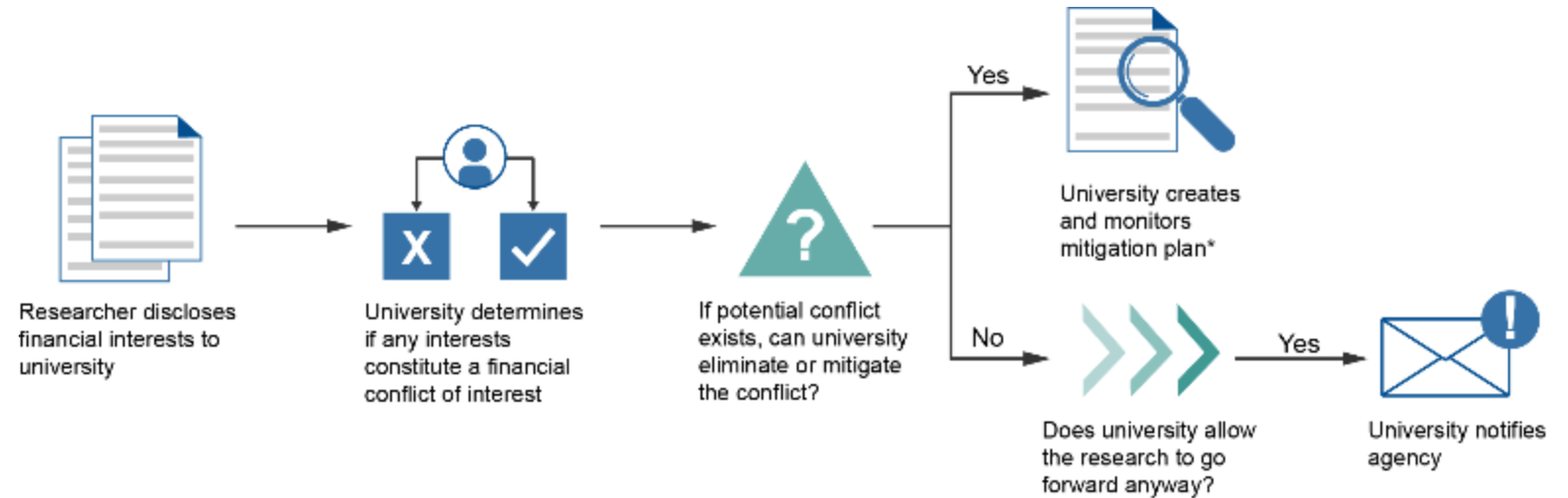
### Agencies Rely on Universities to Monitor Conflicts but Lack Clear Enforcement Procedures

- All five agencies rely on universities to identify and monitor financial conflicts of interest.
- **NSF and NIH** require universities to have a conflict of interest policy, identify conflicts and develop mitigation plans.
- **NASA and DOD** rely on the university to certify that it “*will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest or personal gain.*”
- **DOD and DOE** leave the determination of the financial conflicts to universities.

## Key finding

# Agencies Rely on Universities to Monitor Conflicts but Lack Clear Enforcement Procedures

## Generalized University Processes for Identifying and Mitigating Potential Financial Conflicts of Interest



Source: GAO analysis of university and agency policies. | GAO-22-105434

Key finding

Agencies Rely on Universities to Monitor Conflicts but Lack Clear Enforcement Procedures

Agency Investigations into Foreign Influence

Table 2: Current and Past Investigations into Foreign Influence, by Agency as of September 2020

Agency	Description of Foreign Influence Caseload
National Institutes of Health (NIH)	NIH identified 455 researchers of possible concern and worked with the Department of Justice to initiate the investigation of six criminal complaints. NIH has also referred 32 cases to the Office of the Inspector General (OIG) within the Department of Health and Human Services (HHS).
National Science Foundation (NSF)	NSF estimates it has taken administrative action against nearly 20 grant recipients who failed to disclose foreign ties.
National Aeronautics and Space Administration (NASA)	NASA OIG has 14 open cases of grantee fraud with a foreign influence component. The number of such cases has approximately doubled in the last year.
Department of Defense (DOD)	One DOD investigative service noted it had 9 open cases involving foreign influence at U.S. universities.
Department of Energy (DOE)	DOE OIG has 21 active cases involving foreign influence, and most involve recipients of grants and cooperative agreements.

Source: Agency documents and interviews with agency and OIG officials | GAO-21-130

## Key finding

### Agencies Rely on Universities to Monitor Conflicts but Lack Clear Enforcement Procedures

- **NSF and NIH** have written procedures for managing allegations of failure to disclose required information, such as foreign affiliations.
- **NASA, DOD, and DOE** lacked clear written processes or procedures for managing allegations of failure to disclose required information, which can identify potential conflicts of interest.

Key finding

Stakeholder Perspectives on Improving Response to Threats of Foreign Influence

Table 3: Common Themes Stakeholders Identified to Improve the Ability to Identify and Address Foreign Threats to Federally Funded Research					
Stakeholder Group	Harmonize grant proposal requirements	Reduce burden on universities	Better communicate identified risks	Disclose participation in foreign talent recruitment programs	Provide training on foreign risks
Agency officials	✓	✓		✓	
University associations	✓	✓	✓	✓	✓
University administrators	✓	✓	✓	✓	
Principal investigators	✓		✓	✓	

Source: GAO analysis of interviews with agency officials, university association representatives, university administrators, and principal investigators. | GAO-21-130



## Recommendations

- **OSTP** should **issue guidance on addressing foreign threats** to federally funded research.
- **DOD and DOE** should **develop an agency-wide policy on conflict of interest for grants**, to address both financial and non-financial conflicts.
- **NIH, NSF, and NASA** should **include a definition on non-financial conflicts** in their agency policies, such as the one developed by OSTP, and address these conflicts, both foreign and domestic.
- **DOD, DOE, and NASA** should **document procedures for addressing and enforcing failures to disclose required information**, both foreign and domestic.