Management Implication Report: Protecting the Integrity of EPA Funded Research

September 3, 2024 | Report No. 24-N-0058





OFFICE OF INSPECTOR GENERAL U.S. ENVIRONMENTAL PROTECTION AGENCY

September 3, 2024

MEMORANDUM

- SUBJECT: Management Implication Report: Protecting the Integrity of EPA Funded Research
- FROM:Nicolas Evans, Acting Assistant Inspector General
Office of Investigations

TO:Christopher Frey, Assistant AdministratorOffice of Research and Development

Purpose: In May 2021, the U.S. Environmental Protection Agency Office of Inspector General Office of Investigations initiated an investigation into allegations that an EPA-funded researcher may be associated with a Chinese talent recruitment program. Subsequently, the EPA OIG has identified a concern regarding the lack of oversight and controls during the EPA research grant application process and duration of the grant. In July 2023, the OIG initiated an investigation into allegations that a major United States university was allegedly receiving funds from China while simultaneously receiving funds from multiple federal agencies, including the EPA. As explained in further detail in this report, the Chinese government sponsors a malign foreign talent recruitment program which could have placed federal funds in jeopardy or resulted in the unauthorized transfer of intellectual property or other nonpublic information. This management implication report identifies concerns regarding potential foreign influence on the EPA's federally funded research awards, as well as proposes best practices for strengthening the administration of EPA grant funds, consistent with multiple research protection acts. We conducted this investigation in accordance with the Quality Standards for Investigation published in November 2011 by the Council of the Inspectors General on Integrity and Efficiency, as well as our own internal standards. These standards require that we conduct investigations in a timely, efficient, thorough, and objective manner.

Background: Section 223 of the William M. (Mac) Thornberry National Defense Authorization Act, or NDAA, for Fiscal Year 2021, Pub. L. 116–283, requires grant applicants to certify that their applications states all current and pending research support received by, or expected to be received by, the participants. The applicants must also agree to update such disclosures at the request of the agency prior to the award and at any time the agency determines appropriate during the term of the award. The NDAA defines "current and pending research support" as all resources made available, or expected to be made available, to a participant in support of the participant's research and development efforts regardless of whether the source of the resource is foreign or domestic. Importantly, the disclosure of foreign support does not automatically disqualify an applicant from receiving EPA funding.

As codified from the NDAA for Fiscal Year 2021, 42 U.S.C. § 6605(a)—Disclosure of funding sources in applications for Federal research and development awards—and effective as of January 1, 2021, federal research agencies must require grant applicants to certify that their disclosures of all current and pending research support received, or expected to be received, are current, accurate, and complete before the agency awards a grant. The statute further provides that the disclosures must be updated at any time the agency determines is appropriate during the award. Similarly, *National Security Presidential Memorandum 33*, issued January 14, 2021, provides that agencies shall require subsequent annual disclosures of research support, including "current and pending private and public sources of funding or income, both foreign and domestic." The purpose of this disclosure requirement is to ensure that no scientific or budgetary overlap or conflict of commitment exists.¹

The Creating Helpful Incentives to Produce Semiconductors <u>Act</u> of 2022, also known as the CHIPS Act, prohibits research and development awards for any proposal in which a covered participant is participating in a malign foreign talent recruitment program. Under the Act, each federal research agency must establish a policy that individuals listed in a proposal for a research and development award must certify in the proposal submission and annually thereafter for the duration of the award that they are not a party to a malign foreign talent recruitment program. Pursuant to the CHIPS Act, "each Federal research agency shall issue a policy using the guidelines" set forth at 42 U.S.C. § 19231(b) "not later than one year after August 9, 2022" and the policy requirements in 42 U.S.C. § 19232 must be established "not later than 24 months after August 9, 2022."² These requirements are codified at <u>42 U.S.C. §§ 19231-19237</u>.

In May 2023, the EPA Office of Research and Development issued updated <u>research terms and conditions</u> requiring grantees to annually certify all research support received during the duration of the grant.³ However, the EPA has no mechanism to cross-check the veracity of whether grant applicants listed all sources of their funding at the outset or in the annual certifications. This is particularly true for foreign support. In March 2024, the Office of Research and Development issued updated <u>research terms and conditions</u> again. Notably missing from the updated research terms and conditions was the requirement that covered participants certify in the proposal submission, and annually thereafter during the duration of the award, that they are not a party to a malign foreign talent recruitment program. These requirements are also not included in the EPA grants' <u>general terms and conditions</u>, effective as of October 1, 2023. This management implication report addresses the issue of foreign influence on the EPA's federally funded research awards, identifies concerns regarding an EPA funded researcher that allegedly received overlapping federal funding and foreign support, and proposes best practices for

¹ Presidential Memorandum on United States Government-Supported Research and Development National Security Policy.

² 42 U.S.C. Chapter 163, Subchapter VI, Part C: <u>Research Security</u>

³ EPA Solicitation Clauses at pg. 5. Updated as of May 2023.

strengthening the administration of EPA grant funds, even for entities without foreign support or obligations.⁴

Chinese Talent Programs

The Chinese Communist Party developed the Hundred Talents Plan to incentivize and recruit Chinese students educated abroad to return to China to help technologically and scientifically advance China. Since 2008, China has launched over 200 talent recruitment plans, including "The Thousand Talents Plan." This program recruited over 7,000 scientists, engineers, entrepreneurs, and finance experts. The plan provides salaries, research funding, lab space, and other incentives to lure experts to work for China.⁵ According to a U.S. Senate Permanent Subcommittee on Investigations hearing:

Talent Plan members sign legally binding contracts with Chinese institutions, like universities and research institutions. The contracts can incentivize members to lie on grant applications to U.S. grant-making agencies, set up "shadow labs" in China working on research identical to their U.S. research, and, in some cases, transfer U.S. scientists' hard-earned intellectual capital. Some of the contracts also contain nondisclosure provisions and require the Chinese government's permission to terminate the agreement, giving the Chinese government significant leverage over talent recruitment plan members.⁶

Receipt of Foreign Funding

Receiving multiple sources of funding for research projects can create a conflict of commitment. The *National Security Presidential Memorandum 33* defines a conflict of commitment as "a situation in which a participant accepts or incurs conflicting obligations between or among multiple employers or other entities." The memorandum further states that many institutional policies define a conflict of commitment to include "conflicting commitments of time and effort, including obligations to dedicate time in excess of institutional or funding agency policies or commitments." The potential for such a conflict is high when researchers are accepting foreign support as well as U.S. federally funded grants.

Pursuant to 42 U.S.C. § 6605 and the *National Security Presidential Memorandum 33*, the EPA must require applicants to disclose and certify foreign support during the application process and subsequently cooperate with any requests for additional information regarding research support during the duration of the grant. The Office of Research and Development requires extramural research grantees to complete the <u>NCER Form 5</u> to identify current and pending support. However, this form does not define "current and pending support," nor does it explicitly identify that foreign support must be

⁴ The National Science Foundation has implemented the requirement of the CHIPS Act. Specifically, its <u>Proposal and Award</u> <u>Policies and Procedures Guide</u>, effective May 20, 2024, contains requirements and restrictions related to malign foreign talent recruitment programs with references to the CHIPS Act.

⁵ Joske, Alex, <u>Hunting the Phoenix</u>, American Strategic Policy Institute, August 20, 2020.

⁶ U.S. Senate Permanent Subcommittee on Investigations, <u>Threats to the U.S. Research Enterprise: China's Talent</u> <u>Recruitment Plans</u>.

included. Furthermore, it does not ask to certify that the researcher is not a party to a malign foreign talent recruitment program.

Concern Identified: In 2021, the U.S. Department of Homeland Security informed the OIG of an EPA-funded researcher who allegedly received both federal funding and foreign support from China during the application process and the period of performance. Specifically, this researcher allegedly received foreign support to serve as the primary sponsor for over 40 visas, including academic F-1 visas, exchange visitor J-1 visas, business B-1 visas, and tourism B-2 visas for people from China. There is cause for concern with the intent behind the sponsorship of the visas, specifically whether the source of foreign funding encouraging such sponsorship might be intended to prompt participants to partake in EPA awards to source EPA proprietary knowledge and innovation to share with foreign government programs.⁷ The EPA-funded researcher was not required to report the foreign support under the grant's reporting requirements and the researcher made no such disclosure. While the EPA updated its reporting requirements in May 2023 to require that grantees disclose funding support annually, the EPA lacks a mechanism to vet for conflicts of interest when a grant applicant or recipient states that it is receiving foreign support or neglects to volunteer such information. In July 2023, the OIG was invited to join a multiagency investigation into a major United States university that was allegedly receiving funds from China while simultaneously receiving funds from multiple federal agencies. The OIG's investigation into this matter was hindered by the EPA not implementing the requirement of the CHIPS Act.

CHIPS Act Certifications

Under the CHIPS Act, the EPA must, by August 9, 2024, require covered participants to certify that they are not a party to a malign foreign talent recruitment program in the proposal submission and annually thereafter for the duration of the award. Further, the CHIPS Act requires recipient institutions to prohibit covered participants partaking in malign foreign talent recruitment programs from working on projects supported by EPA research and development. These requirements are codified at <u>42 U.S.C. §§ 19231-19237</u>. The Office of Research and Development is responsible for, among other things, overseeing and managing the announcements for grant applications. The statutory disclosure requirements were not, however, included in the May 2023 Office of Research and Development updated research terms and conditions. An EPA employee in that office told us that the eligibility requirements for grants are "primarily boilerplate language" that the office cannot change. Principally, the eligibility for an EPA award, grant, contract, or cooperative agreement is based on applicable statutory and regulatory requirements, as well as the Request for Applications standards, which are set by the EPA Office of Grants and Debarment.⁸ Without these disclosure requirements in place, the EPA cannot make a sound decision as to whether a potential conflict of interest involving research support affects the safeguarding and integrity of EPA-funded research.

⁷ In particular, the National Science and Technology Council in its <u>guidance</u> for implementing *National Security Presidential Memorandum 33*, recognized that "[t]he research security challenges we face are real and serious: some foreign governments, including China's government, are working hard to illicitly acquire our most advanced technologies."

⁸ Open or planned Requests for Applications can be found on the EPA's Research Funding Opportunities <u>website</u>.

FY 2021 NDAA Disclosures of Foreign Support

During our investigation, we discovered that the EPA has no mechanism for verifying the accuracy or legitimacy of reports of foreign funding made by applicants. Pursuant to section 223 of the NDAA for FY 2021, the EPA requires grant applicants to disclose all current and pending research support, regardless of source. The EPA has not, however, created a mechanism for verifying the accuracy or legitimacy of reports of foreign funding made by applicants. Furthermore, the EPA does not appear to have a process for considering whether receipt of foreign support might create a conflict of commitment.

Duplicative Government Support

Aside from the application and annual certifications, the EPA lacks a process for verifying whether grant recipients have received other government-funded grants for the same subject matter area, which is a potential disqualifying factor to receiving an additional award. Receiving an EPA grant within the same subject matter area and in the spectrum of a previously awarded grant from the Agency may affect an applicant's ability to receive a grant under a subsequent application.⁹

Based on the foregoing, the EPA OIG has identified a concern regarding award disclosures of foreign support and influence by grant recipients during the application and period of performance, which was also identified in an April 2023 management implication report shared with your office.¹⁰ My office is notifying you of this issue so that the Agency may consider implementing certain best practices, including:

- Implementing mechanisms to ensure full transparency and to confirm the veracity of statements made by grant applicants and recipients during the application process and annual certifications.
- Ensuring that applicants are aware that current and pending support should include all resources made available, or expected to be made available, to a participant in support of the participant's research and development efforts, regardless of whether the source of the resource is foreign or domestic.
- Ensuring whether there is scientific or budgetary overlap or conflict of commitment before making awards or providing funding under existing awards.
- Establishing and implementing a policy that requires covered participants to certify that they are not a party to a foreign talent recruitment program contract, agreement, or other arrangement.
- Prohibiting research and development awards from being made for any proposal in which a covered participant is partaking in a malign foreign talent recruitment program in a manner consistent with the CHIPS Act.

⁹ EPA Solicitation Clauses at pg. <u>5</u>. Updated as of May 2023.

¹⁰ EPA OIG, *Disclosure of Foreign Support for EPA Research <u>Grants</u>, April 13, 2023.*

- Consistent with the CHIPS Act, require recipient institutions to prohibit covered participants partaking in malign foreign talent recruitment programs from working on projects supported by EPA research and development awards.
- Providing training to EPA-funded researchers on the risks of malign foreign talent recruitment programs.
- Continue requiring all applicants to attest to and certify to the veracity of the statements made as part of their application and in their subsequent disclosures.
- Regularly reviewing National Science and Technology Council Guidance for Implementing National Security Presidential Memorandum 33 on National Security Strategy for United States Government Supported Research and Development, released January 2023.¹¹

If you decide that it is appropriate for your office to take or plan to take action to address these matters, the OIG would appreciate notification of that action. Should you have any questions regarding this report, please contact Senior Special Agent at our of the second s

Sean W. O'Donnell, Inspector General
Maureen Gwinn, Principal Deputy Assistant Administrator for Research and Development
Nora Gluch, Director, Science Policy Division, Office of Research and Development
Michael Osinski, Director, Office of Grants and Debarment, Office of Mission Support

¹¹ <u>Guidance for Implementing National Security Presidential Memorandum 33</u>.



Whistleblower Protection

U.S. Environmental Protection Agency The whistleblower protection coordinator's role is to educate Agency employees about prohibitions against retaliation for protected disclosures and the rights and remedies against retaliation. For more information, please visit the OIG's whistleblower protection <u>webpage</u>.

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