Fostering Research Integrity (and Security) Amidst Rapid Technological Changes

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National Institutes of Health (NIH) Deputy Director for Extramural Research Director, NIH Office of Extramural Research

The Future of Research Integrity Conference Office of Research Integrity (DHHS-ORI) University of South Alabama Student Center (Delivered Virtually) May 20, 2024 Disclosures: None



- "Classic" misconduct:
 - -fabrication, falsification, plagiarism
- Professional misconduct :
 - -harassment, discrimination, hostile environment
 - -peer review breaches
 - double-dipping, concealed interests, lies, fraud; sometimes instigated by foreign actors



NIH Perspective





2024 data through May 10, 2024

Session 2: Security, Integrity, AI, Foreign Influence

NATIONAL SCIENCE AND TECHNOLOGY COUNCIL



GUIDANCE FOR IMPLEMENTING NATIONAL SECURITY PRESIDENTIAL MEMORANDUM 33 (NSPM-33) ON NATIONAL SECURITY STRATEGY FOR UNITED STATES GOVERNMENT-SUPPORTED RESEARCH AND DEVELOPMENT

A Report by the

Subcommittee on Research Security

Joint Committee on the Research Environment

January 2022



EXECUTIVE OFFICE OF THE PRESIDENT WASHINGTON, D.C. 20503

February 14, 2024

MEMORANDUM FOR THE HEADS OF FEDERAL RESEARCH AGENCIES

 FROM:
 ARATI PRABHAKAR

 DIRECTOR
 OFFICE OF SCIENCE AND TECHNOLOGY POLICY

 SUBJECT:
 Guidelines for Federal Research Agencies Regarding Foreign Talent

 Recruitment Programs
 Research Agencies Regarding Foreign Talent



Background: Six Years Ago



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



Nondisclosure!

China's Influence & American Interests

PROMOTING CONSTRUCTIVE VIGILANCE



"China's most systematic channel for identifying foreignbased 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

A True Story

The New Hork Times

In a Boston Court, a Superstar of Science Falls to Earth

A jury found the Harvard chemist Charles Lieber guilty of lying to the federal government about his participation in China's Thousand Talents recruitment program.

Give this article
A C 865



Charles Lieber, a Harvard research scientist convicted on Tuesday of lying to the government about his involvement in a Chinese effort to attract foreign-educated scientists, left federal court in Boston last year. Katherine Taylor/Reuters



Published Dec. 21, 2021 Updated Dec. 22, 2021





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November 30, 2018: NIH Query to Harvard University

Questions regarding:

- Thousand Talents Program ("Thousand People Plan")
- Wuhan University of Technology
- Possible overlap
- Possible financial conflicts of interest

From: To: Cc:	Lauer, Michael (NIH/OD) [E] nmcgowan@fas.harvard.edu George, David (NIH/NIBIB) [E]; Liang, Minna (NIH/NIDA) [E]; Waldeck, Tracy (NIH/NIDA) [E]; Black, Jodi (NIH/OD) [E]; Bulls, Michelle G. (NIH/OD) [E]; Ta, Kristin (NIH/OD) [E]; Dean, Diane (NIH/OD) [E]; Amero, Sally (NIH/OD) [E]; Valdez, Patricia (NIH/OD) [E]; Bonham, Valerie (NIH/OD) [E]; Lauer, Michael (NIH/OD) [E]
Subject:	Please acknowledge receipt Failure to disclose outside research support, relevant affiliations, or foreign components
Date: Importance:	Friday, November 30, 2018 5:34:39 AM High

[Confidential]

Date: November 30, 2018

To: Nuala McGowan Senior Director of Research Finance and Compliance Harvard University

- From: Michael S Lauer, MD NIH Deputy Director for Extramural Research Director, NIH Office of Extramural Research
- Re: Failure to disclose outside research support, relevant affiliations, or foreign components

Dear Ms. McGowan:

It has come to our attention that there are issues of potential noncompliance with NIH policies regarding disclosure of outside research support and relevant affiliations or foreign components at Harvard University.

January 10, 2019, Response HARVARD FINANCIAL ADMINISTRATION



January 10, 2019

To: Michael S. Lauer, MD NIH Deputy Director for Extramural Research Director, NIH Office of Extramural Research

From: Jennifer A. Ponting, JD Director, Pre-Award Services Office for Sponsored Programs Harvard University

Re: "Failure to disclose outside research support, relevant affiliations, or foreign components" Email dated November 30, 2018

Dr. Lieber has represented that he is not and has never been a participant in China's "Thousand People Plan."



Thousand Talents Plan Employment contract

"外专千人计划"工作合同书

聘任方:______武汉理工大学_____(简称甲方) 受聘方 "外专千人计划"入选者_Charles M. Lieber(简称乙方)

Employer (Party A): Wuhan University of Technology Employed Foreign Expert (Party B)." One Thousand Talent" Charles M Lieber

为保证"外专千人计划"顺利实施,保障甲乙双方的合法权益, 根据国家有关文件精神和政策规定,经双方平等协商,订立本合同。

Both sides, in line with the principle of legality, fairness, equality, and mutual agreement ,to ensure the implementation of "One Thousand Talent" plan, and to guarantee the legal rights and obligation of both sides , on the basis of Chinese laws and rules concerned ,agree to sign this contract.

第一条 聘期

"外专千人计划"引进人才岗位首次聘期为 三 年,聘期自 2012 年 3 月 1 日至 2015 年 2 月 28 日。聘任期满,经双方协商,可续签 下一期合同。

I. Duration of the Contract

The term of this contract shall be from March 1st,2012 to February 28th,2015. Both parties can sign the new contract through consultation and mutual consent after the contract is upon expiration.

2012 to 2015

\$1.5 million research funding

Salary: \$50,000 per month Living: \$150,000

Work 9 months per year International cooperation projects b. scientific research funding: Party A shall provide Party B ten million Chinese Yuan(10,000,000RMB), during the term of this contract to the construction of new direction and infrastructure construction. Three million Chinese Yuan(3,000,000RMB) among the total amount can be used to the construction of new direction. This total

d. payment and living conditions: Party A shall provide Party B with fifty thousand U.S.Dollars(\$50,000)a month.(before tax). Party A shall provide Party B with one million Chinese Yuan(1,000,000RMB)(after tax)as living allowance which will be paid 1/3 a year for three years in U.S.Dollars.

4. Party B's Obligations

(1). Party B shall observe relevant laws and regulations of the People's Republic of China and the rules and regulations of the university.

(2). Party B shall work for Party A for no less than nine months a year. Including the time he works in WUT or the other ways working for Party A, such as declaring international cooperation projects, cultivating young teachers and Ph. D students, organizing international conference, applying for patents and publishing articles in the name of Party A.

October 2012: Email re Thousand Talents Plan Payments

Before your visit, I would like to talk about one detail in the implementation of the contract of "one thousand talent" high level foreign expert between you and our university. According to the article concerning the payment and living conditions, I want to know the way you prefer to be paid so that everything can be prepared before your coming. I would like to provide two options for you to choose if you do not mind. Option one. I help you open a new bank account in the Chinese Bank named [redacted]. The payment will be put into your account and you can get the payment from the branch of [redacted] in your country. Option Two. I can prepare the payment in cash.

November 7-8, 2012: Bank Account Opened; \$90,000 Issued

Charles M. Lieber Subsidy

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600,000 RMB in total:
  300,000 RMB in bank-card of ICBC; (279330¥ after tax.)
  300,000 RMB in cash;
   It's 279330 RMB after tax, then we exchange them into US Dollars.
      Nov 8^{\text{th}}, 1\$ = 6.2566 \Upsilon,
     279330 \Upsilon = 44,645.65$, Rounded number money 44,700$
```

Exhibit 212 - Receipt from WUT Found in the Defendant's Home in Lexington in 2019

Thousand Talents Salary: Half in Bank Account, Half in Cash

From: Lieber, Charles		
Date: 2014-01-18 07:04		
To: Ligiang Mai (mlq518@gmail.com); mlq@cmlins.harvard.edu forwards to whut.edu.cn		
CC: XIANGFan		
Subject: several items		
Dear Liqiang (& Fan),		
I am writing to touch base on several items prior to my visit near the end of February:		

4. Salary. I would like to receive ~1/2 of salary (for current period) in US dollars, with remainder deposited into the bank account that was set-up. The ~00 that I promised to pay for the party following Lin Xu's Ph.D. defense in April, can be deducted from either ½. Best regards, charlie

From DOJ

"After November 2012 and continuing well into 2015, Lieber received up to \$20,000 in cash each time he visited WUT, in \$100 bills that were enclosed in brown paper packages. An equal amount of money was deposited into Lieber's ICBC account ... According to Lieber, he did not spend the money in his ICBC account, and so the balance grew over time ... When he checked the balance in 2014 it contained approximately \$200,000. Lieber never reported his WUT salary on his tax returns nor did he report his ICBC account to the government as required by law. In his interview with the FBI, Lieber acknowledged that this was 'obviously illegal."

Setting Up an International Cooperation Project

WUT & HARVARD Academic Cooperative Agreement

ACADEMIC COOPERATIVE AGREEMENT between HARVARD UNIVERSITY,USA and WUHAN UNIVERSITY OF TECHNOLOGY, P. R. CHINA

To carry out advanced research and development of nanowire-based lithium ion batteries with high performance for electric vehicles, Department of Chemistry and Chemical Biology of Harvard University in USA and State Key Laboratory of Advanced Technology for Materials Synthesis and Processing of Wuhan University of Technology in P. R. China have agreed to have made an agreement as below.

For and on behalf of HARVARD UNIVERSITY

Charles Michael Lieber, Ph.D.

For and on behalf of WUHAN UNIVERSITY OF TECHNOLGY

Liqiang Mai, Ph.D.

January 2013: Announcing the International Cooperation Project



Founded

Update Time:2013-01-04 10:08:00

January 2013: Announcing the International Cooperation Project (2)



Publication: Primary Affiliation with WUT-Harvard Joint Nano Key Lab



dx.doi.org/10.1021/nl304435z | Nano Lett. 2013, 13, 746-751

From DOJ (2)

"It was not until January 2015 that Harvard first caught wind of the "WUT-Harvard" joint lab. When confronted about the lab by the Dean of Science, Lieber feigned ignorance. He told the Dean that WUT had used Harvard's name without his knowledge or consent ... None of this was true. By that point, Lieber had already been paid hundreds of thousands of dollars by WUT (none of which he reported to the IRS); he had helped found the joint lab with WUT and agreed to serve as its co-director; he had authorized the use of Harvard's name in connection with the lab; and ... he had visited the lab numerous times."

April 2018: Response to Department of Defense Queries

To:Ning Gao[ninggao26@gmail.com]From:Lieber, Charles M.Sent:2018-04-26T10:29:19ZImportance:NormalSubject:CAS linkReceived:2018-04-26T10:29:17Z

Dear Ning,

•

Could you also provide me with the link/info to CAS webpage where I am listed as directing(?) that lab at Wuhan? I lost a lot of sleep worrying about all of these things last night and want to start taking steps to correct sooner than later. I will be careful about what I discuss with Harvard University, and none of this will be shared with government investigators at this time. Best, Charlie

December 2018: Response to NIH Queries

On Dec 2, 2018, at 1:28 AM, Lieber, Charles M. <<u>cml@cmliris.harvard.edu</u>> wrote: Dear Xiaojie,

I was just informed that I am being investigated yet again for 'ongoing' close research association with Wuhan University of Technology (WUT)/L. Mai. This time it is NIH, and they are threatening to not only end my funding (which is most of my research support)

I guess the main reason for this investigation is because you have been hired in the "one thousand talent" program through Whut. I heard many scientists in this program in USA are being investigated by NIH.

Will update you when we found more.

Best, Xiaojie

January 10, 2019, Response HARVARD (Reminder)

January 10, 2019

To: Michael S. Lauer, MD NIH Deputy Director for Extramural Research Director, NIH Office of Extramural Research

From: Jennifer A. Ponting, JD Director, Pre-Award Services Office for Sponsored Programs Harvard University

Re: "Failure to disclose outside research support, relevant affiliations, or foreign components" Email dated November 30, 2018

Dr. Lieber has represented that he is not and has never been a participant in China's "Thousand People Plan."



From Sentencing Memo

"While Lieber's participation in TTP was not itself illegal, his chronic lies to the U.S. government were. Lieber purposely—and repeatedly—lied to government agents about his ties to WUT and TTP in response to direct, unambiguous questions; and he purposely concealed from tax authorities the hundreds of thousands of dollars paid to him ..."



Justice.gov > U.S. Attorneys > District of Massachusetts > Press Releases > Former Harvard University Professor Sentenced for Lying About His Affiliation with Wuhan University of Technology; China's Thousand Talents Program; and Filing False Tax Returns

PRESS RELEASE

Former Harvard University Professor Sentenced for Lying About His Affiliation with Wuhan University of Technology; China's Thousand Talents Program; and Filing False Tax Returns

Wednesday, April 26, 2023



For Immediate Release

U.S. Attorney's Office, District of Massachusetts

Another True Story ... Hot Off the Press

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Cleveland Clinic to Pay Over \$7 Million to Settle			
Allegations of Undisclosed Foreign Sources of			
Funding on NIH Grant Applications and Reports			
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- Global interest in rapid technological advancement
- Foreign interests instigating deceit, false statements, double-dipping, concealed financial interests
- Flows of knowledge, know-how, and money
- Hiding behind distance, borders, language
- Two out of > 200 similar stories
- Though case-load down, worries continue



Institutional Oversight (MIT)

POLICY FORUM

RESEARCH SECURITY

Managing United States–China university relations and risks

US universities must proactively address potential concerns

By Richard Lester¹, Lily Tsai², Suzanne Berger², Peter Fisher³, M. Taylor Fravel², David Goldston⁴, Yasheng Huang⁵, Daniela Rus⁶

Science, April 21, 2023 https://www.science.org/doi/epdf/10.1126/science.adg5619 "Not to participate in Chinese talent recruitment programs that are designed to transfer US technology to China"

Other New Worries





https://www.economist.com/science-and-technology/2024/02/01/ai-could-accelerate-scientific-fraud-as-well-as-progress

- Rapid technological changes, global challenges
- Research security, research integrity overlaps
- Involve improper flows of money and information
- Tensions between:
 - US government and US research institutions
 - US research institutions and their faculty / staff
- Need to address concerns proactively and cooperatively



From 1999 NSTC Report on renewing the Government – University partnership: "The ethical obligations entailed in accepting public funds and in the conduct of research are of the highest order and recipients must consider the use of these funds as a trust. Great care must be taken to 'do no harm' and to act with integrity. The credibility of the entire enterprise relies on the integrity of each of its participants."



https://clintonwhitehouse5.archives.gov/WH/EOP/OSTP/html/rand/downloadrpt.html