



RESEARCH
AND ENGINEERING

THE UNDER SECRETARY OF DEFENSE

3030 DEFENSE PENTAGON
WASHINGTON, DC 20301-3030

JUL 01 2019

The Honorable Charles Grassley
Chairman
Committee on Finance
United States Senate
Washington, DC 20510

Dear Chairman Grassley:

Thank you for your letter to Acting Secretary of Defense Shanahan, dated April 1, 2019, regarding the protection of Department of Defense (DoD)-funded research from foreign threats. I am responding on his behalf as I have responsibility in this very important area for the Department. The academic research community has provided numerous groundbreaking technologies over the years, and the continuing development of that relationship is vital to our country's national defense. At the same time, DoD is concerned that some nations may be attempting to undermine the collaborative research environment in the United States to exfiltrate DoD-funded research for the benefit of foreign governments. The Department's challenge and imperative is to stop hostile entities that intend to access and exploit research vital to future defense capabilities, and still preserve DoD's ability to generate defense technologies faster than our adversaries.

The Department has taken a number of actions to address the issue of foreign talent recruitment programs in particular, and, more broadly, foreign actors seeking to exploit Department-funded research. We have strengthened the disclosure policy mandating that key personnel on research grants disclose all current and pending support that they are receiving. As directed by Congress in section 1286 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2019, the Department has established an initiative to reduce the impact of foreign talent recruitment programs and to gather more information on the threat of exfiltration of intellectual property, controlled unclassified information, key personnel, and information about critical technologies relevant to national security. Also, in October 2018, the Secretary of Defense established the Protecting Critical Technology Task Force (PCTTF) to accelerate technology protection across all Department activities. The PCTTF has initiated several lines of effort to protect funded research, but the Department will need Congress's assistance in establishing the authorities needed to screen and vet all researchers participating on DoD grants, a first step in protecting taxpayer-funded research.

Finally, the Department has engaged with the academic community extensively, the intelligence community, law enforcement, and the interagency, on the issue of foreign talent recruitment programs and research exfiltration. These engagements will continue to gather momentum in the months to come.

While this general discussion should give you a sense of the efforts we are taking on this issue, below are more detailed discussions regarding your specific questions.

1. Please describe in detail the process by which the Department, and recipients of Department funds for research purposes, conduct background checks of researchers and institutions prior to awarding grants.

The grants funded by the Department for scientific research are awarded almost exclusively to institutions, such as universities or companies, rather than to individuals. As such, the Department assesses whether that institution is suitable for such an award. The assessment is done by requiring any institution which applies for a research grant be registered in the System of Award Management. This ensures that the recipient is not on the list of excluded parties ineligible for Federal funds, and the recipient's past performance is reviewed under the Federal Awardee Performance and Integrity Information System. For awardees that expend over \$750,000 per year in Federal funds, the awardee's single audit will be checked for any adverse findings. As is the case for any recipient of Federal funding, all institutions receiving research grants must comply with the requirements of 2 Code of Federal Regulations 200, the "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards," and the Department of Defense Grant and Agreement Regulations.

DoD does not currently conduct background checks on individual researchers. As part of the FY 2019 NDAA section 1286 initiative, the Department is examining the authorities required for screening and vetting of all Department-funded researchers at universities. The Department will need Congress's support to establish the authorities needed to screen and vet all researchers participating in the Department's grants, a first step in protecting taxpayer-funded research. A report on the findings of section 1286 will be delivered to Congress in August 2019.

2. What rules, procedures, or regulations currently exist to prevent potential foreign actors from acquiring, altering, or duplicating taxpayer-funded research data and findings?

For classified research, institutions must meet additional cybersecurity standards and reporting requirements under the National Industrial Security Program Operating Manual (NISPOM), and only researchers possessing a security clearance may access the research. The Defense Security Service (DSS) and the Military Department Counterintelligence Organizations (MDCOs) work closely with cleared universities to raise their awareness of the threats posed by foreign actors, and to mitigate the risks from suspicious activity.

The Department may designate certain research areas as critical even when unclassified (labelled as controlled unclassified information). Critical research may have access restricted from certain groups, such as foreign nationals. Beyond access restrictions, some controlled unclassified research has additional cybersecurity protocols, such as the requirements of the Special Publication 800-171 of the National Institute for Standards and Technology (NIST).

Furthermore, like other science funding agencies, the Department is tightening its conflict of interest/conflict of commitment protocols. On March 20, 2019, the Department required all grant applicants submit information about the key personnel who will work on the grant, including all current projects each individual is working on, in addition to any future support the

individual has applied to receive, regardless of the source. This disclosure was required previously for many research awards, but this policy memorandum standardized the practice across all Department research programs.

The award terms and conditions for all research grants (most recently updated in July 2018) prohibit research fraud or misconduct as described in Department of Defense Instruction 3210.7. Fraud or misconduct includes research plagiarism which is defined as “the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.” DoD concerns about research exfiltration focus on unauthorized disclosure of research findings and data prior to the lead investigator determining that s/he is ready to share the information via patent, publication, or presentation. Within this window of time, ensuring the proper use of research data falls under the rules that govern plagiarism and research integrity.

- 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 foreign financial contributions to them? Please provide a copy of the budget and all other supporting documentation for the past five years.**

We are unable to provide a complete answer to this question without conducting a dedicated study. There is no specific body dedicated to overseeing compliance with, or conducting investigations of, rules governing foreign affiliations of university researchers under Department of Defense grants. Generally, oversight and compliance of researchers within DoD is distributed among many DoD Organizations.

- 4. With respect to the recipients of Department 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.**

The Department is currently undertaking a review and has established an initiative, pursuant to section 1286 of the NDAA for FY 2019, to reduce the influence of foreign talent recruitment programs. A report containing the Department's findings pursuant to section 1286 will be provided to Congress in August 2019. Furthermore, in-progress briefs of these efforts have been provided to House and Senate Armed Services Committee staffers.

With regard to audits of specific institutions, this question falls under the purview of the distributed departmental audit and compliance enterprise. Due to the numerous organizations that would need to be involved to fully respond to this question, we cannot provide you with a complete answer at this time.

- 5. What enforcement mechanisms are available to the Department to protect intellectual property created by and resulting from taxpayer-funded research and to hold accountable foreign agents and institutions for violating Department policies**

and rules? Does the Department require additional statutory authorities to effectively punish and deter wrongdoers? If so, what are they?

For all types of fundamental research funded by the Department, the disposition of rights to the intellectual property generated by the research remains with the university where the research was conducted, as set forth in Chapter 18 of Title 35 of the United States Code, commonly referred to as the “Bayh-Dole Act.” Any attempt to use or license such work without permission of the university would thus be a violation of Federal law. Since the universities own the rights to the intellectual property, the Department has no claim on the intellectual property such research generates, and thus there are no DoD rules regulating its disposition. For research done at Service labs, Federally Funded Research and Development Centers and University Affiliated Research Centers, each institution has a specific management document addressing the use/misuse of governmental intellectual property.

The Department does have rules regulating research that is of a higher technology readiness level (research in the 6.3 budget category and above). Export controls from both the Export Administration Regulations (EAR) and the International Traffic in Arms Regulations (ITAR) serve to protect against the export of the technologies being used by foreign researchers in the course of conducting the research itself. A violation of export controls could be grounds for removal of a researcher or termination of an award. In terms of additional authorities needed, the Department is currently undertaking a review of the threat posed by foreign exploitation of U.S. technology within the Department of Defense research, science and technology, and innovation enterprise as required by section 1286 of the NDAA for FY 2019. The Department plans to take this review into account as it works with Congress to determine what new authorities might be needed to address this issue.

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?

With regard to audits or investigations of specific institutions, this question falls under the purview of the distributed departmental audit and compliance enterprise. Due to the numerous organizations that would need to be involved to fully respond to this question, we cannot provide you with a complete answer at this time.

7. Does the Department 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.

Yes, DoD, MDCOs, and Defense Criminal Investigative Organizations maintain a close and continuous relationship with the Federal Bureau of Investigation (FBI) to analyze and address this threat, since the FBI is able to leverage authorities that are not inherent in the

Department. DoD and FBI co-lead an interagency counterintelligence working group focused on the mitigation of foreign intelligence threats to U.S. critical technologies, including taxpayer-funded research. DoD and FBI's relationship also extends to the field office level, where the Department works to provide information on DoD research to guide and facilitate FBI investigations.

For example, to highlight four major activities that the Department has undertaken to further develop collaboration with the FBI: 1) the Department participated in the FBI Academia Summit with other Federal research funding agencies and the presidents of leading academic institutions to discuss the threat posed by foreign actors and foreign talent programs; 2) the Department hosted a briefing for FBI Counterintelligence to discuss the threat of foreign talent programs with DoD research program managers; 3) the Department hosted an FBI representative at a meeting of the Defense Basic Research Advisory Group to discuss foreign talent programs and to help the FBI establish points of contact at each of the services to speak with the program managers of individual research awards when the FBI has relevant information about problematic activities; and 4) Department representatives travelled to the Houston FBI field office to work with local FBI experts to help identify researchers that may be participating in foreign talent programs. The Department has also participated in various other meetings over the past year where FBI and the State Department were present to discuss foreign talent programs.

Other than the FBI, the Department relies heavily on partners in the intelligence community who maintain and analyze information to identify foreign actors of concern. The Department intends to continue working closely with law enforcement, the State Department, and the intelligence community on the protection of intellectual property, controlled information, key personnel, and information about critical technologies relevant to national security to ensure that the most up-to-date threat information is shared widely and acted upon quickly.

In addition, the PCTTF is working with key subject matter experts within the Department to develop technology protection plans for critical technology areas designated by the Department, encompassing all areas of research from basic through developmental. In putting these plans together, the PCTTF is working closely with the Office of the Under Secretary of Defense for Intelligence and members of the intelligence community to better understand the threat posed by foreign actors and how best to create protection plans that address those threats.

- 8. Please provide a list of all instances in the past five years in which the following occurred: (1) foreign actors mounted systematic efforts to influence Department researchers; (2) foreign actors worked to transmit to other countries intellectual property produced by Department-supported research; (3) foreign actors contributed resources to Department-funded researchers in ways that could impact the integrity of the research; (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 Defense Department Inspector General or the Justice Department.**

Given that the FBI has investigative jurisdiction over foreign counterintelligence matters, the Department recommends that questions about systematic influence efforts, transmission of

intellectual property, and foreign contributions be sent to the FBI. For investigative findings of a lack of disclosure of financial support, this question falls under the purview of the distributed departmental audit and compliance enterprise. Due to the numerous organizations that would need to be involved to fully respond to this question, we cannot provide you with a complete answer at this time. To fully understand the influence of foreign actors on DoD-funded research, DoD will need Congress's support in establishing the authorities needed to screen and vet all researchers participating in the Department's grants, an important step in protecting taxpayer-funded research.

Thank you once again for your continued work and leadership on this critical issue. The Department welcomes working with your Committee to ensure that our Warfighters maintain the technological advantage that is essential to our national security. If you have follow up questions, my point of contact on this subject is Dr. Bindu Nair, Deputy Directory, Basic Research Initiative (bindu.r.nair.civ@mail.mil).

Sincerely,



Michael D. Griffin