APPENDIX B

CHINA'S TALENT RECRUITMENT PLAN CASE STUDIES

PERMANENT SUBCOMMITTEE ON INVESTIGATIONS

UNITED STATES SENATE



Chinese Talent Recruitment Case Examples

<u>Individual M</u>

A National Lab employee, Individual M, who accepted a joint appointment at a Chinese university as part of the TTP likely took National Lab intellectual property and patent information without consent of other laboratory scientists, in order to file a similar patent with Chinese collaborators. Individual M subsequently filed for a U.S. patent that overlapped with the design and claims of the patent held by the National Lab.

Individual N

Energy's Office of Intelligence and Counterintelligence conducted an investigation of Individual N that applied to the TTP while working at a National Lab. The investigation determined that Individual N was a supervisor at the National Lab and oversaw other TTP applicants who worked on sensitive but unclassified national security topics.

While employed at the National Lab, Individual N hosted dozens of other Chinese nationals, worked on numerous Energy funded projects, and visited multiple Energy labs. The individual hired at least four Chinese nationals and TTP participants, while at least eight others were known to be no-pay appointments paid for by other Chinese organizations. The investigation revealed a disproportionate collaboration with Chinese institutions, and the individual attempted to initiate official sharing agreements between the laboratory and a Chinese organization. Additionally, the investigation found that monitoring the group's work was complicated by the language barrier, the revolving door of personnel, and the somewhat insular nature of the group. A later review identified at least six projects designated as sensitive.

Individual O

Energy's Office of Intelligence and Counterintelligence investigated a postdoctoral researcher, Individual O, whom China selected for the TTP. The investigation determined that Individual O removed multiple gigabytes of unclassified data totaling over 30,000 electronic files from the National Lab prior to departing for China.

While employed at the National Lab, Individual O was selected for China's TTP. In support of the TTP application, the researcher obtained recommendation letters from U.S. colleagues and detailed some ongoing projects. Shortly after being selected for the TTP, the researcher took a professorial position in China. After Individual O departed for China, Energy discovered that the researcher uploaded multiple gigabytes of information including presentations, technical papers, research, and charts, from the National Lab network to a personal cloud storage account. Individual O told his or her prospective Chinese employer that his or her research area in the United States would play a critical role in advanced defense

applications. Individual O furthermore planned to leverage the Chinese university's strength in national defense and military research to support the modernization of the People's Republic of China's national defense. After returning to China, Individual O committed to keeping a close and collaborative relationship with several named research teams at the National Lab.

Individual Z

In early 2019, NIH contacted a medical school concerning three principal investigators with potential affiliations with the TTP, Chinese universities, and other Chinese government funded grant programs. The institution conducted an internal review and initially indicated that it did not identify any financial conflicts of interests. The internal review involved phone interviews and written questions and answers with the principal investigators at issue.

NIH, however, submitted additional questions concerning one of the principal investigators who told the institution that he or she never worked at Peking University and did not receive any funds from any talent recruitment plans. NIH sent the institution a screenshot of Peking University's website that identified the principal investigator as a "Professor" since 2012. NIH also sent the institution information indicating that the principal investigator was likely a TTP member. The institution later provided NIH with an affidavit from the principal investigator stating he or she never held a position at Peking. The principal investigator also told the institution that Peking University's web site must be an oversight as he or she never actually accepted the position. NIH then informed the institution that the principal investigator likely had a potential conflict as he or she maintained an active, unreported Natural Science Foundation of China ("NSFC") grant. The institution's representative wrote back to NIH: "Obviously concerning to us." Despite these violations of NIH grant policy, the institution allowed the individual to continue as a principal investigator on the NIH grant and NIH has yet to take any further action.

<u>Individual X</u>

In early 2019, NIH contacted a medical research institution concerning a principal investigator, Individual X. That individual also was publicly listed as serving in several positions at Huazhong University of Science and Technology. Additionally, NIH alleged that the principal investigator also worked on two active NSFC grants that Individual X did not disclose.

Subsequently, the institution conducted an internal investigation and stated that it

may have failed to completely disclose [Individual X's] affiliation at Huazhong University of Science and Technology, funding from the National Natural Science Foundation of China, and the Chinese Thousand Talents Program, and foreign components of the awarded projects in applications and progress reports which designate [Individual X] as the [principal investigator] or Key Personnel.

After the institution's inquiry into the individual's foreign associations, Huazhong University deleted the individual's online resume. The institution, however, asserted that the work did not overlap with past or existing NIH grants. Despite these violations of NIH grant policy, the institution allowed the individual to continue as a principal investigator on the NIH grant and NIH has yet to take any further action.

<u>Individual Y</u>

In early 2019, NIH contacted a hospital institution regarding alleged foreign support for an NIH-sponsored medical researcher, Individual Y. Individual Y worked at the institutions' Biomedical Informatics and Division of Biostatistics. The institution conducted an internal investigation and located a TTP contract signed by Individual Y. The TTP contract required Individual Y to "recruit three undergraduate students each year ... focus on recruiting 1-2 post-doctoral students each year ... [and] publish 12 papers in mainstream international journals."

The institution's internal investigation also discovered that in addition to being a member of the TTP on contract through 2020, Individual Y had faculty appointments at two universities in China: Jianghun and Wuhan. Individual Y also received a 2018 award from the National Natural Science Foundation of China. Individual Y also proposed using a U.S. data set for the NSFC-funded project. The institution did not disclose any of the sources of foreign support to NIH. The institution subsequently counseled Individual Y on the "importance of <u>full and</u> <u>accurate disclosure</u>."

NIH also identified potential conflicts of commitment. For example, NIH asked if the institution was aware that Individual Y "was spending 6 months a year in China working on this project?" The institution reported that it was not aware. As a corrective measure, the institution refunded to NIH Individual Y's salary draws for time periods where there was "most likely potential for effort overlap." NIH continues to investigate the alleged violations.

Individual 1

Individual 1 was a professor and researcher working in cellular and molecular physiology. Individual 1 is also a principal investigator who worked on an NIH Exploratory/Developmental Research Grant Award. On April 11, 2014, Individual 1 requested and received a one-year unpaid leave of absence starting in July 2014 to work at Tsinghua University.

Individual 1 joined Tsinghua Medical School as a recipient of a TTP award in July 2014. While working at Tsinghua Medical School, Individual 1 worked on developing special antibodies. Tsinghua provided Individual 1 with other special opportunities, such as the ability to work with a distinguished Nobel Prize winner, the use of first-class technology and facilities, and access to the institution's renowned structural biology center. Individual 1 even received an award from the Chinese government that fully supported his or her research and salary at Tsinghua University from July 2014 to June 2017.

On April 6, 2015 Individual 1 requested and received extended leave permitting the individual to maintain a 50 percent appointment at the institution while working at Tsinghua University. The institution also granted permission for Individual 1 to continue to conduct research at the institution.

While Individual 1 was supposed to conduct all the work at the U.S. institution's facilities, Individual 1 directed some of the work to be done in China at Tsinghua University. Individual 1 did not submit a financial disclosure form to the U.S. institution in 2014 as required by the U.S. institution. The individual also did not disclose to the U.S. institution the salaries received from Tsinghua University in subsequent disclosure forms.

"The institution's internal investigation determined that it should have reported to NIH the possibility of collaboration with investigators at a foreign site that could result in co-authorship and should have provided a Foreign Justification attachment to Individual 1's award application." In addition, the institution failed to include Individual 1's Tsinghua University's position on supplementary reports and failed to report the continuing arrangement with Tsinghua. In response to repeated violations of NIH policies and TTP membership, the institution's only actions was to develop a remediation plan that required Individual 1 to file annual conflict of interest disclosures.

Individual 3

A medical school reported that a pharmacology and dermatology professor, Individual 3, potentially failed to comply with NIH policies requiring disclosure of outside research support and foreign affiliations or research components. Individual 3 has an NIH grant from the National Cancer Institute. On several publications, Individual 3 listed foreign support, in addition to his or her NIH support, and held affiliations with at least five Chinese institutions. None of the foreign support or foreign affiliations, however, were disclosed on Individual 3's NIH grant documents.

When questioned by the institution, Individual 3 said his or her publications included reference to support from the NSFC because he or she considered it an honor. Individual 3, however, also claimed that he or she received no financial support from the NSFC award for his or her NIH-funded, or any other, research. He or she also claimed that the aim of the project was different than the subject of his or her NIH award.

During its internal investigation, the institution found online reports suggesting Individual 3 was a Dean at Jiangsu University, participated in the Jinshan Scholars Program, and in the TTP. Individual 3 said he or she rejected the position and never participated in the alleged programs. Individual 3 also worked with three post-doctoral students on an NIH grant who held concurrent positions at Chinese institutions. Though these post-doctoral researchers did not list their foreign government support in co-authoring publications with Individual 3, these post-doctoral researchers' co-authors at their affiliated Chinese institutions listed Chinese government support.

As part of its response to this matter, the institution convened a Committee on Research Security and Conflicts of Commitment to make recommendations about how to secure research on its campuses and ensure that researchers' commitments supporting their research are not compromised by external relationships. The institution told NIH that it will also review all of Individual 3's grant applications for the next two years.

Individual 4

NIH contacted a medical research institution after identifying issues of potential willful non-disclosure of outside research support and relevant affiliations or foreign components. NIH found that Individual 4, who serves as the Principal Investigator on an NIH grant from the National Cancer Institute, may have willfully failed to disclose the following affiliations:

- 1. A distinguished professorship Zhejiang University;
- 2. Selection for the Chinese Talents Program;
- 3. At least two NSFC grants;
- 4. One National Key R&D Program of China grant;
- 5. One Shanghai Education Development Foundation "Shuguang Program" grant;
- 6. One Chinese Minister of Science and Technology grant; and
- 7. Two Department of Education of Jiangxi grants.

The institution did express concern that the Thousand Talents contract required Individual 4 to work "at least 9 months" in China from January 2014 to December 2018 while the individual was a faculty member at the institution. Further, the Chinese Talents Program contract required awards, patents, and projects during the contract period would be under the Chinese Institutions name. The contract also required the individual to resign from the institution by January 2019 and work full-time for the Chinese institution.

As part of its response to this matter, the institution prepared several communications to raise awareness across the university research community on the importance of fully reporting foreign components and relationship with foreign collaborators as required by NIH police and other sponsors. The institution also revised help guides and business processes and outside interest disclosure forms to better identify the need for faculty to disclose outside relationships with foreign entities.

The institution, after conducting a preliminary investigation, told NIH that the only failure to disclose concerned was the affiliation with Zhejiang University. The other awards did not overlap with the NIH award. The institution did express concern that the Thousand Talents contract required Individual 4 to work "at least 9 months" in China. NIH continues to investigate the matter.

<u>Individual 5</u>

NIH contacted Individual 5's institution after identifying issues of potential noncompliance regarding disclosure of outside research support and relevant affiliations or foreign support. Individual 5 serves as a principal investigator on a current NIH award from the National Institute on Mental Health. While working on the NIH award, Individual 5 also has a position at Guangzhou Medical University in China and holds at least two NSFC grants. Several of Individual 5's NIH-supported publications were also supported by foreign awards, suggesting foreign collaborations. The grants and affiliations were not disclosed in applications to NIH. The institution, however, stated that research activities conducted in China as part of the consulting agreement did not overlap with the NIH application.

<u>Circumvention of Export Controls</u>

One other federal agency provided the Subcommittee with two additional case studies that are detailed below.

Case Study 1

Federal agencies discovered a previously unknown Chinese state-sponsored talent recruitment program co-sponsored by a Chinese government organization that conducts military research and development. The talent recruitment program appears to specifically target US academics who are experts in critical science, technology, engineering, and math ("STEM") fields, as well as individuals with direct placement and access to federally-funded research in US academic institutions. Some identified US selectees of this talent recruitment program served as grant managers at a federal agency, making decisions on research grant awards, while simultaneously being employed and tasked by the Chinese government. These talent recruitment selectees allocated federal research funds to other US academics who were themselves selectees of the same and other Chinese talent recruitment programs. After several years another generation of talent program selectees were appointed to the same grant management positions with decision authority over federally-funded research grants. Based on this information, we assess that this state-sponsored talent program represents part of a coordinated effort on the part of the Chinese government to target critical STEM fields.

Talent program selectees have sponsored masters, doctoral, and post-doctoral students from Chinese universities with which the selectees themselves are associated, including People's Liberation Army ("PLA")-affiliated schools. Talent program selectees have accepted positions in Chinese universities, including adjunct or visiting professorships, advisors to research programs, and visiting lecturers. In some cases these talent program selectees may have contractual obligations to Chinese institutions and are being directed to sponsor or hire Chinese students from specific Chinese programs to work with them in their US-based labs on federally-funded research.

A review of Chinese students sponsored or hired by the talent program selectees found that many of these students come from labs and research programs that perform research with defense applications, including PLA-affiliated schools and research institutes, and civilian universities and programs that conduct extensive defense-related research. Many of these students have also received funding from state-run programs such as the China Scholarship Council that require researchers to return to China after the completion of their studies to facilitate the transfer of sensitive scientific know-how.

This trend also represents significant economic security concerns. A selectee of multiple talent recruitment programs sponsored Chinese graduate students to work in a federally-funded laboratory at a US university. The selectee then cofounded a China-based medical technology business together with the entrepreneurial component of another talent recruitment program and hired their former students. The Chinese business now competes with major U.S. companies.

Case Study 2

A Professor at a U.S. University who specialized in a critical, dual-use STEM field and was the recipient of numerous US government research grants was also a selectee of multiple Chinese talent recruitment programs and an "overseas professor" of a Chinese university. The professor directed a China-based laboratory performing applied military research and development. Instead of traveling directly to China to work at this laboratory, the Professor stayed in the United States and sponsored visiting Chinese students and scholars from the laboratory to study under the professor's guidance in the United States. This technique, commonly seen throughout the United States with talent recruitment program selectees, allowed the professor to pass dual-use research, and potentially exportcontrolled research, to China via the visiting students and scholars without having to physically leave the United States. Many of these visiting students and scholars were not only affiliated with the Professor's Chinese laboratory but they were directly affiliated with research and development organizations involved in China's military modernization efforts. **Conclusion:** The cases described above are just two examples of identified talent program selectees and their activities that undermine US national and economic security. Some of this activity may violate U.S. law in areas such as grant fraud, computer fraud, misuse of public resources for personal financial gain, or illegal supplementation of a federal salary. Additionally, some of the activity may not be illicit in nature, but involve conflicts of interest or commitments and/or violations of federal research grant terms and ethical or research integrity codes of conduct. Lastly, it is unknown the extent or scale of China's efforts to incentivize, employ, or task individuals in the U.S. through these talent recruitment programs or similar state-sponsored mechanisms.