

Foreign Interference and Research Integrity: NIH Experience and Advice

Michael Lauer MD

NIH Deputy Director for Extramural Research

91st Meeting of the National Advisory Council for Human Genome Research

Virtual Meeting

September 14, 2020

Disclosures: None



Headlines!

OPINION

University of Florida swiftly addressed foreign research controversy | Column

The university worked with NIH and law enforcement and stemmed the problem quickly, writes the chair of UF's board of trustees.

FOREIGN INFLUENCE

Florida center details fired scientists' links to China

Report finds six cancer researchers didn't disclose Thousand Talents deals

By **Jeffrey Mervis**

THE WALL STREET JOURNAL.

POLITICS | NATIONAL SECURITY

Harvard Chemistry Chairman Charged on Alleged Undisclosed Ties to China

Charles Lieber is accused of lying to Defense Department, National Institutes of Health about Chinese government funding

 **NEWS**

Emory professor hit with criminal charge, linked to Chinese government program

Xiojiang Li was a member of the Thousand Talents plan, a Chinese program that a Senate report last year said was designed to steal sensitive research.

- Undisclosed research support
 - Employment, Thousand Talents contracts
 - Grants from foreign agencies, sometimes duplicate/overlapping
- Undisclosed COI
- Peer review violations
 - Sharing applications

Shadow Laboratories; Undisclosed Chinese Employment and Grant Research Support



National Institutes of Health
Office of Extramural Research

WHAT IS CHINA'S THOUSAND TALENTS PLAN?

The nation's bid to lure back ex-pat scientists and recruit highly-skilled foreign researchers is now in its tenth year.

BY HEPENG JIA

<https://www.nature.com/articles/d41586-018-00538-z>
Nature January 17, 2018



- “To apply, you must already have a **firm job offer from a Chinese institution** ...
- All applicants must have worked at renowned universities outside China
- All applications to the Thousand Talents scheme go through your **Chinese university employer.**”

<https://www.nature.com/articles/d41586-018-00538-z>
Nature January 17, 2018





“China’s most systematic channel for identifying foreign-based non-traditional collectors is its ... Thousand Talents Program (TTP) ... aims to **recruit** leading overseas scientists ... Official Chinese TTP websites list more than three hundred US government researchers and more than six hundred US corporate personnel who have accepted TTP money. **In many cases, these individuals do not disclose receiving the TTP money to their employer, which for US government employees is illegal and for corporate personnel likely represents a conflict of interest that violates their employee agreement.**”

Hoover Institution Press Publication No. 702
Hoover Institution at Leland Stanford Junior University,
Stanford, California 94305-6003

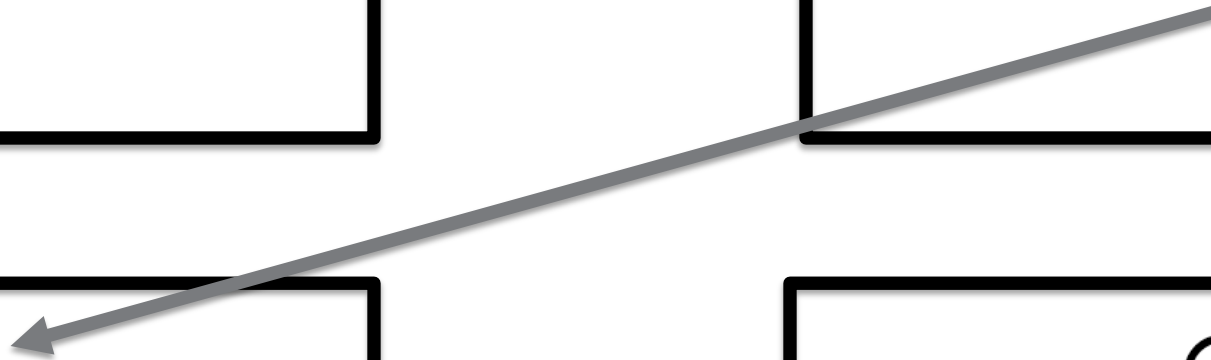
An “Obvious” Question: What is a Recruitment?

American University

Chinese University

American Academic Leader

Chinese Academic Leader

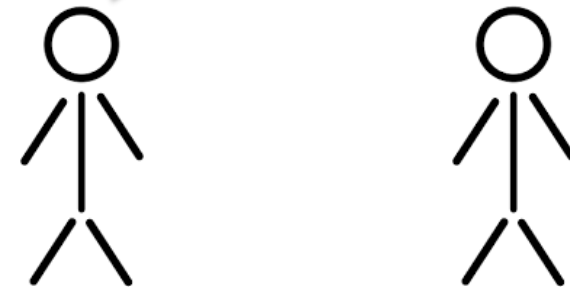


American University

American Academic Leader

Chinese University

Chinese Academic Leader



中共中央组织部

国家“千人计划”入选通知书

中共中央组织部人才工作局
海外高层次人才引进工作专项办公室

The Organization Department of the Central Committee of the Communist Party of China

National “Thousand Talents Program” Shortlisting Notification

To [REDACTED]

After the experts’ review and the approval of the Working Group on the Transfer of High-level Foreign Talents, you are officially shortlisted in Batch [REDACTED] [REDACTED] of the national “Thousand Talents Program.” According to the related provisions, you would enjoy the corresponding working and living benefits and receive a certain amount of financial support after you have performed the work contract.

Notice is hereby given .

[Stamp: Talent Bureau of the
Organization Department of
the Central Committee of the
Communist Party of China]

Talent Bureau of the Organization Department of the
Central Committee of the Communist Party of China

Chinese Academy of Sciences

Employment Contract of "Recruiting Overseas Professionals"



Employer (Party A):



Employee (Party B):



2014

Article 1 Position and Term of Employment

Party A employs Party B as a professor in "Thousand Talents Program" for a period of five years. The employment period is from [REDACTED] 2019. Party B shall work full time at Party A premise as a professor effective from the commencement date of this contract.

2. Job Objectives during the Employment Period:

A. Scientific Research Objectives:

a. The laboratory in the United States will be gradually moved back to China to rebuild, and the international cutting-edge translational medicine will continue to be carried out.

".... The laboratory in the United States will be gradually moved back to China..."

Department of Justice

U.S. Attorney's Office

Northern District of California

FOR IMMEDIATE RELEASE

Thursday, June 11, 2020

Officer of China's People's Liberation Army Arrested At Los Angeles International Airport

Defendant C

SAN FRANCISCO
(PRC) People's L
attempting to dep

Also according to court documents, Wang provided information to CBP that he had been instructed by his supervisor, the director of his military university lab in the PRC, to observe the layout of the UCSF lab and bring back information on how to replicate it in China. CBP received information that Wang had studies from UCSF with him which he was taking to share with his PLA colleagues, and he had sent research to his lab in China via email. Wang similarly told his supervising UCSF professor that he had duplicated some of the work of that professor at the lab in China. Some of the work of the UCSF lab was funded by grants from the United States Department of Health and Human Services, National Institutes of Health (NIH). Wang also wiped his personal phone of WeChat messaging content earlier the morning



①Party A shall provide Party C with a basic start-up research fund with a cumulative amount of RMB 8,000,000. The aforementioned basic start-up research fund shall be used within five (5) year, with the fund for hardware construction being used within three (3) years. The start-up fund shall mainly cover the following expenditures for Party C and his team , such as lab construction, equipments purchase, scientific research, academic exchanges, and salary for research assistants (A minimum of



项目实施3年内（即中期考核时）

Within 3 years of project implementation (i.e. during interim review)

专利产出：

；申请国内专利2-3项。

Patent output:

； and 2-3 domestic patents will be applied.



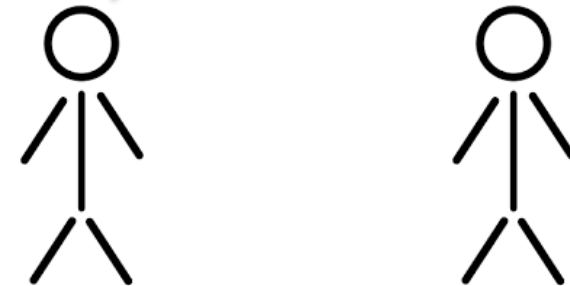
Reminder: Clean Recruitment

American University

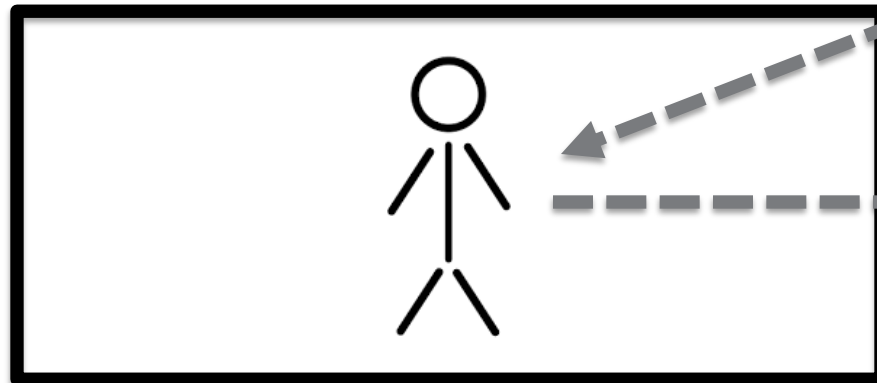
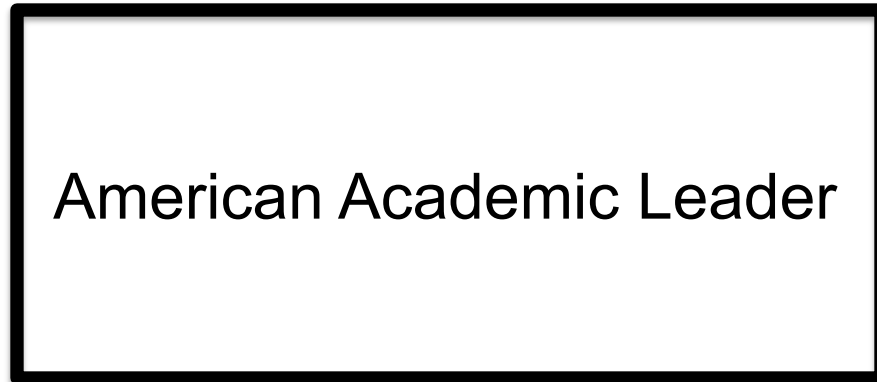
American Academic Leader

Chinese University

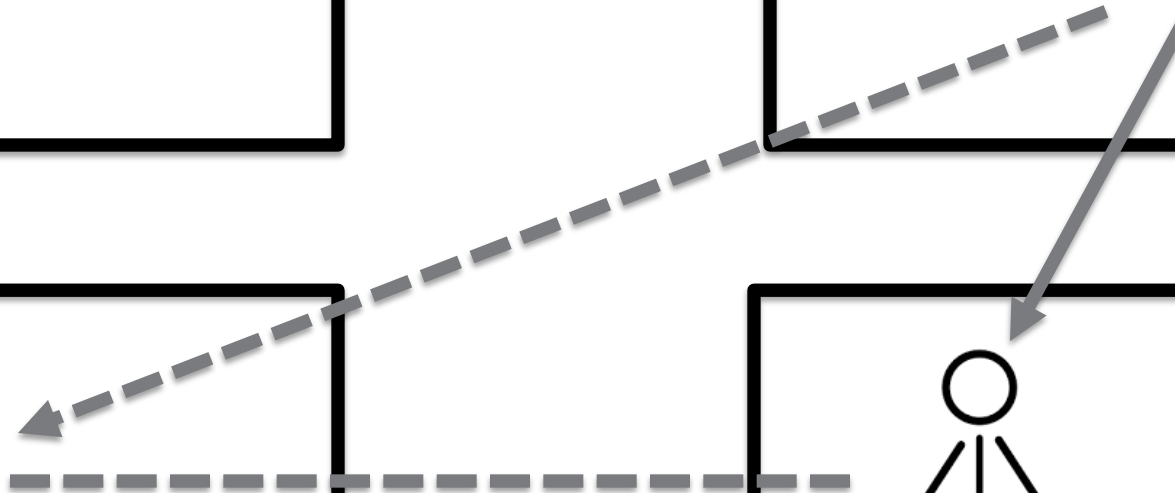
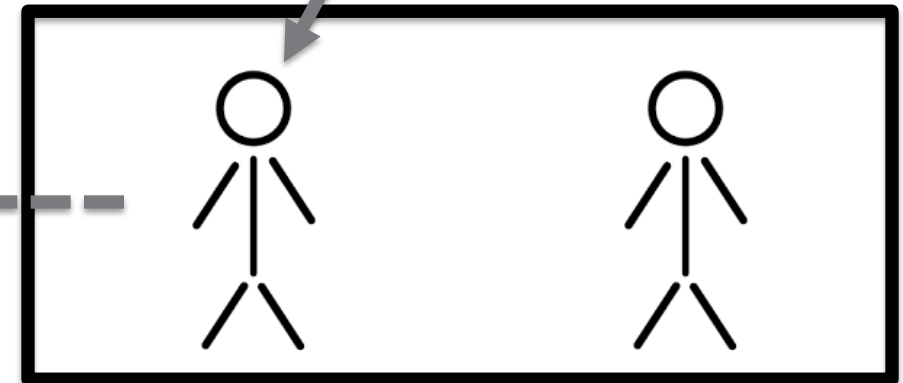
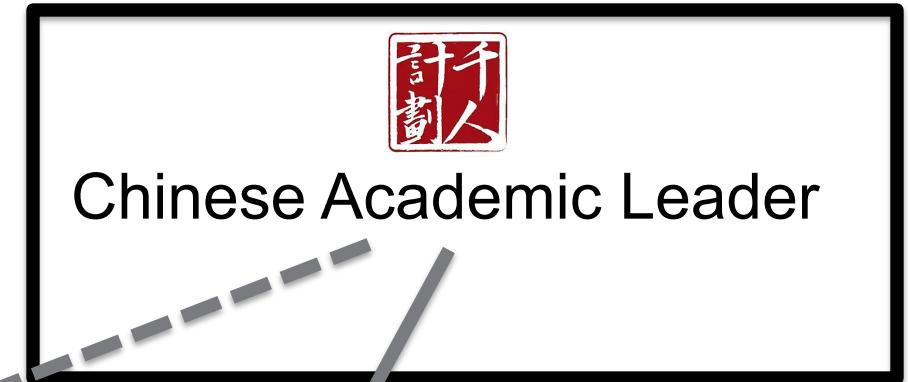
Chinese Academic Leader



American University



Chinese University



US Institutions Unaware of What Their Faculty are Doing

“Dr X – We were unaware of these additional funding sources until the communication from Dr. Lauer at NIH. ... We have obtained translations of these applications / contracts. Regarding the Thousand Talents Program ... you indicated that this was an honor program, comparable to an academic title. It is clear from the contract that this program includes provision of space, staff, & funds for laboratory research and expected research deliverables...”

ORIGINAL

United States District Court
NORTHERN DISTRICT OF GEORGIA

UNITED STATES OF AMERICA

v.

XIAOJIANG LI

CRIMINAL COMPLAINT

Case Number: 1:19-MJ-1007

FILED IN CHAMBERS
U.S.D.C. Atlanta
NOV 21 2019
JAMES N. HATTEN, Clerk
By: *KSa* Deputy Clerk

US Institutions Not Aware ...

22. **Li** certified his effort at Emory University as 100% on 07/22/2015 and 11/18/2015:
- a. On 07/22/2015, **Li** certified 71% of his effort working on federal grants and 29% teaching for the time period of 09/01/2014 through 02/28/2015.
 - b. On 11/18/2015, **Li** certified 75% of his effort working on federal grants and 25% teaching for the time period of 03/01/2015 through 08/31/2015.
23. For 01/01/2015 to 02/28/2015 and 03/01/2015 to 08/31/2015, even though **Li** was in China approximately 60 percent of the time and had a paid position at CAS at that time, **Li** received the following payments—while maintaining a reported FTE of one—from the NIH grants as salary and fringe benefits from Emory University:



Undisclosed Foreign Employment Agreements

- Time commitment – sometimes full-time
- Substantial funding for research (including start-up funds)
- Laboratory, equipment, personnel
- Signing bonus, salary, housing, other benefits
- Deliverables: papers (high-IF), patents/IP, training
- Creates conflicts of commitment, interest

4

THE CANCER LETTER | JANUARY 24, 2020 | VOL 46 | ISSUE 04

REPORT DESCRIBES OFFSHORE ACCOUNTS HELD BY MOFFITT SCIENTISTS INVOLVED IN CH THOUSAND TALENTS PROGR

By Matthew Bin Han Ong



Moffitt's internal investigation: Scientists did not disclose funding from state-sponsored programs in China

On Jan. 17, Moffitt Cancer Center officials delivered the final report of the institution's internal investigation to the Florida legislature, alleging that top leaders and researchers at the cancer center had opened personal bank accounts in China and received unreported personal payments and other research support.



Criminal Implications of “the Money”



United States Department of Justice

THE UNITED STATES ATTORNEY'S OFFICE
NORTHERN DISTRICT *of* GEORGIA

[U.S. Attorneys](#) » [Northern District of Georgia](#) » [News](#)

Department of Justice

U.S. Attorney's Office

Northern District of Georgia

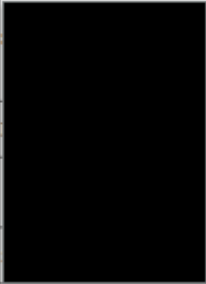
FOR IMMEDIATE RELEASE


Monday, May 11, 2020

Former Emory University professor and Chinese “Thousand Talents” participant convicted and sentenced for filing a false tax return





项目批准号 Project Approval Number	
申请代码 Application Code	
归口管理部门 Centralized Management Department	
依托单位代码 Supporting Unit Code	



国家自然科学基金委员会

National Natural Science Foundation of
China


资助项目计划书


Sponsored Project Proposal



National Institutes of Health
Office of Extramural Research
National Institutes of Health
Office of Extramural Research




项目批准号	
申请代码	
归口管理部门	
依托单位代码	




国家自然科学基金委员会
资助项目计划书

资助类别:
亚类说明:
附注说明:
项目名称:
直接费用:
项目资金:
负责人:
通讯地址:
邮政编码:
电子邮件:
依托单位:
联系人:
填表日期:



.edu.cn



American scientist as team lead

Annual person-months



国家自然科学基金项目计划书

项目组主要成员

编号	姓名	出生年月	性别	职称	学位	单位名称	电话	证件号码	项目分工	每年工作时间(月)
1										10
2										10
3										10

US Grant

- Aim 1: AAAAAA
- Aim 2: BBBBBB
- Aim 3: CCCCCC

Foreign Grant

- Aim 1: AAAAAA
- Aim 2: BBBBBB
- Aim 3: CCCCCC

- NIH is funding grants identical or highly similar to Chinese grants
- Investigators are “double-dipping” – and not disclosing



Department of Justice

FOR IMMEDIATE RELEASE
THURSDAY, DECEMBER 19, 2019
WWW.JUSTICE.GOV

Office of Public Affairs
(202) 514-2007
TTY (866) 544-5309

DEPARTMENT OF JUSTICE REACHES \$5.5 MILLION SETTLEMENT WITH VAN ANDEL RESEARCH INSTITUTE TO RESOLVE ALLEGATIONS OF UNDISCLOSED CHINESE GRANTS TO TWO RESEARCHERS

WASHINGTON — The Department of Justice announced today that Van Andel Research Institute (VARI) has agreed to pay \$5,500,000.00 to resolve allegations that it violated the False Claims Act by submitting federal grant applications and progress reports to the National Institutes

JUSTICE NEWS

Department of Justice

Office of Public Affairs

FOR IMMEDIATE RELEASE

Thursday, May 14, 2020

Former Cleveland Clinic Employee and Chinese “Thousand Talents” Participant Arrested for Wire Fraud

Assistant Attorney General for National Security John C. Demers, U.S. Attorney Justin E. Herdman of the Northern District of Ohio, and FBI Cleveland Special Agent in Charge Eric B. Smith announced a former Cleveland Clinic employee was arrested yesterday without incident by law enforcement and had his initial court appearance today.

Department of Justice

Office of Public Affairs

FOR IMMEDIATE RELEASE

Thursday, July 9, 2020

Researcher Charged with Illegally Using U.S. Grant Funds to Develop Scientific Expertise for China

A rheumatology professor and researcher with strong ties to China has been ordered held without bond to face a charge of grant fraud for not disclosing that he was engaged in a sophisticated scheme to use approximately \$4.1 million in grants from the National Institutes of Health (NIH) to develop China's expertise in the areas of rheumatology and immunology. He is also charged with making false statements about maintaining employment in China at the same time he was employed at universities in the United States, including The Ohio State University.



Undisclosed Financial Conflicts of Interest



Undisclosed \$11.7 Million China-Based Business

广州康睿生物医药科技股份有限公司

GuangZhou KangRui Biological Pharmaceutical
Technology Co.,Ltd.



<https://inewssource.org/2019/07/06/thousand-talents-program-china-fbi-kang-zhang-ucsd/>

LETTER

doi:10.1038/nature14650

Lanosterol reverses protein aggregation in cataracts

Ling Zhao^{1,2,3,*†}, Xiang-Jun Chen^{4*}, Jie Zhu^{3,5*}, Yi-Bo Xi^{4*}, Xu Yang^{6*}, Li-Dan Hu^{4*}, Hong Ouyang^{2,3}, Sherrina H. Patel³, Xin Jin⁶, Danni Lin³, Frances Wu³, Ken Flagg³, Huimin Cai^{1,7}, Gen Li¹, Guiqun Cao¹, Ying Lin^{2,3}, Daniel Chen³, Cindy Wen³, Christopher Chung³, Yandong Wang², Austin Qiu^{3,8}, Emily Yeh³, Wenqiu Wang^{3,9}, Xun Hu¹, Seanna Grob³, Ruben Abagyan¹⁰, Zhiguang Su¹, Harry Christianto Tjondro⁴, Xi-Juan Zhao⁴, Hongrong Luo³, Rui Hou⁷, J. Jefferson P. Perry¹¹, Weiwei Gao^{3,12}, Igor Kozak¹³, David Granet³, Yingrui Li⁶, Xiaodong Sun⁹, Jun Wang⁶, Liangfang Zhang^{3,12}, Yizhi Liu², Yong-Bin Yan⁴ & Kang Zhang^{1,2,3,12,14,15}

Rui Hou⁷Kang Zhang^{1,2,3,12,14,15}

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⁷Guangzhou KangRui Biological Pharmaceutical Technology Company, Guangzhou 510005,

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Peer Review Breaches



Case 3: “Keep this confidential.”

This MD Anderson researcher was alleged to have “emailed an NIH grant application to a scientist based in the People’s Republic of China.”

According to Weber’s report, the researcher “also may have sent at least two NIH grant applications to U.S.-based scientists who were not designated by the NIH to review the material.”

In one instance, the researcher instructed the recipient of the information to “keep it to yourself.”

In another instance, the accompanying note read, “Here is bone and meat [sic] you need.”

On yet another occasion, the researcher sent an NIH grant application to a department within the National Cancer Center/Cancer Hospital Chinese academy of Medical Science. The transmittal email read: “Some methods you may learn from this proposal. Keep this confidential.”

The researcher received all of these applications from NIH legitimately, for the purposes of conducting peer review.

Cancer Letter, April 26, 2019



- At least 196 scientists, not all ethnically Chinese
- 90 institutions, many fields of biomedicine, all over US
- Nearly all in pre-clinical research
- Denials despite documents to the contrary; explanations
 - “I allowed XXX to use my name as PI”
 - “I knew nothing about this grant...”
 - “I didn’t actually do the work...”
 - “The affiliations [in published papers] were in error ...”

NIH Case Work (N=189)

Finding	Number (%)
Undisclosed foreign grant	133 (70%)
Undisclosed talents award	102 (54%)
Undisclosed foreign company	17 (9%)
Undisclosed foreign patent	7 (4%)
Peer review violation	9 (5%)
Any NIH violation	154 (81%)
Violation of institutional rules	70 (37%)
Termination or resignation	54 (29%)
Institutional removal from NIH system	77 (41%)

Preliminary: Subject to change



United States Senate
PERMANENT SUBCOMMITTEE ON INVESTIGATIONS
Committee on Homeland Security and Governmental Affairs
Rob Portman, Chairman
Tom Carper, Ranking Member

Threats to the U.S. Research Enterprise:
China’s Talent Recruitment Plans

STAFF REPORT

PERMANENT SUBCOMMITTEE ON
INVESTIGATIONS

UNITED STATES SENATE



Fundamental Research Security

Contact: Gordon Long – glong@mitre.org

JSR-19-2I

December 2019

DISTRIBUTION A: Approved for public release; distribution unlimited.

JASON
The MITRE Corporation
7515 Colshire Drive
McLean, Virginia 22102
(703) 983-6997



EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF SCIENCE AND TECHNOLOGY POLICY
WASHINGTON, D.C. 20502

September 16, 2019

Letter to the United States Research Community

Dear Colleagues,

As a fellow researcher and former university vice president for research, I know firsthand that the open and internationally collaborative nature of the United States research enterprise has been critical to our success in research, and that this success has underpinned our Nation's prosperity and security. Indeed, the values we cherish as Americans are the ethos of research itself; namely, the freedom to explore new frontiers, the commitment to openness and transparency through the sharing of methods and results, the ability to debate difficult issues thoughtfully and with civility, and the passion to work with and improve the lives of others. By adhering to these values and operating with due regard to principles of integrity – including reciprocity, openness, and transparency – your work has made America the world leader in science and technology. The Nation is indebted to you.

Yet we must not take our research enterprise or its global leadership position for granted. Over the past several years, some nations have exhibited increasingly sophisticated efforts to exploit, influence, and undermine our research activities and environments. As researchers, we must acknowledge the changing geopolitical and international scientific landscape: United States policies and practices must evolve thoughtfully and appropriately to meet current and future challenges. The success of our research enterprise is dependent on *everyone* upholding the principles of research.

Some of those recent efforts to exploit America's research enterprise have come through foreign government-sponsored talent recruitment programs. Historically, researchers at United States institutions could in many cases participate in a talent program and simultaneously receive both foreign and United States government support. Under some circumstances, this may still be acceptable. However, it has become clear that features of some talent programs are unacceptable and inconsistent with our research values and research principles. Breaches of research ethics, both within talent programs and more generally, include the failure to disclose required information such as foreign funding, unapproved parallel foreign laboratories (so-called shadow labs), affiliations and appointments, and conflicting financial interests. Other inappropriate behaviors include conducting undisclosed research for foreign governments or companies on United States agency time or with United States agency funding, diversion of intellectual property or other legal rights, and breaches of contract and confidentiality in or surreptitious gaming of the peer-review process.

Ultimately, these inappropriate behaviors, whether or not they arise through participation in a foreign talent program, interfere with the allocation of Federal funding in a fair manner based on merit. As a result, these breaches of research security and integrity position others to reap the benefits of your hard work without bearing the associated risks or making the investments borne by American taxpayers and other funders. These activities ultimately undermine the integrity of the research enterprise and, thus, our economic and national security.

University Actions to Address Concerns about Security Threats and Undue Foreign Government Influence on Campus

Updated May 2020

AAU and APLU have previously identified and shared effective practices universities are employing to ensure the security of research, protect against intellectual property theft and academic espionage, and prevent actions or activities by foreign governments and/or other entities that seek to exert undue foreign government influence or infringe on core academic values (e.g. free speech, scientific integrity, etc.).

New Concerns: Military, Global Recruitment

#News

Print

Scholars Charged With Lying About Chinese Military Ties

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SEARCH

Featured college pages



By Elizabeth Redden

// July 28, 2020

b. A photo of TANG in a military uniform from the article is attached below. Based upon my training and experience, the uniform she is wearing is consistent with the PLAAF.



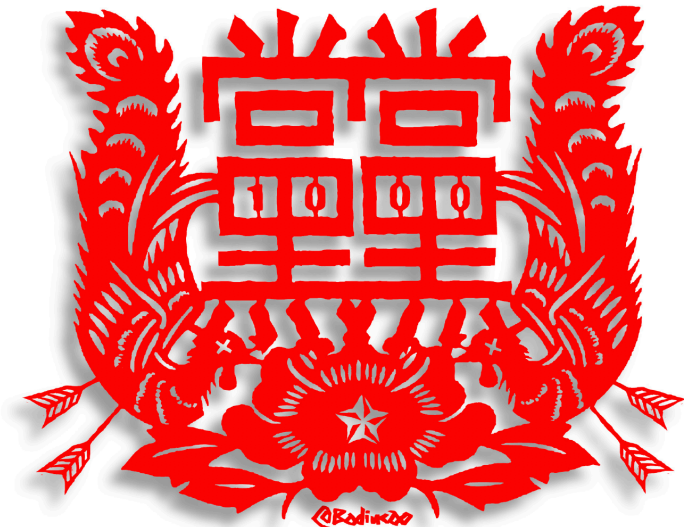
An image from the affidavit in support of a criminal complaint against former UC Davis researcher Tang Juan.

Federal prosecutors last week **announced** visa fraud charges against three visiting researchers and a graduate student from China accused of lying about their affiliations with the Chinese military on their U.S. visa applications.

Hunting the phoenix

The Chinese Communist Party's global search for technology and talent

Alex Joske



Enhancing the Security and Integrity of America's Research Enterprise

The White House Office of Science and Technology Policy

www.whitehouse.gov/ostp
www.ostp.gov
@WHOSTP



Key Point: Encourage but be Transparent

- “While most international collaborations are acceptable **and encouraged**, we urge researchers to err on the side of **transparency**.”
- “It protects everyone’s interests – the Federal government, Penn State, individual researchers, and their international collaborators – to have international relationships **disclosed and vetted** to determine if there are any potential conflict of commitments, duplications of research, and/or diversion of intellectual property in the performance of federally funded research.”



Incomplete Thank You

- NIH
 - Larry Tabak, Carrie Wolinetz, Jodi Black, Patricia Valdez, Sally Amero, Michelle Bulls, Julie Muroff, Kate Tapley, Mike Shannon, Bill Cullen, Liza Bundesen, Megan Columbus, Renate Myles, Katrina Pearson, Rick Ikeda, Jess Mazerik, Nicole Garbarini, Minna Liang, Francesca Bosetti, Tara Schwetz, others
- FBI, DOJ, DNI
 - John Brown, Don Lichay, Tam Dao, Melody Hounsell, Jeff Stoff, John Napier, Jason Vanthomme, John Hartnett, Tim Clifton, Melissa Abbate, others
- Non-federal organizations
 - Wendy Streitz, Lisa Nichols, Sarah Rovito, Toby Smith, Lizbet Boroughs, Ross McKinney, Marcia McNutt, others
- DHHS
 - Michael Schmoyer, Lisa Aguirre, Alisa Hudgens, Les Hollie, Michael Oberlin, Francis Montoya, Justin Bidwell, Jason Scalzo, Adam Layton, others
- State
 - Jonathan Margolis, Andrew Hebbeler, Megan Frisk, Staci Rijal, Riju Srimal, others
- OSTP and other research agencies
 - Rebecca Keiser, Jeremy Ison, Bindu Nair, Helena Fu, Aaron Miles, others
- Dozens of VPRs and institutional compliance / integrity leaders

