

FILED

FEB 25 2020

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF TENNESSEE  
AT KNOXVILLE

Clerk, U. S. District Court  
Eastern District of Tennessee  
At Chattanooga

UNITED STATES OF AMERICA

v.

ANMING HU

Case No. 3:20-CR- 21

JUDGES Varlan / Poplin

**INDICTMENT**

The Grand Jury charges:

**INTRODUCTION**

At all times relevant to this Indictment unless otherwise indicated:

***NASA's China Funding Restriction***

1. National Aeronautics and Space Administration ("NASA") was a part of the executive branch of the United States government. NASA regularly partnered with U.S. companies and academic institutions to facilitate the development of new technologies to help meet NASA's technology needs.

2. In 2011, Congress passed The Department of Defense and Full-Year Appropriations Act, Public Law 112-10 and the Consolidated and Further Continuing Appropriations Act of 2012, Public Law 112-55. Under these Acts, NASA was prohibited from using appropriated funding to enter into or fund any grant or cooperative agreement of any kind to participate, collaborate, or coordinate bilaterally in any way with China or any Chinese-owned company ("NASA's China Funding Restriction").

3. NASA defined “China or any Chinese-owned company” to include Chinese universities because Chinese universities are considered to be incorporated under the laws of the People’s Republic of China (“PRC”).

*The Defendant and His Employment with the University of Tennessee, Knoxville*

4. Defendant ANMING HU (“HU”) was an Associate Professor in the Department of Mechanical, Aerospace and Biomedical Engineering at the University of Tennessee, Knoxville (“UTK”). UTK hired HU as an Assistant Professor in November 2013. As a faculty member at UTK, HU owed a duty of loyalty and candor to UTK at all times. HU performed research under grants funded by United States Government agencies including the Department of Energy and NASA.

5. Beginning at least as early as 2013 and continuing through the date of this Indictment, HU was also a faculty member at the Beijing University of Technology (“BJUT”), Institute of Laser Engineering in Beijing, China. BJUT was established by the PRC’s Ministry of Education in 1960. The PRC’s Ministry of Education continued to manage BJUT at all times relevant to the conduct described herein.

6. The University of Tennessee had a policy requiring employees to disclose conflicts of interest. The policy required, in part, that employees “take the initiative and report in writing (e.g. memo) to their immediate supervisor any conflicts of interest between their University duties and responsibilities and outside interests.” With respect to University employees engaged in research, the policy required that such employees “must have disclosed outside interests that may be affected by the research before proposals are submitted to funding agencies.”

7. As part of its reporting requirements, UTK required its faculty and staff to submit an Outside Interests Disclosure Form upon initiation of employment and at least annually thereafter. The form required UTK employees to disclose conflicts of interest with respect to outside employment and significant financial interests. Submission of the online form required the employee to certify that they “have read and understand the University’s Conflict of Interest Policy and have made all necessary disclosures.”

***HU’s Affiliation with BJUT***

8. BJUT’s Institute of Laser Engineering maintained a publicly-available website. The website identified HU as a professor at BJUT and HU’s biography portion of the website stated that HU was hired by BJUT in September 2013 as a Distinguished Professor. Under the heading labeled “Contact,” the website provided HU’s BJUT email address.

9. Between March 2015 and January 2020, HU was listed as an author or co-author on at least six published research papers that identified HU as affiliated with BJUT.

10. Between September 2015 and December 2018, HU was identified as the inventor on twelve patent applications filed in China. For all twelve of HU’s patent applications, BJUT was identified as the applicant.

11. On or about April 14, 2014, HU forwarded an email to his UTK email account. This email contained HU’s Beijing Overseas High-Level Talents Program application as an attachment. In the application, HU stated that he signed an employment contract with BJUT and had agreed to work in Beijing two months a year from January 2012 through 2017.

12. On or about December 9, 2014, HU sent an email to a new BJUT researcher. In the email, HU stated, “I would like welcome you to joining ILE, BJUT as a postdoctoral researcher. Please focus on your setting [sic] down with my student, [BJUT student] and

teachers in the Institute office and human resource.” The new BJUT researcher responded, “I am very glad to join your group in Beijing.”

13. On or about November 19, 2015, HU sent an email to a Chinese university employee. HU attached a document labeled “Hu-biography” to the email. This attachment stated, “In 2012 He was appointed as a chair professorship in Institute of Laser Engineering, Beijing Institute of Technology, China.”

14. On or about November 30, 2015, HU sent an email to a researcher in Japan regarding a joint China-Japan project. HU stated, “Currently there is a joint Chinese-Japanese research grant call. It will fund both sides. Are you interested to develop a joint proposal? If yes, I can make the proposal from Beijing University of Technology, where I have a lab and research group.”

15. On or about July 8, 2016, HU sent an email to a Chinese university employee and included three documents as attachments to the email. In the email, HU stated, “please select what you need. there are three CV’s.” One of the attached CVs stated that HU was a distinguished professor as well as a doctoral advisor at BJUT. The other two CVs did not include any affiliation with BJUT.

16. On or about January 16, 2017, HU sent an email to a BJUT professor regarding the acceptance of a PhD student at BJUT. In the email, HU stated, “please find the letter. I will inform the institute of laser engineering that I will accept [PhD student] as a PhD student. She will probably need my cv .... I attached here. You need to add one line: 2011 to current: Professor of Institute of Laser Engineering, Beijing University of technology.” A letter on BJUT letterhead titled, “Supervisor Acceptance Letter for Master/PhD Degree Program Applicants” was attached to the email. The letter stated, “This letter is to invite [PhD student] to join my

research group in Institute of Laser Engineering.” The letter was signed by HU and dated January 16, 2017.

17. On or about January 17, 2017, the BJUT professor referenced in paragraph 16 above, sent an email to the PhD student, copying HU, which stated in part, “Please find your acceptance letter in the attachment. Prof. Hu also ask me to attach you his CV for your application if required. From 2011 to current: Prof. Hu is also Professor at Institute of Laser Engineering, Beijing University of Technology.”

18. On or about May 19, 2017, HU sent an email to a professor at a U.S.-based university that included a recommendation letter for a BJUT student as an attachment. In the recommendation letter, which contained HU’s signature, HU stated in part, “I am a Chair professor in Institute of Laser Engineering, Beijing University of Technology. I have taught special seminars for graduate students in the institute of laser engineering in the past 4 years. I have my own research group including 3 PhD students in the same institute where [BJUT student] studies. My group there is focusing on super-resolution nano manufacturing and printable electronics.”

19. On or about December 1, 2017, a BJUT researcher sent an email to HU apologizing for building optical paths in HU’s cleanroom at BJUT. The BJUT researcher asked HU if the optical paths in the cleanroom could stay. HU responded to the BJUT researcher and stated that optical paths had to be removed. HU stated that his project with the National Natural Science Foundation of China required an optical platform, but since the optical platform at BJUT was too small, HU would continue testing in the United States.

20. On or about February 26, 2018, HU sent an email to an employee at a U.S.-based university. HU stated, “Could you please do me a favor for providing a letter for me? I would

like ask you to backup my application for a short-term visiting professorship in Shanghai University of Engineering Science. I plan to collaborate with professors/students there for the fundamental research on laser applications.... To save your time, i draft a letter for you.” A draft recommendation letter and HU’s CV were attached to the email. The draft recommendation letter, drafted by HU, stated that HU was “a specially appointed chair professor at the Institute of Laser Engineering, Beijing Institute of Technology.”

#### THE SCHEME TO DEFRAUD NASA

21. Beginning in 2016, HU engaged in a scheme to defraud NASA by falsely representing and concealing his affiliation with BJUT to UTK. Through his fraudulent representations and omissions to UTK about his affiliation with BJUT, HU knowingly and willfully caused UTK to falsely certify to NASA and to NASA contractors that UTK was in compliance with NASA’s China Funding Restriction regarding NASA-funded projects that UTK sought and obtained on HU’s behalf. Had HU fully disclosed to UTK his affiliation with BJUT, UTK would not have certified to NASA and NASA contractors that UTK was in compliance with NASA’s China Funding Restriction and NASA would not have awarded NASA-funded projects to HU.

22. It was part of the scheme that HU worked as a professor at BJUT. HU self-identified as a BJUT professor in research publications, patent applications in China, and certain of his curricula vitae (“CVs”). HU also supervised graduate students at BJUT, made and communicated decisions about whether to accept graduate students at BJUT, supervised the operation of a laboratory at BJUT, and worked on projects sponsored by the Chinese government at BJUT, all while also working as a professor at UTK.

23. It was also part of the scheme that HU concealed his affiliation with BJUT from UTK by making fraudulent representations and omissions to UTK. HU falsely represented to UTK that he was not an employee of any organization except for UTK. In addition, HU omitted his affiliation with BJUT from his CV that he used when applying for tenure at UTK in 2018.

***HU's False Representations and Omissions***

24. In January 2016, HU was preparing to submit a proposal to the Jet Propulsion Laboratory at the California Institute of Technology (“JPL”) to work on a NASA-funded project. At all times relevant to this Indictment, JPL was a Federally Funded Research and Development Center operating under a sponsoring agreement between NASA and the California Institute of Technology.

25. The title of HU’s proposal was “Microgravity effects on molten metal flow of rapidly heated new generation nano-braz and traditional braze materials.” In connection with this proposal, HU sought and obtained a letter of commitment from a professor at the National Synchrotron Radiation Laboratory in Hefei, China to collaborate on the project.

26. On or about January 6, 2016, HU sent the signed letter of commitment to a JPL employee, copying two UTK employees.

27. On or about January 12, 2016, a UTK Office of Sponsored Programs employee (“UTK OSP employee”) sent an email to HU suggesting revisions to the proposal. The UTK OSP employee wrote in part, “After these two items have been addressed, I believe we will be ready to obtain the Letter of Commitment/UTK China Assurance document and have all this submitted.” HU responded in part, “For China Assurance: are you talking about the Hefei National Radiation Facilities, right? I include one letter. Does it solve this concerning?” The UTK OSP employee responded in part, “Regarding the China Assurance, NASA requires you to

include a signed document stating you assure you will comply with the Chinese Funding Restrictions.”

28. Later on January 12, 2016, the UTK OSP employee sent an email formally transmitting the proposal on HU’s behalf to JPL, copying HU. The email stated in part:

Lastly, I want to note that we have reviewed the Letter of Commitment provided from Professor [] of National Synchrotron Radiation Laboratory, and it **WILL NOT** be considered an officially-approved UTK document.

The language from the required assurance states:

(4) By submission of its proposal, the proposer represents that the proposer is not China or a Chinese-owned company, and that the proposer will not participate, collaborate, or coordinate bilaterally with China or any Chinese-owned company, at the prime recipient level or at any subrecipient level, whether the bilateral involvement is funded or performed under a no-exchange of funds arrangement.

Therefore, UTK cannot agree to the letter of commitment arrangement provided & still maintain our assurance. We request that the letter not be provided in the main application submission to NASA.

If you have any questions or comments, or I can provide anything further, please let me know.

(emphasis in original).

29. On or about September 15, 2016; October 30, 2017; September 11, 2018; and September 5, 2019; HU completed and submitted a UTK Outside Interests Disclosure Form. On all four, HU made a false representation in furtherance of the scheme to defraud by checking the box corresponding with “No” to the question, “Are you an officer, director, board member, trustee, or employee of any organization or business entity (for-profit or non-profit) other than the university?” Likewise, HU answered this question the same way on UTK Outside Interests Disclosure Forms HU submitted in 2013 and 2015. Although HU had a continuing duty to notify UTK about conflicts of interest, HU failed to correct his false representations on these



2013 and 2015 forms after becoming aware of NASA's China Funding Restriction in January 2016, and thereby furthered the scheme to defraud.

30. In 2018, HU applied for a tenured faculty position with UTK. In connection with his application, HU provided a CV. HU's CV fraudulently omitted any affiliation with BJUT in furtherance of the scheme to defraud. Similarly, HU's CV that he submitted in support of his application to UTK in 2013 also omitted any affiliation with BJUT. In furtherance of the scheme, HU failed to correct this omission after becoming aware of NASA's China Funding Restriction in January 2016.

31. In December 2019, UTK was preparing to submit a proposal on HU's behalf for an NASA-funded project. In connection with this proposal, on or about December 13, 2019, a UTK employee sent HU an email, copying two other individuals. The subject of the email was "NASA Assurance Form," and the email stated in part, "Part of the process of submitting proposals to NASA is that we (UTK) have to provide a Chinese Assurance letter. Our authorized Organizational representative, [UTK employee], signs these document on behalf of UT stating that we do not plan to collaborate, coordinate, or participate with China or any Chinese-owned company on our projects. ... Please read over the letter and let me know if you confirm/not confirm."

32. A document labeled "ChineseAssurance.docx" was attached to the email. The document stated in part:

By submission of its proposal, the proposer represents that the proposer is not China or a Chinese-owned company, and that the proposer will not participate, collaborate, or coordinate bilaterally with China or any Chinese-owned company, at the prime recipient level or at any subrecipient level, whether the bilateral involvement is funded or performed under a no-exchange of funds arrangement.

33. On or about December 13, 2019, HU responded, “i have read through this letter and confirm that I will fully obey the policy.”

*NASA-Funded Projects Awarded to UTK on HU's Behalf*

34. It was also part of the scheme that HU, after having been advised specifically about NASA's China Funding Restriction, continued to seek and was awarded NASA-funded projects. After having been advised of NASA's China Funding Restriction in 2016, HU continued to conceal his affiliation with BJUT from UTK, and knowingly and willfully caused UTK to certify to NASA and NASA contractors that UTK was in compliance with NASA's China Funding Restriction regarding NASA-funded projects UTK obtained on HU's behalf.

JPL Subcontract No. 1560728

35. On or about September 27, 2016, UTK submitted a proposal to NASA/JPL on HU's behalf. The proposal was submitted to work as a subcontractor under the prime contract between NASA and JPL. The title of the proposal was “Nanobrazing stainless steel containers for breaking the chain-of-contact (BTC) Mars Sample Return Mission.” Under the proposal, NASA/JPL would pay \$60,000 for the project.

36. On or about October 20, 2016, the Assistant Vice Chancellor for Research at UTK, electronically signed Subcontract Number 1560728, a JPL “Cost-Reimbursement With An Educational Institution Subcontract” (“Subcontract”).

37. The Subcontract stated that the Subcontract “shall be administered in accordance with the following, which are incorporated by reference and made an integral part of this Subcontract: ‘General Provisions (GPs) Set for Cost Reimbursement without Fee with an Educational Institution Subcontract’ Dated 4/14....” The Subcontract also contained the following statement directly above the signature portion, “The below parties have agreed to the

Subcontract's terms and conditions and to the effective start date." The General Provisions document was 27 pages long and was attached to the Subcontract. NASA's China Funding Restriction was included on page 19 of the document.

38. On or about October 20, 2016, the Subcontract was sent via email from UTK in Tennessee to NASA/JPL in California.

39. On or about November 1, 2016, the Subcontract was signed by a Subcontracts Manager at NASA/JPL.

40. Between on or about February 15, 2017 and February 12, 2018, UTK submitted eleven invoices to NASA/JPL for payment under the Subcontract.

41. For example, on or about February 15, 2017, UTK submitted invoice number 90080002 to NASA/JPL requesting payment of \$7,332.97 under the terms of the Subcontract.

42. On or about March 27, 2017, NASA/JPL wired \$7,332.97 to UTK.

43. On or about March 9, 2017, UTK submitted invoice number 90080450 to NASA/JPL requesting payment of \$7,812.45 under the terms of the Subcontract.

44. On or about April 10, 2017, NASA/JPL wired \$7,812.45 to UTK.

45. On or about July 24, 2017, UTK submitted invoice number 90082670 to NASA/JPL requesting payment of \$11,202.74 under the terms of the Subcontract.

46. On or about August 21, 2017, NASA/JPL wired \$11,202.74 to UTK.

47. The total amount paid by NASA/JPL under the Subcontract was \$59,999. All eleven invoices were signed by a UTK employee and contained the following certification, "I certify that all expenditures reported (or payment requested) are for appropriate purposes and in accordance with the provisions of the application and award documents."

Marshall Space Flight Center (“MSFC”) Cooperative Agreement

48. On or about September 25, 2017, MSFC published a Cooperative Agreement Notice (“CAN”) seeking proposals from U.S. industry and academia to facilitate the development of new technologies to help meet NASA’s technology needs.

49. On or about August 28, 2018, UTK formally transmitted a proposal on behalf of HU to MSFC under the CAN. The title of the proposal was “Printed metallic sensors based on 3D printing and laser sintering of nanoinks.” HU was identified as the Principal Investigator on the project.

50. Under the proposal, NASA would pay \$50,000 for the project. Payments from NASA were to be made in installments based on the completion of five project milestones: completion of Milestone A triggered payment from NASA in the amount of \$20,000; Milestones B and C triggered payment of \$10,000 respectively; and Milestones D and E triggered payment of \$5,000 respectively.

51. On or about November 12, 2018, the Assistant Vice Chancellor for Research at UTK electronically signed the “NASA Grant and Cooperative Agreement” associated with the project. The Agreement contained a provision which stated, “This Award is made under the authority of 51 U.S.C. 20113(e) and is subject to all applicable laws and regulations of the United States in effect on the date of this Award including but not limited to 2 C.F.R. 1800.” The Agreement also included as an enclosure, an 18-page document titled, “Terms and Conditions.” Page 6 of the Terms and Conditions contained NASA’s China Funding Restriction.

52. On or about November 12, 2018, the NASA Grant and Cooperative Agreement was sent via email from UTK in Tennessee to MSFC in Alabama.

53. On or about November 13, 2018, a NASA Grant Officer signed the Agreement and later that day, an MSFC employee emailed the fully executed NASA Grant and Cooperative Agreement to HU and others.

54. On or about July 22, 2019, UTK submitted invoice number 90094841 by wire from Tennessee to NASA in Mississippi via the U.S. Department of the Treasury's Invoice Processing Platform ("IPP") requesting payment of \$20,000 in accordance with completion of Milestone A.

55. On or about August 26, 2019, NASA made payment to UTK via electronic wire in the amount of \$20,000.

56. On or about July 22, 2019, UTK submitted invoice number 90094842 by wire from Tennessee to NASA in Mississippi via IPP requesting payment of \$10,000 in accordance with completion of Milestone B.

57. On or about August 26, 2019, NASA made payment to UTK via electronic wire in the amount of \$10,000.

58. On or about August 30, 2019, UTK submitted invoice number 90095482 by wire from Tennessee to NASA in Mississippi via IPP requesting payment of \$10,000 in accordance with completion of Milestone C.

59. On or about September 9, 2019, NASA made payment to UTK via electronic wire in the amount of \$10,000.

60. On or about August 30, 2019, UTK submitted invoice number 90095483 by wire from Tennessee to NASA in Mississippi via IPP requesting payment of \$5,000 in accordance with completion of Milestone D.

61. On or about September 9, 2019, NASA made payment to UTK via electronic wire in the amount of \$5,000.

62. All four of the UTK invoices submitted to NASA (90094841, 90094842, 90095482, and 90095483) were signed by a UTK employee and contained the following certification:

By signing this report, I certify to the best of my knowledge and belief that the report is correct and accurate, and the expenditures, disbursements, and cash receipts are for the purposes and objectives set forth in the terms and conditions of the above-referenced award/contract. For any Federal award, I am aware that any false, fictitious, or fraudulent information, or the omission of any material fact, may subject me to criminal, civil, or administrative penalties for fraud, false statements, false claims, or otherwise (U.S. Code Title 18, Section 1001, and Title 31, Sections 3729-3730 and 3801-3812).

**COUNTS ONE – THREE**  
**(Wire Fraud – 18 U.S.C. § 1343)**

63. The allegations set forth above in paragraphs 1 through 62 are incorporated herein by reference.

64. From in or about 2016 through the date of this Indictment, in the Eastern District of Tennessee and elsewhere, the defendant, ANMING HU, did knowingly, willfully, and with intent to defraud, devise and intend to devise, and attempt to devise a scheme to defraud NASA, and to obtain money and property by means of materially false and fraudulent pretenses, representations, promises, and half-truths, and concealment of material facts with a duty to disclose.

65. On or about the dates set forth below, in the Eastern District of Tennessee and elsewhere, HU, for the purpose of executing, and attempting to execute, the scheme to defraud, caused to be transmitted by means of wire communication in interstate commerce, certain writings, signs, signals, pictures, and sounds, to wit, the wire communications described below:

COUNT	DATE	DESCRIPTION OF WIRE
ONE	October 20, 2016	Email transmitting the "Cost-Reimbursement With An Educational Institution Subcontract" regarding JPL Subcontract 1560728 from UTK in Tennessee to JPL in California
TWO	November 12, 2018	Email transmitting the "NASA Grant and Cooperative Agreement" from UTK in Tennessee to MSFC in Alabama
THREE	August 30, 2019	Invoice Number 90095483 requesting payment of \$5,000 transmitted from UTK in Tennessee to NASA in Mississippi through the Department of the Treasury's Invoice Processing Platform

Each count a separate offense, all in violation of Title 18, United States Code, Sections 1343 and 2.

**COUNTS FOUR – SIX**  
**(False Statements – 18 U.S.C. § 1001)**

66. The allegations set forth above in paragraphs 1 through 47 are realleged and incorporated herein by reference.

67. On or about the dates set forth below, the defendant, ANMING HU, did willfully and knowingly, and with intent to deceive, cause to be made, materially false, fictitious, and fraudulent statements, representations, and omissions in a matter within the jurisdiction of the executive branch of the Government of the United States, to wit, defendant HU caused UTK to falsely certify to NASA/JPL via submission of the invoices identified below, that UTK was in compliance with NASA's China Funding Restriction. HU caused the certifications contained in the invoices identified below to be false because, as HU then and there knew, HU was affiliated with BJUT and therefore, UTK was not in compliance with NASA's China Funding Restriction.

COUNT	DATE	DESCRIPTION OF FALSE STATEMENT
FOUR	February 15, 2017	UTK submission of invoice number 90080002 to NASA/JPL requesting payment of \$7,332.97 and certifying that the requested payment was for appropriate purposes and in accordance with the provisions of the application and award documents.

FIVE	March 9, 2017	UTK submission of invoice number 90080450 to NASA/JPL requesting payment of \$7,812.45 and certifying that the requested payment was for appropriate purposes and in accordance with the provisions of the application and award documents.
SIX	July 24, 2017	UTK submission of invoice number 90082670 to NASA/JPL requesting payment of \$11,202.74 and certifying that the requested payment was for appropriate purposes and in accordance with the provisions of the application and award documents.

Each count a separate offense, all in violation of Title 18, United States Code, Sections 1001 and 2.

**FORFEITURE ALLEGATIONS**

68. The allegations contained in Counts One through Six of this Indictment are hereby realleged and incorporated by reference as if fully set forth herein for the purpose of alleging forfeiture pursuant to Title 18, United States Code, Section 982(a)(3) and Title 18, United States Code, Section 981(a)(1)(C), as incorporated by Title 28, United States Code, Section 2461.

69. Upon conviction of any offense in violation of Title 18, United States Code, Sections 1343 and/or 1001, the defendant shall forfeit to the United States of America, pursuant to Title 18, United States Code, Section 982(a)(3), and Title 18, United States Code, Section 981(a)(1)(C), as incorporated by Title 28, United States Code, Section 2461(c), any property constituting, or derived from, proceeds obtained, directly or indirectly, as a result of any such violation, including but not limited to, a money judgment in the amount of proceeds derived from any such violation.

70. If any of the property described above, as a result of any act or omission of the defendant: (a) cannot be located upon the exercise of due diligence; (b) has been transferred or sold to, or deposited with, a third party; (c) has been placed beyond the jurisdiction of the Court;



(d) has been substantially diminished in value; or (e) has been commingled with other property which cannot be divided without difficulty; the United States of America shall be entitled to forfeiture of substitute property pursuant to Title 21, United States Code, Section 853(p), as incorporated by Title 18, United States Code, Section 982(b)(1) and by Title 28, United States Code, Section 2461.

A TRUE BILL:

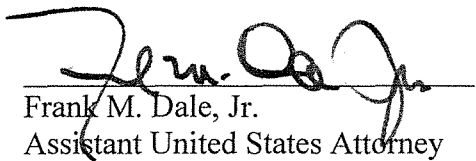
**SIGNATURE REDACTED**

GRAND JURY FOREPERSON

J. DOUGLAS OVERBEY  
UNITED STATES ATTORNEY



Casey T. Arrowood  
Assistant United States Attorney



Frank M. Dale, Jr.  
Assistant United States Attorney

JOHN C. DEMERS  
ASSISTANT ATTORNEY GENERAL



Nathan Charles  
Trial Attorney