



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

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FEDERAL RESEARCH

NIH Should Take Further Action to Address Foreign Influence

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

GAO@100 Highlights

Highlights of [GAO-21-523T](#), a testimony before the Committee on Health, Education, Labor, and Pensions, U.S. Senate

Why GAO Did This Study

The federal government reported expending about \$44.5 billion on university science and engineering research in fiscal year 2019. The Department of Health and Human Services funds over half of all such federal expenditures, and NIH accounts for almost all of this funding. Safeguarding the U.S. research enterprise from threats of foreign influence is of critical importance. Recent reports by GAO and others have noted challenges faced by the research community to combat undue foreign influence, while maintaining an open research environment.

This testimony discusses (1) NIH's conflict of interest policy and disclosure requirements that address potential foreign influence, (2) NIH's mechanisms to monitor and enforce its policy and requirements, and (3) the steps NIH has taken to address concerns about foreign influence in federally funded research identified by stakeholders. It is based on a report that GAO issued in December 2020 ([GAO-21-130](#)).

What GAO Recommends

In its December 2020 report, GAO recommended that NIH define and address non-financial conflicts of interest in its policy. NIH concurred with our recommendation and has recently updated its grant application forms and instructions to require that applicants more fully disclose non-financial interests, including foreign activities and resources. However, NIH has not yet updated its conflict of interest policy.

View [GAO-21-523T](#). For more information, contact Candice N. Wright at (202) 512-6888 or wrightc@gao.gov.

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NIH Should Take Further Action to Address Foreign Influence

What GAO Found

U.S. research may be subject to undue foreign influence in cases where a researcher has a foreign conflict of interest. Federal grant-making agencies, such as the National Institutes of Health (NIH), can address this threat by implementing conflict of interest policies and requiring the disclosure of information that may indicate potential conflicts. GAO found that NIH's policy focuses on financial conflicts of interest but does not specifically address or define non-financial interests, which may include multiple professional appointments. In the absence of agency-wide policies and definitions on non-financial interests, universities that receive federal grant funding may lack sufficient guidance to identify and manage conflicts appropriately, potentially increasing the risk of undue foreign influence. In its report, GAO noted that NIH also requires researchers to disclose information—such as foreign support for their research—as part of grant proposals, and that such information could be used to determine if certain conflicts exist.

National Institutes of Health Disclosure Requirements for Grantees as of December 2020

 Researcher biographies	 Current and pending support	 Foreign components of research
<ul style="list-style-type: none"> Baccalaureate or other initial professional education, such as nursing. Postdoctoral, residency, and clinical fellowship training, as applicable. Relevant publications and positions held, concluding with the present position. 	<ul style="list-style-type: none"> Other support to include all financial resources, whether federal, non-federal, commercial or institutional, available in direct support of an individual's research endeavors. <p>This includes, but is not limited to research grants, cooperative agreements, contracts, and/or institutional awards.</p>	<ul style="list-style-type: none"> Activities outside the United States or partnership with international collaborators. Provide a justification if the applicant organization is a foreign institution, or if the project includes a foreign component.

Source: GAO presentation of information in agency documents. | [GAO-21-523T](#)

NIH relies on universities to monitor financial conflicts of interest, and the agency collects information, such as foreign collaborations, that could be used to identify non-financial conflicts. NIH has taken action in cases where it identified researchers who failed to disclose financial or non-financial information. Such actions included referring cases to the Department of Justice for criminal investigation. Additionally, NIH has written procedures for addressing allegations of failures to disclose required information.

In interviews, stakeholders identified opportunities to improve agency responses to prevent undue foreign influence in federally funded research. For example, agencies could harmonize grant application requirements and better communicate identified risks. NIH has taken steps to address the issue of foreign influence in the areas stakeholders identified.

Chair Murray, Ranking Member Burr, and Members of the Committee:

Thank you for the opportunity to discuss our December 2020 report on foreign influence in federally funded research, as it relates to the actions taken by the National Institutes of Health (NIH).¹ The federal government reportedly expended about \$44.5 billion on university science and engineering research in fiscal year 2019.² The Department of Health and Human Services (HHS) funds over a half of all such federal expenditures, and NIH accounts for almost all of this funding.³

Safeguarding U.S. taxpayers' investment in federally funded research from undue foreign influence is of critical importance. Recent reports by GAO and others have noted challenges faced by the research community to combat undue foreign influence, while maintaining an open research environment that fosters collaboration, transparency, and the free exchange of ideas.⁴ For example, we recently reported on the risk foreign students working at U.S. research universities may pose by "exporting" sensitive knowledge they gain to their home countries.

In August 2018, the Director of NIH sent a letter to over 10,000 universities highlighting concerns over foreign government talent recruitment programs, noting that these programs can influence researchers receiving federal funding to divert intellectual property and

¹GAO, *Federal Research: Agencies Need to Enhance Policies to Address Foreign Influence*, [GAO-21-130](#) (Washington, D.C.: Dec. 17, 2020).

²See National Science Foundation's "Higher Education Research and Development" survey on research and development expenditures provided to higher education institutions in the United States and outlying areas. These were the most recent data available at the time of our testimony. Funding data for fiscal year 2020 have not been released.

³Our review focuses on HHS's sub-agency—NIH—because it expends almost all of the federal research funding on behalf of the agency. For cohesion, we refer to NIH as an agency in this testimony.

⁴GAO, *Export Controls: State and Commerce Should Improve Guidance and Outreach to Address University-Specific Compliance Issues*, [GAO-20-394](#) (Washington, D.C.: May 12, 2020). United States Senate, Permanent Subcommittee on Investigations, Committee on Homeland Security and Governmental Affairs, *Threats to the U.S. Research Enterprise: China's Talent Recruitment Plans*, (Washington, D.C.: November 2019).

federally funded research to other countries.⁵ The letter also highlighted concerns that some researchers with federally funded grants did not disclose financial and other resources provided by foreign governments. For example, in May 2020, a former researcher at one U.S. university pleaded guilty for not reporting hundreds of thousands of dollars in foreign income on his federal tax returns, in relation to his involvement in the Thousand Talents Program, a Chinese-government talent recruitment program.⁶ This case came to light after NIH reviewed the researcher's grant proposals and became concerned that he had failed to disclose, among other things, foreign research activity.⁷

My testimony today summarizes the findings in our December 2020 report on foreign influence in federally funded research, as they relate to the NIH. Accordingly, this testimony discusses (1) conflict of interest policies and disclosure requirements at NIH that address potential foreign influence, (2) mechanisms to monitor and enforce policies and requirements, and (3) the views of selected stakeholders on how to better address foreign threats to federally funded research. For the report, we reviewed relevant laws, regulations, federal guidance, conflict of interest policies and requirements and interviewed agency officials, university

⁵Department of Health and Human Services, National Institutes of Health, "Dear Colleague" letter to university and academic medical school officials (Bethesda, Md.: Aug. 20, 2018). According to the Office of Science and Technology Policy (OSTP), a government sponsored talent recruitment program is an effort directly or indirectly organized, managed, or funded by a foreign government to recruit science and technology professionals in targeted fields. OSTP further noted that some countries sponsor such programs for legitimate purposes, but programs sponsored by other countries include language that creates conflicts of interest for researchers, such as by transferring U.S. funded work to another country. The White House Office of Science and Technology Policy, *Enhancing the Security and Integrity of America's Research Enterprise*, (Washington, D.C.: June 2020).

⁶Department of Justice press release, *Former Emory University Professor and Chinese "Thousand Talents" Participant Convicted and Sentenced for Filing a False Tax Return*, (Washington, D.C.: May 11, 2020) available at <https://www.justice.gov/opa/pr/former-emory-university-professor-and-chinese-thousand-talents-participant-convicted-and>. According to a Senate subcommittee report, the Thousand Talents Plan, launched in 2008, incentivizes individuals engaged in research and development in the United States to transmit the knowledge and research gained to China in exchange for salaries, research funding, lab space, and other incentives. United States Senate, Permanent Subcommittee on Investigations, *Threats to the U.S. Research Enterprise*.

⁷This researcher worked simultaneously at Emory University performing federally funded biomedical research, and at two Chinese universities performing similar research. The agency's review prompted the university, and later federal law enforcement, to investigate the matter, which revealed the filing of false tax returns.

officials, and researchers about agency and university conflict of interest policies and disclosure requirements.

While this testimony focuses on the actions taken by NIH on this topic, our report reviewed the top five agencies which together accounted for almost 90 percent of all federal research and development expenditures at universities in fiscal year 2018—the Department of Defense, the Department of Energy, the National Aeronautics and Space Administration, NIH, and the National Science Foundation. We also selected 11 universities which received over \$500 million in combined research grant funding in fiscal years 2018 and 2019 from two or more of the five selected agencies. Additional information on our scope and methodology is available in our December 2020 report. Our work was performed in accordance with generally accepted government auditing standards.

Background

Federal agencies that fund research have a strong interest in ensuring that the underlying research is scientifically rigorous and free of bias such as foreign influence. Two tools that agencies may use to address foreign influence are conflict of interest policies and disclosure requirements, such as foreign affiliations and current and pending research support. Among other things, conflict of interest policies help to guard against the researcher's financial interests or conflicts in the design, conduct, and reporting of federally funded research. Agencies may also require researchers to disclose information about their affiliations, associations, and activities which may indicate potential non-financial conflicts, such as conducting the same research for both the U.S. federal government and a foreign government.

In May 2019, the White House Office of Science and Technology Policy's (OSTP), National Science and Technology Council, established the Joint Committee on the Research Environment (JCORE) to address issues related to the safety, integrity, and productivity of the research environment, including balancing an open research environment with national security concerns.⁸ The JCORE Subcommittee on Research Security focuses on developing (1) appropriate and effective risk management for federal agencies and research institutions; (2) consistent, coordinated, and effective outreach to and engagement with academic and research institutions; (3) coordinated guidance for federal

⁸Specifically, OSTP documents noted that JCORE will examine administrative burdens in federally funded research; integrity in research; safe, inclusive, and equitable research settings; and open research environments balanced with security.

agencies; and (4) recommendations for best practices for academic and research institutions. This committee has worked closely with federal grant-making agencies, security agencies, and the research community to develop guidance on addressing foreign threats.

In January 2021, as part of the initiative, the JCORE Subcommittee on Research Security released guidance for research organizations on protecting America’s research enterprise. This document serves as a complementary document to the National Security Presidential Memorandum 33 (NSPM-33), which was issued on January 14, 2021 directing actions to strengthen protections of U.S. government supported research and development against foreign government interference and exploitation. Both the guidance document and the memo included substantially similar definitions related to conflicts of interest:⁹

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.¹⁰

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. Many institutional policies define conflicts of commitment as conflicting commitments of time and effort, including obligations to dedicate time in excess of institutional or funding agency policies and commitments. Other types of conflicting obligations, including obligations to improperly share information with, or withhold information from, an employer or funding agency, can also

⁹These definitions are similar to those previously shared by the JCORE Subcommittee on Research Security in June 2020. The White House Office of Science and Technology Policy, *Enhancing the Security and Integrity of America’s Research Enterprise*, (Washington, D.C.: June 23, 2020).

¹⁰*Presidential Memorandum on United States Government Supported Research and Development National Security Policy*, National Security Presidential Memorandum 33, (Jan. 14, 2021). Unless otherwise noted, when discussing conflicts of interest in this report, we are referring to both financial conflicts of interest and non-financial conflicts of interest (also referred to as conflicts of commitment). The memorandum’s definition does not include the term “financial conflict of interest.”

threaten research security and integrity, and are an element of a broader concept of conflicts of commitment.¹¹

NIH's Policy and Disclosure Requirements Address Financial Conflicts of Interest but Do Not Address Non-Financial Conflicts

In our December 2020 report, we found that NIH has an agency-wide conflict of interest policy that requires researchers to provide certain information to the university as part of the grant proposal process. NIH's policy focuses on financial conflicts of interest, specifies which financial interests should be reported to the university, and requires universities to mitigate any conflicts.¹² In addition, the policy requires universities to develop their own conflict of interest policies, notes specific requirements for identifying conflicts of interest, and includes guidance for universities on mitigating such conflicts, among other things.

NIH's conflict of interest policy does not specifically mention foreign financial interests—including whether such interests should be reported. NIH established its policies in the mid-1990s, when the threat of foreign influence in research was not an issue. NIH officials explained that they require researchers to disclose all financial interests, which, in their view, refers to both domestic and foreign interests.

Furthermore, NIH requires researchers applying for grants to disclose information as part of the grant proposal process. Such disclosures could be used to determine if certain conflicts exist. Specifically, NIH requires grant applicants to provide biographical details for key personnel conducting the research (such as education and professional appointments), information on other research support (such as outside funding or material support), and information on foreign components of the research, such as foreign partnerships or activities outside the United States (see table 1 for disclosure requirements used by NIH for grantees). NIH officials noted that they primarily use disclosures to determine the capacity of the researcher to perform the proposed research, identify

¹¹*Presidential Memorandum on United States Government Supported Research and Development National Security Policy*, National Security Presidential Memorandum 33. The memorandum's definition does not include the term "non-financial conflict of interest."

¹²While this testimony and associated report focus on the conflicts of interest associated with grantees, GAO has previously reported on NIH's internal scientific integrity policy which describes the importance of avoiding conflicts of interest and cites federal regulations and additional agency guidance on ethical conduct for NIH employees. GAO, *Scientific Integrity Policies: Additional Actions Could Strengthen Integrity of Federal Research*. [GAO-19-265](#). (Washington, D.C.: April 4, 2019).

redundant funding of the same research, and assess the risk of foreign influence.

Table 1: National Institutes of Health Disclosure Requirements for Grantees, as of December 2020

Category	Required information
Researcher biographies	<ul style="list-style-type: none">• Baccalaureate or other initial professional education, such as nursing.• Postdoctoral, residency, and clinical fellowship training, as applicable.• Relevant publications and positions held, concluding with the present position.
Current and pending support	<ul style="list-style-type: none">• Other support to include all financial resources, whether federal, non-federal, commercial, or institutional, available in direct support of an individual's research endeavors, including but not limited to research grants, cooperative agreements, contracts, and/or institutional awards.
Foreign components of research	<ul style="list-style-type: none">• Activities outside the United States or partnership with international collaborators.• Provide a justification if the applicant organization is a foreign institution, or if the project includes a foreign component

Source: GAO presentation of information in agency documents. | GAO-21-523T

Our December 2020 report also found that NIH's agency-wide policy focuses on financial conflicts of interest, but it does not define non-financial conflicts. Such conflicts may include foreign academic appointments and in-kind support—for example, in the form of laboratory space or materials—which can be provided by foreign entities.¹³ Government-wide guidance governing the grants process does not

¹³NIH's Grants Policy Statement indicates that before an award is made, NIH staff will review disclosures of current and pending support, which the agency terms as "other support," to determine whether there is "scientific, budgetary or commitment overlap." Commitment overlap is an example of non-financial interest, although it is not defined as such in NIH policy.

specifically mention or define non-financial conflicts, nor does it mention disclosing foreign affiliations, associations or activities.¹⁴

According to OSTP officials, it is important for agencies to define non-financial conflicts and address the issue in their policies in order to identify and mitigate undue foreign influence. Our December 2020 report recommended that NIH should update its conflict of interest policy to include a definition on non-financial conflicts, such as the one developed by OSTP, and address these conflicts, both foreign and domestic. NIH concurred with our recommendation and has recently updated its grant application forms and instructions to require that applicants more fully disclose non-financial interests, including foreign activities and resources. However, NIH has not yet updated its conflict of interest policy. Taking this action will help ensure uniformity across its policy and guidance documents and better position NIH to receive complete and accurate reporting on potential non-financial conflicts.

NIH Relies on Universities to Monitor Conflicts and Has Written Procedures for Enforcing Requirements

In our December 2020 report, NIH officials stated that they rely on universities to identify and monitor financial conflicts of interest. Specifically, NIH requires universities to have a conflict of interest policy, determine whether a financial interest constitutes a conflict, and develop mitigation plans if the university determines that a conflict exists. If a conflict exists, NIH regulations also require universities to provide financial conflict-of-interest reports to the agency that include specified information about university mitigation plans to address such conflicts.¹⁵ According to NIH officials, the agency reviews the financial conflict-of-interest reports to ensure completeness and to determine whether the mitigation plan sufficiently alleviates the conflict.

In addition, NIH collects information on non-financial interests that could be used to determine potential conflicts, such as foreign collaboration. The foreign collaboration can be with researchers or outside organizations involved in the project or those that provide new sources of

¹⁴While 2 C.F.R. part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, does not include these requirements, NSPM-33, issued on January 14, 2021, among other things, requires the heads of research funding agencies to, within twelve months of the date of issuance and consistent with applicable law, establish policies requiring the disclosure of specific information related to potential conflicts of interest and non-financial conflicts of interest (which it refers to as conflicts of commitment) from participants in the federally funded research and development enterprise.

¹⁵42 C.F.R. § 50.605(b)(1)-(3).

support. NIH collects this information through its annual Research Performance Progress Reports. Through our review of agency documents and interviews with agency officials, we found that NIH also periodically collects information on the progress of funded projects through these progress reports. NIH officials told us that they use this information to detect potential foreign influence by identifying discrepancies between progress reports and other sources, such as publications.

In our December 2020 report, we also found NIH has written procedures detailing how it manages allegations of failure to disclose required information, such as foreign affiliations. In interviews, NIH officials told us that there have been instances where researchers have failed to disclose financial or non-financial information, as required. Specifically, as of September 2020, NIH had identified 455 researchers of possible concern and worked with the Department of Justice to initiate investigations 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). NIH officials explained that they can learn about allegations of failure to disclose required information through universities, tip lines, other agencies (including the Federal Bureau of Investigation), or internal program offices.

In our review of NIH's written procedures, we found that they outline the investigative process, establish roles and responsibilities, and provides flexibility for each case. For example, NIH's written procedures provide details on the routing of allegations to different groups within the agency, provide options for administrative actions, and note that each allegation should be evaluated individually and that NIH actions should be commensurate with degree of noncompliance.

According to officials and agency documents, NIH can take a range of administrative or enforcement actions when an allegation of failure to disclose required information has been substantiated. These actions include asking the researcher's university to open an investigation, suspending the grant, or referring the case for prosecution.

NIH Has Taken Steps to Address Foreign Influence in Federally Funded Research Identified by Stakeholders

As we reported in December 2020, agency officials, university association representatives, university administrators, and principal investigators noted several opportunities to improve agency responses to foreign influence in federally funded research.¹⁶ NIH has taken steps to address foreign influence in the areas stakeholders identified, as detailed below.

Harmonize grant proposal requirements. All stakeholders noted the benefit and importance of harmonizing grant requirements to ensure clear understanding across all parties involved in addressing the risks of foreign influence.

NIH has taken steps to harmonize some aspects of the grant proposal process, according to officials. For example, NIH and NSF collaborated with the Federal Demonstration Partnership in 2019 to develop SciENCv (Science Experts Network Curriculum Vitae), a tool that lets researchers prepare biographical information for grant proposals to either agency. Representatives from university organizations and university administrators noted they support the idea of uniformity and the shared standard format, so all users are using the same form to disclose outside support and other affiliations.

Reduce burden on universities. Agency officials, university association representatives, and university administrators also noted that harmonizing and standardizing agency requirements for disclosing financial and non-financial interests could help reduce the burden on universities associated with ensuring researchers meet requirements for grants from multiple agencies.

NIH participates in interagency efforts with JCORE to develop guidance on reducing burdens on applicants and universities by streamlining the application processes for grantees.

Better communicate identified risks. In interviews, university associations, university administrators, and principal investigators said agencies should better communicate the specific risks of foreign influence they have identified to universities. University administrators told us they would like more guidance on steps agencies recommend to identify, analyze, and mitigate threats of foreign influence.

¹⁶According to NIH, a principal investigator is the researcher on a grant identified as having the appropriate level of authority and responsibility to direct the project or program supported by the grant.

NIH has taken some steps to communicate identified risk of foreign influence. For example, in 2018, it issued a report focused on complications of foreign influence in the extramural research community. The report highlighted specific concerns of foreign government programs that recruit scientists to capitalize on U.S.-funded research. In addition, the report also included recommendations to NIH and universities on raising awareness of foreign influence and safeguarding research integrity, among other things.¹⁷

Disclose participation in foreign talent recruitment programs.

Agency officials, university associations, university administrators, and principal investigators, expressed a wide range of views on whether researchers should be allowed to participate in foreign talent recruitment programs. In addition, principal investigators in six out of eight universities we interviewed did not know what these talent recruitment programs were or how to identify them.

In interviews, NIH officials told us they have observed a systematic failure to disclose by participants in certain foreign talent recruitment programs. Further, these officials noted they have observed that some researchers readily disclose funding from some foreign sources, such as the Wellcome Trust, which is located in the United Kingdom, while at the same time not disclosing funding from Chinese sources.¹⁸ NIH officials also stated that, based on their review of contracts with some foreign funding sources, such as talent recruitment programs, these contracts expressly prohibit the researcher from disclosing the funding or their participation in the program to NIH or any other U.S. grant-making agency.

Provide training on foreign risks. Representatives of university associations suggested that agencies provide training to principal investigators on foreign influence in federally funded research. They said such training could improve universities' ability to identify and mitigate potential risks associated with their researchers.

¹⁷National Institutes of Health Advisory Committee to the Director, *ACD Working Group for Foreign Influences on Research Integrity*, (December 2018).

¹⁸The Wellcome Trust is a politically and financially independent foundation in the United Kingdom supporting health and science researchers. As previously noted, The Thousand Talents Plan, launched in 2008, incentivizes individuals engaged in research and development in the United States to transmit the knowledge and research gained to China in exchange for salaries, research funding, lab space, and other incentives.

NIH issued a notice in March 2018 to the extramural research community entitled Financial Conflict of Interest: Investigator Disclosures of Foreign Financial Interests, to help clarify which foreign financial sources should be reported. In the memo, NIH reminded researchers to report financial support received from a foreign government or foreign institution of higher education.

In conclusion, at a time when there is growing concern about threats of foreign influence, taking the next step to fully implement our recommendation to define and address non-financial conflicts of interest in its policy documents could better enable NIH to receive complete and accurate reporting from universities. This in turn, can strengthen the agency's efforts towards addressing non-financial conflicts, including those involving foreign influence.

Chair Murray, Ranking Member Burr, and Members of the Committee, this completes my prepared statement. I would be pleased to respond to any questions that you may have at this time.

GAO Contact and Staff Acknowledgments

If you or your staff have any questions about this testimony, please contact Candice N. Wright, Acting Director, Science, Technology Assessment, and Analytics at (202) 512-6888 or WrightC@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement.

In addition to the contact named above, Farahnaaz Khakoo-Mausel (Assistant Director), Caitlin Dardenne (Analyst-in-Charge), and Ben Shouse made key contributions to this testimony. Other staff who made contributions to the report are identified in the source product.

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