

AFFIDAVIT OF SPECIAL AGENT MATTHEW J. MCCARTHY

I, Matthew J. McCarthy, being duly sworn, depose and state:

INTRODUCTION

1. I am a Special Agent (“SA”) of the United States Department of Homeland Security, Homeland Security Investigations (“HSI”), currently assigned to the Office of the Special Agent in Charge, Boston, Massachusetts, and have been employed in that capacity for over 16 years. From May 2004 to December 2010, I was assigned to the Document and Benefit Fraud Task Force. From December 2010 until November 2014, I was assigned to the Organized Crime Drug Enforcement Task Force. Since November 2014, I have been assigned to the Counter-Proliferation Investigations Group. During my career, I have been the affiant on numerous affidavits in support of both search warrants and criminal complaints in the District of Massachusetts. I have received specialized training on how to conduct investigations involving the violation of federal law, most recently, involving the illegal exportation of weapons, technology, and other controlled commodities and on the federal criminal statutes that regulate and, in certain instances, prohibit the export of U.S. controlled commodities, including weapons, weapons systems, military equipment and technology. I am responsible for investigating and enforcing violations of the Arms Export Control Act, 22 U.S.C. § 2778, as well as the International Emergency Economic Powers Act, 50 U.S.C. §§ 1701 *et seq.*, and relevant regulations. I have participated in numerous investigations of violations of federal laws related to the unlawful export from the United States of goods and technology restricted for export for reasons of national security and foreign policy, as well as espionage offenses and related illegal activities.

2. As part of my responsibilities, I have conducted national security investigations with other law enforcement agencies, including the Federal Bureau of Investigation (“FBI”) and

Defense Criminal Investigative Service (“DCIS”), involving potential violations of federal criminal laws, including export control and espionage offenses, theft of trade secrets, acting as agent of foreign government without prior notification to the Attorney General, and various other crimes. I have received training and gained experience in search and seizure, intelligence exploitation, and the use of confidential human sources. I am familiar with the use of computers, cell phones, social media, email, and the internet in connection with criminal activity. Additionally, I am familiar with strategies used by foreign adversaries to circumvent U.S. laws.

3. I am currently involved in a joint criminal investigation of GANG CHEN (“CHEN”), a naturalized U.S. citizen of Chinese origin and a professor and researcher at the Massachusetts Institute of Technology (“MIT”). Since in or about 2013, CHEN’s research at MIT has been funded by more than \$19 million in grants awarded by various federal agencies, including the U.S. Department of Defense (“DOD”), the U.S. Department of Energy (“DOE”) and the Defense Advanced Research Projects Agency (“DARPA”). Along with my co-case agents from the FBI, DCIS, the Internal Revenue Service - Criminal Investigation (“IRS-CI”), and DOE’s Office of the Inspector General (“DOE-OIG”), I am investigating CHEN for several violations of federal law, including wire fraud due to his failure to disclose contracts, appointments, and awards from various entities in the People’s Republic of China (“PRC”) in connection with his receipt of federal grant funding from DOE.

4. Since in or about 2012, CHEN has held various PRC contractual appointments designed to promote the PRC’s technological and scientific development, including acting as an “overseas expert” for the PRC government at the request of the PRC Consulate Office in New York (“PRC CONSULATE OFFICE”) and serving as a member of at least two PRC Talent Programs. CHEN has also received numerous monetary awards from various PRC entities, many

of them tied to the PRC government. Since in or about November 2015, for example, CHEN has served as a “review expert” for the National Natural Science Foundation of China (“NNSFC”), which, as described below, operates similarly to federal grant-funding agencies in the United States like the National Science Foundation. In this role, CHEN assessed and reviewed grant applications, helped determine which grants the PRC government would fund, and reviewed the results of PRC funded research. Yet, CHEN never disclosed his work for NNSFC when he applied for grants from DOE or even his employer, MIT. The investigation of CHEN has revealed that he similarly failed to disclose other appointments, contracts, affiliations, and PRC sponsored activities to DOE in connection with his application for, and receipt of, at least one federal research grant. Finally, the investigation has shown that CHEN failed to disclose at least one PRC-based bank account with a balance exceeding \$10,000 to the IRS, as required.

5. I am submitting this affidavit in support of a criminal complaint charging CHEN with: (1) wire fraud, that is, devising a scheme to defraud DOE and causing to be transmitted by means of wire communications in interstate and foreign commerce grant-related documents to DOE containing false statements and material omissions, in violation of 18 U.S.C. § 1343; and (2) willfully failing to file a foreign bank account report (“FBAR”) for the 2018 tax year and making a false statement in Schedule B to his 2018 federal income tax return (IRS Form 1040), in violation of 31 U.S.C. § 5322 and 18 U.S.C. § 1001(a)(2).

6. As described below, based upon the evidence gathered to date in this ongoing investigation, I have probable cause to believe, and I do in fact believe, that CHEN, having devised a scheme and artifice to defraud and for obtaining money from DOE by means of materially false and fraudulent pretenses and representations, transmitted wire communications in interstate and foreign commerce in furtherance of his scheme and artifice to defraud DOE in violation of 18

U.S.C. § 1343, in that CHEN electronically submitted and caused to be submitted grant applications and other documents to DOE that failed to disclose his substantial affiliations, appointments and contractual obligations with the PRC and its government. I also have probable cause to believe, and do in fact believe, that CHEN willfully failed to file an FBAR with the IRS by April 15, 2019, as required, disclosing his interest in a PRC-based financial account with an aggregate value of more than \$10,000 during the 2018 calendar year, in violation of 31 U.S.C. §§ 5314 and 5322; and he made a false statement on Schedule B to his 2018 federal income tax return (IRS Form 1040) when he answered “no” to the question of whether he had “a financial interest in or signature authority over a financial account (such as a bank account, securities account, or brokerage account) located in a foreign country,” in violation of 18 U.S.C. § 1001(a)(2).

7. The information in this affidavit is based upon my training and experience, my personal knowledge of this investigation, and information provided to me by other special agents and law enforcement officials who have assisted in this investigation and have experience investigating counterintelligence national security matters. In submitting this affidavit, I have not included each and every fact known to me about the investigation, but instead have included only those facts which I believe are sufficient to establish the requisite probable cause. As noted below, in preparing this affidavit, among other things, I have reviewed documents and materials found on CHEN’s electronic devices. Where these materials were written in Mandarin, I relied upon translations prepared by linguists employed by the FBI.

RELEVANT LEGAL AUTHORITY

8. Title 18, United States Code, Section 1343 makes it a crime for a person, having devised or intended to devise any scheme or artifice to defraud, or for obtaining money or property by means of false or fraudulent pretenses, representations, or promises, to transmit or cause to be

transmitted by means of wire communications in interstate or foreign commerce any writings, signs, signals, pictures or sounds for the purpose of executing such scheme or artifice to defraud.

9. Title 31, United States Code, Sections 5314 and 5322 make it a crime for a U.S. person to willfully fail to file with the IRS an FBAR (also known as a FinCEN Form 114) for any financial account located outside the United States over which they have an ownership interest if the aggregate value of the foreign account exceeded \$10,000 at any time during the prior calendar year. The FBAR/FinCEN Form 114 is required to be filed by April 15 of the subsequent calendar year and is filed with a person's tax return. For example, I have seen records on CHEN's electronic devices demonstrating that he had at least three accounts at the Bank of China in 2018, and that at least one of these accounts had a balance greater than \$10,000. Therefore, CHEN was required to file an FBAR/FinCEN Form 114 disclosing this account to the IRS by April 15, 2019, which he failed to do.

FACTS SUPPORTING PROBABLE CAUSE

10. Based on my review of CHEN's emails, CHEN's electronic devices, MIT documents, and publicly available information, I believe CHEN entered into numerous contracts with PRC government agencies and has held several undisclosed appointments in the PRC since at least 2012, including acting as an "overseas expert" on science and technology for the PRC government. Through these various undisclosed appointments, CHEN has sought to advance the scientific and technological development of the PRC by providing advice and expertise — sometimes directly to PRC government officials — often in exchange for financial compensation and awards. At the same time, between at least 2017 and 2019, CHEN applied for and obtained a DOE grant in order to fund a portion of his research at MIT. In doing so, CHEN failed to disclose material information about his ongoing affiliations with the PRC as required by DOE. Separately,

CHEN also failed to disclose to the IRS that he owned and had an interest in a bank account in the PRC that had an aggregate value of more than \$10,000 in 2018.

I. CHEN's Background

a. CHEN's Research at MIT

11. CHEN is currently the Carl Richard Soderberg Professor of Power Engineering within the Department of Mechanical Engineering at MIT, where he has been employed as a full professor since 2004. CHEN was a tenured associate professor at MIT from 2001 until 2004. Between July 2013 to June 2018, CHEN was the Head of MIT's Mechanical Engineering Department. CHEN was born and raised in the PRC and first came to the United States in or about 1989. In or about June 2000, CHEN became a naturalized United States citizen.

12. CHEN received his bachelor's and master's degrees from the Power Engineering Department, Huazhong Institute of Technology, in 1984 and 1987, respectively. Located in the PRC, Huazhong Institute of Technology is now called the Huazhong University of Science and Technology ("HUST"). In 1993, CHEN received his Ph.D. from the Mechanical Engineering Department at the University of California ("UC") at Berkeley. From 1993 until 1997, he worked as an assistant professor at Duke University, and from 1997 until 2001 he worked as a tenured associate professor at University of California at Los Angeles ("UCLA"). In 2001, CHEN left UCLA to join MIT's staff as an associate professor. According to CHEN's curriculum vitae, which I have reviewed, MIT's undergraduate and graduate mechanical engineering programs are ranked number one in the world.

13. CHEN also serves as the Director of the MIT Pappalardo Micro/Nano Engineering Laboratory, and the Director of the Solid-State Solar Thermal Energy Conversion Center ("S³TEC") at MIT. Established in 2009, S³TEC is a leading DOE Frontier Research Center

(“EFRC”). EFRCs were established by DOE in order to identify scientific challenges preventing advances in energy technologies by bringing together creative, multi-disciplinary scientific teams. S³TEC’s partner institutions include Boston College, Brookhaven National Laboratory, Northwestern University, Oak Ridge National Laboratory, and the University of Houston.

14. CHEN’s Nanoengineering Group at MIT focuses on nanoscale transport and energy conversion phenomena. This research has applications in energy storage, conversion and utilization. CHEN has made important contributions to the understanding of heat conduction in nanostructures, and his research has advanced a wide range of technologies.

15. Since 2013, CHEN’s research has been funded by approximately \$19 million in federal grants and awards from DOE, DOD, DARPA and other federal agencies. During that same time, CHEN and his research group has received approximately \$29 million of foreign funding, including \$19 million from the PRC’s Southern University of Science and Technology (“SUSTech”).

16. Established by the PRC’s Ministry of Education in 2010, SUSTech is a public research university (*i.e.*, it is funded by the PRC government) located in Shenzhen, Guangdong Province, China. According to publicly available information, SUSTech is a platform the PRC government is using to quickly build an international, high-level research university.¹ In February 2012, SUSTech established its first advisory committee. The committee consisted of five world-class academic experts, including CHEN.

¹ I am aware from my review of documents and publicly available information that SUSTech has attempted to do this partly by using the PRC’s Talent Plans (described below in footnote 4) and recruiting candidates for the PRC’s “Thousand Talents Global Recruitment Program” (also known as the “National Distinguished Expert Program”). Through these PRC Talent Plans, SUSTech has recruited international talent for their science and engineering programs, primarily from the United States. As of March 2018, SUSTech employed approximately 73 National Distinguished Experts and 87 National Distinguished Young Experts.

b. CHEN's Extensive Dealings with the PRC and the PRC Government

17. Based upon my review of e-mails, WeChat messages, and documents found on CHEN's electronic devices, CHEN has had extensive dealings with the PRC and the PRC government since at least 2012. While living in the United States and working for MIT, CHEN has been awarded numerous undisclosed contracts and received several appointments from various PRC government officials and entities, many of which are expressly intended to further the PRC's scientific and technological goals.

18. Ratified by the PRC's National People's Congress in March 2016, the PRC's "13th Five-Year Plan" is a blueprint for the technological advancement of the PRC by the year 2020.² Among other things, this plan identifies particular areas of scientific development that PRC government officials (including, most notably, the former General Secretary of the Chinese Communist Party ("CCP") and current PRC President, Xi Jinping) believe will enhance the PRC's economic prosperity and global standing. I am aware that the general subject matter of CHEN's research at MIT — nanotechnology — was specifically identified in China's 13th Five-Year Plan as a particular area of interest to the PRC government.

² The PRC began implementing Five Year Plans in 1953 in order to align the PRC's economy with top policy goals of technological and economic development. These plans were also used to communicate the directives throughout the Chinese Communist Party.

19. CHEN's efforts to promote the PRC's scientific and economic development and advance its strategic goals were partially detailed in a February 2016 email that CHEN sent himself using his MIT e-mail account. The following is a verbatim list of the items included in CHEN's email:

1. promote chinese collaboration
2. China places innovation (scientific) as key and core not fashion [sic], but because we must do it, from historic trend as well from our stage
3. our economy is no. 2, but from technology (structure of economy) and human resources, we are far from no. 2
4. we are paying big price in environment, not sustainable, as well as from labor cost
5. environment protection and development in same place, environment even higher, clean energy if higher cost, reduce steel, cement. We must count on technology, cannot grow as past
6. communist 18th convention, scientific innovation placed at core. We realize not just independent innovation; but also internationalize to plan for and facilitate. Closed door innovation does not work; innovation as driving force
7. MOST³/government 3 focus; a) basic/fundamental and frontier research; b) difficulty and challenging problems from industry/social, to elevate our industry, c) an ecosystem (law, political, service, culture)
8. for applied: applied basic research, technological innovation, translation to commercialization
9. For basic research, flexibility for scientist
10. Two improvements: natural science and social science intersection (chinese philosophy), we have too much separation between natural and social; ancient china; those who working ideological [sic] part regarded as role, mechanical lower, 2) for challenging, more valuable topics for research; how to convert impossible into possible; more societal impacts, contribute more for people's well being,

I already learnt [sic] at the beginning

Our emphasize [sic] in policy to combine two factors: how to enterpresizes [sic] into major players in innovation, enterprises have more say and more input in scientific innovation; more incentive how to incentivize [sic] mobilize people to innovate; we are totally differently from chaplin era

China international collaboration platform, national science and technology cooperation program, welcoming your faculty and students

³The PRC's Ministry of Science and Technology ("MOST") formulates and facilitates the implementation of strategies and policies for innovation-driven development, and develops policies for science and technology development, including recruitment of foreign talent. MOST is responsible for identifying and supporting international science and technology cooperation projects in specific targeted areas.

How to promote MIT China collaboration, Ambassador ZHANG [PRC's NY Consul General] is here, we should work together, we do share common grants for many things; how to organize scattered activities into a framework...

20. CHEN's dealings with the PRC government appear to date back to at least 2012.

Since that time, among other things, CHEN entered into at least four contracts with various entities within or closely affiliated with the PRC government. The terms of these contracts have entitled CHEN to receive hundreds of thousands of dollars in direct payments and millions of dollars in funding for his research from the PRC in exchange for performing various tasks. The contracts are as follows:

i. As mentioned above, CHEN has served on SUSTech's Advisory Board since approximately 2012. Since that time, CHEN and his research group have benefited from approximately \$19 million in funding from SUSTech.

ii. Beginning in or about November 2015 and continuing until the present, CHEN has served as a "review expert" for the National Natural Science Foundation of China ("NNSFC"). Founded in 1986 by the Party Central Committee and the State Council of China, the NNSFC is managed by the Ministry of Science and Technology of China. I believe that the NNSFC is a governmental agency in the PRC that appears to operate similarly to the United States' National Science Foundation in that it seeks to promote research and advance technological innovation by funding advanced scientific research and other projects for the PRC government. The PRC's Ministry of Science and Technology manages and supervises all NNSFC projects, including all research funded by NNSFC. Based on my review of documents obtained during this investigation, I believe that CHEN played a critical role as a NNSFC "review expert" and participated in project reviews, reviewed research results, and provided his assessment to NNSFC. Furthermore, according

to emails that I have reviewed, NNSFC requested CHEN's bank account information at various times between November 2015 and January 2020. I believe, therefore, that CHEN was compensated for his work for NNSFC.

iii. In or about March 2017, the Zhongguancun Development Group ("ZDG"), a PRC state-owned enterprise funded by the Beijing Municipal Government, awarded CHEN a five-year contract whereby CHEN agreed to provide expertise and assistance in matters of scientific and talent development in the PRC. Initially, ZDG officials wished to identify CHEN publicly and in contract documents as the "ZDG Overseas Chief Scientist." CHEN, however, requested that his title be changed to a "consulting scientist." According to a ZDG "Cooperation Memorandum" and communications found on CHEN's electronic devices, CHEN agreed to be referred to as a "ZDG Overseas Strategic Scientist" in the final contract documents with ZDG. Since 2010, Yu Jun, the secretary of the CCP, has served as the President of ZDG and has directed its operations. I am aware from e-mails and documents that I have reviewed during this investigation that a Consul at the PRC Consulate in New York wrote in an e-mail on or about August 31, 2017 that "there were eight top Chinese scientists, including Gang CHEN who have been formally hired as the first group of ZDG overseas strategic scientists and are working with relevant districts, counties, and industries in Beijing coordinating on project implementation, talent development, and other follow-up matters." ZDG's Chief Operating Officer described the overseas strategic scientist program in which CHEN participated as a way that scientists "can contribute to China's scientific research while in the United States" and this position was a "new option for those scientists who want to serve their country."

iv. On or about November 1, 2017, CHEN was appointed as a consultant and advisor to the “Outstanding Talent Plan”⁴ at the Chongqing No. 2 Foreign Language School in the PRC (“PRC Second Foreign Language School”) for a period of five years. The PRC Second Foreign Language School is a state-owned school managed by local PRC government officials. As part of this arrangement, CHEN agreed to advise the school concerning its educational plans and management and to identify and recommend students for admission to top-tier universities in the United States. According to contract documents that I have reviewed, CHEN was to be paid at least \$355,715 for these services.

21. CHEN has also served in other influential positions and held several other appointments in the PRC. Since at least 2014, CHEN has served as a “4th Overseas Expert Consultant” to the PRC government at the request of the PRC CONSULATE OFFICE. According to documents that I have reviewed, a Consul member at the PRC CONSULATE OFFICE first approached CHEN about becoming a “4th Overseas Expert Consultant” on or about June 6, 2014 so that CHEN would have a “louder voice which can directly go to the Chinese top leaders” and “inspire and impact more with your own fame and experience.” CHEN accepted this appointment. Since that time, his responsibilities have included giving “advice and consultation on China’s scientific and economic development,” recommending individuals to become PRC Talent Program

⁴ I am aware from my review of documents and information I have learned during this investigation that the PRC government has established and used numerous plans collectively known as “Talent Programs” or “Talent Plans” to attract, recruit, and cultivate high-level scientific talent in furtherance of China’s scientific development, economic prosperity, and national security. Implemented in 2008, the “Thousand Talents Plan” is the most prominent Talent Program the PRC Government uses to incentivize individuals engaged in research and development in the United States to transmit their knowledge and research to China in exchange for salaries, research funding, lab space, honorary titles, and other incentives. The Thousand Talents Plan is designed to attract both Chinese nationals overseas and foreign experts to bring their knowledge and experience to China. While participation in a PRC Talent Program is not in and of itself illegal, the failure to disclose an affiliation with a PRC Talent Program in an application for federal grant funding may, as discussed below, violate one or more laws.

members, and providing suggestions to the PRC government for the implementation of “the Plan of Overseas Talents to Serve the Country.”

22. Since at least 2013, CHEN also served as an advisor for the China Scholarship Council (“CSC”). I have learned from the FBI and DCIS case agents involved in this investigation that the CSC was established in 1996 as a non-profit institution by the PRC’s Ministry of Education. The CSC is responsible for the administration of PRC government scholarship programs. It provides scholarship funding for Chinese citizens studying abroad, as well as foreign scholars and students studying in China. The CSC scholarship programs are funded predominantly, if not entirely, by the PRC government. In his capacity as advisor for the CSC, CHEN was asked by CSC officials to recommend — and CHEN did recommend — several students to receive the “Chinese Government Award for Outstanding Students Abroad.”

23. Finally, according to WeChat conversations between CHEN and one of his MIT colleagues found on CHEN’s cellular phone, CHEN was a recipient of both the “Top Talent Wuhan City Partner,” and “3551 Optics Valley Talent Plan” awards in Wuhan, China. I have reviewed documents on CHEN’s devices concerning these awards. Based upon my review of these documents, in or about September 2018, CHEN began serving as a “Wuhan City Partner Outstanding Talent” and was also recognized as a “3551 Optics Valley Talent Plan Overseas Outstanding Talent” member. Under the Wuhan City Partner Outstanding Talent Award, CHEN was entitled to a one-time cash incentive of 2 million RMB (approximately \$283,000). Similarly, under the 3551 Optics Valley Talent Plan award, CHEN was entitled to 10 million RMB resettlement compensation (approximately \$1.4 million). Additionally, according to documents I have reviewed, CHEN’s participation in these two PRC talent programs permitted him to establish a thermal energy storage company in Wuhan, China, and allocated up to 100 million RMB

(approximately \$14 million) for the project.⁵ I have seen communications on CHEN's devices concerning this thermal energy company, including communications with one of CHEN's colleagues at MIT. In one communication, CHEN instructed the colleague to remove any information identifying him (CHEN) as a PRC Talent Plan participant from documents concerning the proposed thermal energy project.

24. According to his travel records, between 2016 and 2019, CHEN made nineteen trips to the PRC and spent a total of approximately 188 days in the PRC. Although I understand that CHEN has family in the PRC, I believe based on my training and experience and the investigation of CHEN that his significant travel to the PRC reflects the fact that CHEN was engaged in substantial professional activities in the PRC during these years.

c. The Border Search and Secondary Inspection of CHEN in January 2020

25. On January 22, 2020, CHEN arrived at Boston's Logan International Airport on a flight from the PRC. Upon his arrival, U.S. Customs and Border Protection ("CBP") conducted a secondary inspection and border search of CHEN and his baggage. The inspection occurred in the baggage claim area in Terminal E.

26. During the interview, among other things, CHEN told CBP that he was a Mechanical Engineering professor at MIT and the "MIT Center Director for Engineering." CHEN stated he had been employed by MIT since 2001 and was part of a collaboration between MIT and SUSTech. CBP asked CHEN about the purpose and subject matter of his trip and his meetings in the PRC. In response, CHEN said that his meetings in China were "a collaboration." CBP asked CHEN what the focus of the collaboration was. CHEN replied by saying, "A collaboration is a

⁵ Based upon the investigation to date, I am not aware of any records indicating that CHEN, in fact, established this company.

collaboration,” or words to that effect. CBP then asked if CHEN did any research or just held meetings during these collaborations. CHEN responded by saying, “All my research is conducted in the United States,” or words to that effect.

27. I have spoken to the CBP officers who questioned CHEN and reviewed their report of the interview. According to CBP, CHEN’s answers were short and curt, and he appeared evasive. During the border inspection, CBP determined that CHEN was in possession of an Apple iPhone, a Huawei cell phone, and an Apple Macbook computer. These items were detained and a cursory search was conducted pursuant to border search authority.⁶ The border search was terminated on or about March 18, 2020, at which point I applied for and obtained a search warrant for the contents of CHEN’s electronic devices.

II. CHEN Fraudulently Obtains U.S. Government Funding

28. On or about March 17, 2017, CHEN e-mailed a proposal for a grant renewal to a contact at DOE, Office of Science (hereafter the “March 2017 proposal”). The March 2017 proposal sought DOE funding to conduct research concerning heat conduction in polymer structures. In a separate email, CHEN also directed MIT’s Office of Sponsored Programs to submit this same proposal to DOE through DOE’s official online application portal.⁷

⁶ The majority of the data on CHEN’s devices appeared to be written in Chinese and the Macbook was encrypted. HSI’s forensic examiner at HSI’s Boston office was unable to decrypt the Macbook despite several attempts. As a result, HSI requested linguistic and technical assistance from the FBI Boston Field Office to assist in reviewing the devices and decrypting the Macbook. The entirety of this process, due to language barriers, encryption issues, and CHEN’s refusal to provide passwords for his devices, resulted in the border search taking approximately 60 days from on or about January 22, 2020 to March 18, 2020. During that 60-day period, investigators were only able to review a very small amount of data and conducted only a cursory examination of the devices. As a result, the Government applied for, and obtained, a Fed. R. Crim. P. 41 search warrant to conduct a more thorough examination of CHEN’s devices. Magistrate Judge Donald Cabell issued that warrant on May 8, 2020.

⁷ In general, grant proposals are officially submitted by a researcher’s institution to the federal funding agency. If the grant is approved, the federal agency disburses the money to the institution named in the grant application.

29. I am aware that the DOE grant application process requires two detailed disclosures from the Project Director/Principal Investigator (“PI”). First, in Appendix 1 to the project narrative, DOE requires PIs to provide a comprehensive biographical sketch containing the following information about the PI: education and training information; research and professional experience with a brief description of all “professional/academic positions;” a list of up to “10 publications most closely related to the proposed project;” a list of no more than five synergistic activities; and a list of “all persons” who have been “collaborators or co-authors” with the PI “on a research project, book, or book article, report, abstract, or paper during the 48 months preceding the submission of this application.” Second, in Appendix 2 to the project narrative, DOE requires PIs to provide a list of all sources of current and pending support, including “all sponsored activities and awards requiring a measurable commitment of effort, whether paid or unpaid,” foreign or domestic. The grant application process also requires the PI to disclose whether the proposed project will involve “activities outside the United States or partnerships with international collaborators.” Among other things, the purpose of these disclosures is to allow DOE to identify instances of duplicative funding (that is, instances where the PI or co-PI is receiving funding for the same or similar research from two or more separate entities), to ensure that the PI has enough time and attention to devote to the proposed DOE-funded research, and to ensure that no one involved in the proposed project has a conflict of interest.

30. I believe that CHEN devised and intended to devise a scheme to defraud DOE by means of false and fraudulent pretenses in that the March 2017 proposal and other grant-related documents submitted and caused to be submitted by CHEN contained false statements and material omissions concerning his PRC appointments, activities, awards, and affiliations. In the March 2017 proposal, for example, CHEN failed to disclose the following: (1) that he was an advisor to

SUSTech; (2) that he was a “review expert” for NNSFC; (3) that he was a “ZDG Overseas Strategic Scientist;” (4) that he was an advisor to the CSC; and (5) that he was a “4th Overseas Expert Consultant” to the PRC government. I have confirmed with DOE officials that, at a minimum, CHEN was required to disclose these activities in Appendix 1 and Appendix 2 to the March 2017 proposal.

31. CHEN also hid most of these affiliations from MIT. MIT requires CHEN to file a Conflict of Interest Disclosure and a report of Outside Professional Activities on at least an annual basis. Specifically, the MIT Conflict of Interest Disclosure form required CHEN to disclose payments in excess of \$5,000 (whether received or expected) from any for-profit or not-for-profit organizations, or from “foreign educational institutions, foreign teaching hospitals or foreign research institutions affiliated with educational institutions.” MIT’s Outside Professional Activity report required CHEN to disclose “all compensated outside professional activities and all uncompensated outside professional activities i.e. requiring substantial time commitment with no, or nominal compensation.” On his May 2017 Outside Professional Activity Report, covering the period of June 2016 through May 2017, CHEN failed to report to MIT (1) that he was a “review expert” for NNSFC; (2) that he was a “ZDG Overseas Strategic Scientist;” (3) that he was an advisor to the CSC; or (4) that he was a “4th Overseas Expert Consultant” to the PRC government. Nonetheless, CHEN did list other entities for which he served as an “advisor” or for which he performed “consulting.” CHEN also failed to make any of these disclosures on his MIT Outside Professional Activity Reports between at least 2013 and 2019, or on his Conflict of Interest Disclosures during the same time period.

32. In or about July 2017, DOE approved CHEN’s March 2017 grant proposal and awarded him (through MIT) additional money bringing the total to \$2,741,639 for his project.

Identified as DOE award DE-FG02-02ER45977, this research project was scheduled to be completed by June 30, 2020. As described above, however, I believe CHEN concealed material facts from DOE in order to obtain this grant. I further believe that had DOE known about CHEN's PRC contracts, awards, activities and compensation, it is likely that DOE would not have made award DE-FG02-02ER45977; or, at a minimum, DOE would have inquired of CHEN regarding his PRC affiliations, contracts and activities before deciding whether to make the award.

33. On or about March 25, 2019, CHEN electronically submitted and caused to be submitted an annual progress report to DOE concerning award DE-FG02-02ER45977 (hereafter the "March 2019 progress report"). This progress report included an updated list of CHEN's "current and pending projects," similar to the information submitted by CHEN in Appendix 2 to the March 2017 proposal. Just like the March 2017 proposal, however, CHEN failed to disclose the above-listed PRC appointments and activities. Additionally, CHEN failed to disclose other PRC appointments that came about *after* the March 2017 proposal, including: (1) CHEN's participation in two PRC talent programs — the "Top Talent Wuhan City Partner" Talent Plan and the "3551 GuangGu Talent Plan" — both of which appear to have entitled CHEN to cash payments and other incentives; and (2) CHEN's contract with the PRC Second Foreign Language School, which entitled him to more than \$350,000 in exchange for working as a consultant and advisor.⁸ Once again, had CHEN disclosed complete and accurate information about his PRC contracts, awards, activities, or compensation, I believe DOE would not have continued to fund award DE-FG02-02ER45977. Alternatively, had CHEN disclosed this information, I believe DOE would have inquired further to ensure that CHEN's work for the PRC government and his other PRC

⁸ CHEN also did not disclose these appointments to MIT on his Conflict of Interest Disclosures or Outside Professional Activity reports.

affiliations did not pose a significant conflict of interest, a conflict of commitment, or other impediment to his DOE-funded work.

34. CHEN also indicated in the March 2019 progress report that DOE award DE-FG02-02ER45977 did not involve any international collaborators. CHEN made a similar averment in the March 2017 proposal, while also indicating that the project did not involve activities outside the United States. I believe that these statements, too, were false.

35. I am aware of two articles published by CHEN and others in scientific journals describing research funded by DOE award DE-FG02-02ER45977. In fact, both articles expressly acknowledge funding from DOE award DE-FG02-02ER45977. One of the articles, published in the *Journal of Applied Physics* in January 2018, was co-authored by scientists at HUST (CHEN's alma mater) and Tongji University, both located in the PRC. In addition to DOE award DE-FG02-02ER45977, this article acknowledges support from the China Scholarship Council and NNSFC grant number 5156062. As described above, CHEN has served as a "review expert" for NNSFC since at least November 2015, and he served as an advisor for the China Scholarship Council beginning in 2013. The other article was published in the *Journal of Applied Physics* in April 2019, and it was co-authored by a scientist at HUST. In addition to DOE award DE-FG02-02ER45977, this article expressly acknowledges support from two NNSFC grants – numbers 5156062 and 51776080.

36. Based on my training and experience and information I have learned from my co-case agents, I believe these articles indicate that CHEN did, in fact, collaborate with PRC scientists and universities, including HUST, with respect to DOE award DE-FG02-02ER45977. According to DOE officials, had this information been disclosed, it would have altered DOE's funding decisions with respect to DOE award DE-FG02-02ER45977 or, at a minimum, caused DOE to

inquire further. CHEN's failure to disclose this international collaboration to DOE, therefore, constitutes a material omission.

III. CHEN Failed to File an FBAR for the 2018 Tax Year

37. Each year, taxpayers with an interest in, or signature authority over, one or more financial accounts in a foreign country with an aggregate value of more than \$10,000 at any time during the prior calendar year are required to file an FBAR (FinCEN Form 114) with the Commissioner of Internal Revenue. In the FBAR, the taxpayer is required to identify, among other things, the name of the financial institution at which the account is held, the account number, and the maximum value of the account during the prior calendar year. At all times relevant to this Complaint, an FBAR was required to be filed with the IRS by April 15th of the year following the year in which the account was maintained.

38. Based on records that I have reviewed on CHEN's electronic devices, I believe CHEN had at least three bank accounts at the Bank of China in the PRC in 2018. As described in detail below, I believe at least one of these accounts had a balance of more than \$25,000. Because the balance of this account exceeded \$10,000 during the 2018 calendar year, CHEN was required to file the FBAR / FinCEN Form 114 with the Commission or Internal Revenue by April 15, 2019. I have learned from the IRS, however, that CHEN did not file an FBAR/FinCEN Form 114 for the 2018 tax year. I believe, however, that CHEN knew of the FBAR/FinCEN Form 114 filing requirement because he had previously filed FBARs with the IRS in both 2013 and 2014 (for tax years 2012 and 2013) disclosing PRC-based bank accounts.⁹

⁹ On or about May 23, 2013, CHEN filed an FBAR indicating that he was the owner of a Bank of China account that had a maximum aggregate value of \$23,506 in 2012. On or about May 9, 2014, CHEN filed an FBAR in which he indicated that he was the owner of a Bank of China account that had a maximum aggregate value of \$30,209 in 2013.

39. Based upon CHEN's substantial business and personal dealings in the PRC, I believe he opened and maintained at least one bank account in the PRC in which he has deposited and kept money paid to him by various PRC entities, including the PRC government. During the search of CHEN's electronic devices, for example, investigators discovered several photographs of a Bank of China ATM screen showing the account balance and partial transaction history of three Bank of China accounts. These photographs each contained dates in 2018, all of which coincide with dates when CHEN (according to his travel records) was in the PRC. The text on the screenshots was written in Chinese and the account balance was represented in RMB, the currency used in the PRC. One of these screenshots reflected a balance in one of the accounts in excess of \$25,000 in 2018. Based upon my training and experience and the fact that these screenshots were found on CHEN's devices, I believe CHEN owned, had an interest in, or otherwise controlled this account. As noted above, however, CHEN never disclosed this account in an FBAR/FinCEN Form 114 to the IRS as required.

40. The investigation of CHEN also entailed an examination of CHEN's tax returns by an IRS-CI Special Agent who is assisting in this investigation. I am aware that CHEN filed a Schedule B with both his 2014 and 2015 personal income tax returns (Forms 1040), which he filed jointly with his wife. Schedule B is a document commonly filed by taxpayers along with their personal income tax returns in order to report income earned through interest and dividends. Schedule B also asks taxpayers to indicate whether they have a financial interest in, or signature authority over, a financial account located in a foreign country and, if so, whether the person is required to file an FBAR/FinCEN Form 114. CHEN indicated on his 2014 and 2015 Schedules B that he had an interest in a foreign account and that he was required to file FBARs for those years.

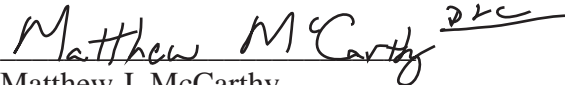
I have confirmed, however, that CHEN failed to file an FBAR for both the 2014 and 2015 tax years.

41. CHEN also submitted Schedules B with both his 2017 and 2018 personal income tax returns. In both documents, CHEN answered “no” to the question of whether he had “a financial interest in or signature authority over a financial account (such as a bank account, securities account, or brokerage account) located in a foreign country.” I believe these answers were false because, as described above, CHEN appears to have owned or had an interest in multiple bank accounts at the Bank of China in 2017 and 2018.

42. On or about June 23, 2020, CHEN timely filed an FBAR/FinCEN Form 114 in which he reported having an interest in an account at the Bank of China with a balance of \$46,400 in 2019. CHEN had previously disclosed this same Bank of China account to the IRS in an FBAR filed on or about May 9, 2014, as referenced in footnote 9. CHEN’s FBAR for the 2019 tax year was filed after CBP questioned CHEN at the border and after CHEN knew that his electronic devices had been detained during the border search. Among other things, those devices contained information and pictures concerning CHEN’s Bank of China accounts he maintained and owned during 2018, which he had failed to report to the IRS when he filed his 2018 tax return, which was due by April 15, 2019.

CONCLUSION

43. Based on the information described above, I have probable cause to believe, and do in fact believe, that CHEN violated 18 U.S.C. §§ 1001(a)(2) and 1343, and 31 U.S.C. §§ 5314 and 5322. Accordingly, I respectfully request that this Court issue a criminal complaint charging CHEN with those crimes.


Matthew J. McCarthy
Special Agent
Homeland Security Investigations

Sworn and subscribed to me via telephone this 13 day of January 2021.


DONALD L. CABELL
UNITED STATES MAGISTRATE JUDGE

