

THE CHINA INITIATIVE

THE DEPARTMENT OF JUSTICE RESPONDS TO ECONOMIC AGGRESSION BY THE CHINESE GOVERNMENT AND OTHER NATIONAL SECURITY THREATS Adam S. Hickey



PRC THREATS TO ACADEMIA

1) Theft of trade secrets, sensitive (controlled) technology, and other intellectual property

2) Influence that compromises the free and open exchange of ideas





ECONOMIC ESPIONAGE IN THE U.S.

- About 80% of all federal economic espionage prosecutions have alleged conduct that would benefit the Chinese state.
- About 60% of trade secret theft cases have had some nexus to China.





WHAT HAS CHINA STOLEN?





THE PRC'S TECHNIQUES





TALENT PROGRAMS

- Started by PRC government in 2008.
- The PRC government funds above-market salaries, advanced research facilities, and bestows titles and prestige to lure experts to China.



- Approximately 7,000 Chinese scientists have returned to China under the program.
- While association with a Talent Program is not illegal, it can create incentives to steal, violate export controls, or (at a minimum) a conflict of interest.
- Ask employees, partners, consultants if they are participating.



U.S. v. Zhou, Chen



- Defendant spouses were employed as **researchers** at Nationwide Children's Hospital (NCH) for approximately ten years.
- Defendants researched exosome isolation, which plays a key role in the research, identification, and treatment of a range of conditions, including cancer.
- Zhou developed a novel method of exosome isolation which NCH could use for treatment.
- But Zhou and Chen founded a Chinese company to monetize the technique Zhou developed, using intellectual property that belonged to NCH.
- The defendants were paid more than **\$800,000** for NCH's intellectual property.
- Zhou, Chen charged with conspiracy to steal trade secrets, and other offenses.



U.S. v. Bo Mao



- The Victim Company (VC) is a leader in the field of open-channel controller technology for solid state hard (SSD) drives.
- Bo Mao was a **professor at a PRC university**, and later became a **visiting professor** at a Texas university; at the same time, Bo Mao was also working for Company 1, a **competitor of VC**, which was seeking VC's technology.
- While in the PRC, Bo Mao was collaborating on research with a colleague in Texas and sought access to the VC's technology, ostensibly for research purposes; the VC provided access to its technology to Bo, who agreed to the VC's restrictions on its IP
- Company 1 was directing Bo's research on the Victim Company's technology; evidence indicates that Bo, or someone else, was attempting to **reverse-engineer** the technology.
- Bo charged with wire fraud.



PRC Universities Benefit From Theft

- PRC nationals Hao Zhang and Wei Pang charged in a thirty-two count indictment which charged six individuals with economic espionage and theft of trade secrets for their roles in a long-running effort to obtain U.S. trade secrets for the benefit of universities and companies controlled by the PRC government.
- Zhang and Pang met at a **university in Southern California** during their **doctoral studies** in electrical engineering, where they conducted **research that was funded by DARPA.**
- Zhang and Pang used stolen IP to obtain professorships at Tianjin University, a leading PRC Ministry of Education school.
- The stolen trade secrets, converted through a **joint venture** in the PRC, enabled Tianjin University to construct and equip a state-of-the-art facility in the PRC statesponsored Tianjin Economic Development Area, and to obtain commercial and military contracts.



THE PRC GOVERNMENT EXPLOITS ACADEMIA

- In September 2019, a PRC government employee, Zhongsan Liu, who was living in New Jersey, was arrested for a **conspiracy to commit visa fraud**.
- Liu entered the United States in 2017 to work for the China Association for International Exchange of Personnel (CAIEP), controlled by the PRC's State Administration of Foreign Experts Affairs (SAFEA), which is responsible for the recruitment and certification of overseas talent and experts to work in China, and for organizing overseas training for Chinese technical professionals.
- Liu worked to **further the PRC's objectives** by recruiting U.S. experts for projects and positions in China, certifying U.S. universities as **SAFEA** training institutes, and participated in S&T conferences which provided opportunities for recruitment.
- Liu helped obtain a J-1 visa for a PRC government employee to enter the United States, purportedly to study at a university in Georgia, when in fact this employee was going to work for **CAIEP**, in New York, to recruit in the U.S., and not conduct academic research.



WHAT SHOULD BE PROTECTED?

0	Increased Sensitivity/Increased Restrictions			
The spectrum of university research	Fundamental University Research	Restricted University Research	Industry Research	Classified Research
Publication restrictions?	Freedom to publish without prior approval	Prior approval needed to publish	Prior approval needed to publish	Publication generally not possible
Employee NDAs?	Rarely or never	Sometimes	Typically	Required for clearance
Customer expectations re: dissemination?	Unlimited dissemination	Restricted dissemination	Restricted dissemination	Highly restricted dissemination
Subject to export controls?	No, excluded by definition	Often	Often	Almost always
Special IT/physical security measures?	No; best practices	Often required by contract; e.g. NIST 800-171	Often required by contract; e.g. NIST 800-171	Yes; NISPOM and related rules



BEST SECURITY PRACTICES

- Awareness building and communications
- Coordination within institution
- Training of faculty and students about threat and obligations
- Review of foreign gifts, grants, contracts, and collaborations
- Review of faculty and student foreign financial interests and affiliations
- Protection of data and cybersecurity

- Protection of IP and use of technology control plans
- Regular interactions with federal security and intelligence agencies
- Foreign travel safeguards and protections
- Vetting of international visitors and students
- Export control compliance program

CHINESE STUDENT AND SCHOLARS

 CSSAs were established to provide on-campus support to overseas Chinese students abroad; most of the activities <u>do not</u> present a threat.



- Some chapters in the U.S. have reportedly received funding from the Chinese Communist Party (CCP) and/or have direct links to the Chinese government. In certain instances, those connections have reportedly been leveraged to chill academic freedoms.
- In one notable instance, a CSSA chapter publicly criticized a Chinese graduation speaker at a U.S. school who had praised the "*fresh air of free speech*" and democracy in the U.S. and had criticized the Chinese government; the speaker later apologized and asked for "*forgiveness*" and according to reports, the CSSAs response was praised by a Chinese Embassy official.



THE BIG PICTURE

Post-WWII Order	China's World Order	
 World Bank, International Monetary Fund 	 China-led Asian Infrastructure Investment Bank (AIIB), One Belt One Road 	
 Peaceful settlement of international disputes, e.g. Convention on Law of the Sea (CLOS), UN 	 Rejection of CLOS ruling on the South China Sea, increased use of UN veto power 	
 Open shipping, international navigation rights 	 Unilateral claims to the South China Sea, constructing and militarizing artificial islands 	
 Free and fair trade 	 Price dumping, massive economic espionage, currency manipulation, disputes over WTO 	
Free enterprise	 State-owned enterprises, politicians as major stakeholders, tight political control 	
 Global spread of multiparty democracies with free and fair elections 	 One-party state 	
 Religious freedom 	 Repression of Falun Gong, Uighurs, Dalai Lama, Christian churches, and other religious minorities 	
 Press freedom, Internet freedom 	 State-controlled media, the Great Firewall of China, 50 Cent Army 	