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United States Senate

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April 15, 2019

VIA ELECTRONIC TRANSMISSION

The Honorable France A. Córdova, Ph. D.
Director
National Science Foundation
2415 Eisenhower Avenue,
Alexandria, VA 22314

Dear Director Córdova:

On December 12, 2018, while Chair of the Judiciary Committee, I held a hearing on China's threats to U.S. national security.¹ In that hearing, Department of Justice (DOJ) and Federal Bureau of Investigation (FBI) officials made clear that the threat to our research from foreign governments is known and ongoing. For example, the DOJ witness, Mr. John Demers, stated, "we need to adapt our enforcement strategy to reach non-traditional collectors, including researchers in labs, universities, and the defense industrial base, some of whom may have undisclosed ties to Chinese institutions and conflicted loyalties."² The FBI witness, Mr. Bill Priestap, stated that China's talent recruitment programs are effectively "brain gain programs" that "encourage theft of intellectual property from U.S. institutions."³ Prior to that hearing, in February 2018, FBI Director Wray testified before the U.S. Senate Select Committee on Intelligence about worldwide threats. Director Wray testified, in part, that the Chinese are "exploiting" and "taking advantage" of our academic institutions.⁴

The threats to our academic and research institutions from foreign governments are well known and extend to medical research, technological advancements, defense, and energy

¹ *Hearing on China's Non-Traditional Espionage Against the United States: The Threat and Potential Policy Responses Before the S. Comm. on the Judiciary*, 115th Cong. 2 (Dec. 12, 2018).

² *Id.* at 8 (statement of John Demers, Assistant Att'y Gen., Department of Justice), <https://www.judiciary.senate.gov/imo/media/doc/12-12-18%20Demers%20Testimony.pdf>.

³ *Id.* at 5 (statement of E.W. "Bill" Priestap, Assistant Director, Counterintelligence Division, Federal Bureau of Investigation), <https://www.judiciary.senate.gov/imo/media/doc/12-12-18%20Priestap%20Testimony.pdf>.

⁴ *Open Hearing on Worldwide Threats Before the S. Select Comm. on Intelligence*, 115th Cong. 2 (Feb. 13, 2018).

research.⁵ Our government must take all reasonable and necessary steps to protect the integrity of taxpayer-funded research and ensure that intellectual property created here is not stolen by agents of foreign governments. To that end, I have written to the National Institutes of Health (NIH) and the Department of Defense (DOD) regarding threats to taxpayer-funded research in an effort to better understand the steps they have taken to combat the threat and ensure the integrity of the research. However, NIH and DOD are not the only agencies charged with dispensing academic research and development grants—among others, the National Science Foundation (NSF) also plays a significant role.

Congress established the NSF through the National Science Foundation Act of 1950 to “promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense; and for other purposes.”⁶ In furtherance of this purpose, NSF has provided extensive support for U.S. university research. It is also responsible for significant shares of the federal science, technology, engineering, and mathematics (STEM) education program portfolio and federal STEM student aid and support.⁷ Congress continued its funding of NSF through the Consolidated Appropriations Act of 2018, where it appropriated more than \$8.1 billion for continued support of its research and education goals pertaining to non-medical sciences and engineering.⁸

According to news reports, NSF has reached out to national security experts to learn more about how foreign entities may influence taxpayer-funded research.⁹ Reports also revealed last year that NSF required its rotators to be U.S. citizens or those seeking citizenship.¹⁰ These are positive initial steps toward protecting the integrity of taxpayer-funded research. However, more must be done. Accordingly, to better understand NSF’s current process for protecting

⁵ Letter from Francis S. Collins, Dir., Nat’l Insts. of Health, to NIH Grantee Institutions (Aug. 20, 2018), <http://www.sciencemag.org/sites/default/files/NIH%20Foreign%20Influence%20Letter%20to%20Grantees%2008-20-18.pdf>; see also *Prioritizing Cures: Science and Stewardship at the National Institutes of Health*, Hearing before the Senate Committee on Health, Education, Labor and Pensions, 115th Cong. (2018), <http://www.cq.com/doc/congressional-transcripts-5378816?2> (expressing similar concerns in subsequent testimony before the Senate Committee on Health, Education, Labor and Pensions); Letter from Charles E. Grassley, Chairman, S. Comm. on the Judiciary, to Francis S. Collins, Dir., Nat’l Insts. of Health (Oct. 23, 2018), [https://www.grassley.senate.gov/sites/default/files/constituents/2018-10-23%20CEG%20to%20NIH%20\(Research%20Threats\).pdf](https://www.grassley.senate.gov/sites/default/files/constituents/2018-10-23%20CEG%20to%20NIH%20(Research%20Threats).pdf); Letter from Charles E. Grassley, Chairman, S. Comm. on Fin., to Matthew Whitaker, Acting Att’y Gen., Dep’t of Justice and Christopher Wray, Dir., Fed. Bureau of Investigation (Jan. 17, 2019), [https://www.grassley.senate.gov/sites/default/files/documents/2019-01-17%20CEG%20to%20DOJ%20\(NIH%20Research%20Threats\)_0.pdf](https://www.grassley.senate.gov/sites/default/files/documents/2019-01-17%20CEG%20to%20DOJ%20(NIH%20Research%20Threats)_0.pdf).

⁶ National Science Foundation Act of 1950, S. 247, 81st Cong. (1950); see also, LAURIE A. HARRIS, CONG. RESEARCH SERV., R45009, THE NATIONAL SCIENCE FOUNDATION: FY 2018 APPROPRIATIONS & FUNDING HISTORY (2017).

⁷ *Id.*

⁸ Consolidated Appropriations Act, 2019, Pub. L. 116-6, 113 Stat. 13 (2019).

⁹ Jeffrey Mervis, *NSF Hopes Jason Can Lead it Through Treacherous Waters*, SCI. MAG., (Mar. 18, 2019), <https://www.sciencemag.org/news/2019/03/nsf-hopes-jason-can-lead-it-through-treacherous-waters>.

¹⁰ *Id.* (“A year ago, for example, it restricted its pool of rotators—scientists who go on leave from their university for a few years to work as NSF program managers—to scientists who are U.S. citizens or who have applied for citizenship. Now, by reaching out to the Jason, NSF appears to be looking for fresh ideas on how to do business in this more constrained environment.”); see also, *Intergovernmental Personnel Act (IPA) Assignments*, NAT’L SCI. FOUND., <https://www.nsf.gov/careers/rotator/ipa.jsp> (last visited Apr. 12, 2019); *Visiting Scientist, Engineer, and Educator (VSEE) Program*, NAT’L SCI. FOUND., <https://www.nsf.gov/careers/rotator/vsee.jsp> (last visited Apr. 12, 2019).

taxpayer-funded research from foreign threats and to assess any forthcoming changes made by NSF in this area, please provide answers to the following no later than April 29, 2019:

1. Please describe in detail the process by which NSF, and recipients of NSF funds for research purposes, conduct background checks of researchers and institutions prior to awarding grants.
2. What rules, procedures, or regulations currently exist to prevent potential foreign actors from acquiring, altering, or duplicating taxpayer-funded research data and findings?
3. How many staff and how much taxpayer money per year is budgeted to ensure compliance with and to identify and investigate potential violations of rules, procedures, and regulations concerning the foreign affiliations of researchers and financial contributions to them? Please provide a copy of the budget and all other supporting documentation for the past five years.
4. With respect to the recipients of NSF funds for research purposes, how many systematic reviews, or audits, have been performed of those entities in the past five years for the purpose of identifying potential violations concerning foreign affiliations and financial contributions? Please list each entity and the results of the review.
5. What enforcement mechanisms are available to NSF to protect intellectual property created by and resulting from taxpayer-funded research and to hold accountable foreign agents and institutions for violating NSF policies and rules? Does NSF require additional statutory authorities to effectively punish and deter wrongdoers? If so, what are they?
6. Please provide the Committee a list of all entities currently under investigation for employing individuals that failed to disclose contributions from foreign governments. Is this publicly available? If not, do you plan to make that list public? If not, why not?
7. Does NSF regularly work with the Justice Department, State Department, and/or the Intelligence Community to properly track, assess, and analyze threats from foreign actors of potential theft, improper disclosure or manipulation of data collected and results reached through taxpayer-funded research, and the corresponding impact or effect on national security? If not, why not? If so, please describe those agency relationships.

8. Please provide a list of all instances in the past five years in which the following occurred: (1) foreign actors used systematic and long-term efforts to influence NSF researchers; (2) foreign actors worked to transmit to other countries intellectual property produced by NSF-supported research; (3) foreign actors contributed resources to NSF-funded researchers in ways that could impact the integrity of the research; and (4) researchers failed to disclose foreign financial support. For each instance, please describe in detail the nature of the violation and whether a referral was made to the NSF Inspector General or the Justice Department.

Should you have questions, please contact Josh Flynn-Brown or Daniel Boatright of my Committee staff at (202) 224-4515. Thank you for your attention to this important matter.

Sincerely,



Charles E. Grassley
Chairman
Committee on Finance