Concerns over national security and science have existed prior to the Cold War. 9/11 created new concerns about who is conducting research on campuses. Since that time, universities have become more vigilant over security of research facilities and research programs and taken additional measures to ensure compliance with rules relating to export controls, dual use research, and classified information. Additionally, foreign students and faculty now face stricter scrutiny from the federal government before they are admitted into the U.S.

Key Terms and Background Information

Federal Security Agency Briefs

Relevant Reports

Tools, Experts, and Compliance Resources

Case Study Examples Involving Security Concerns
Key Terms and Background Information

**Export Controls:** seek to control access to specific types of technology and the associated data and services. A *deemed export* is the export or release of information about a “controlled technology” to a foreign national in the U.S. or abroad for which a government export license is required.

Many universities have designated staff such as security officers and/or export control officers to comply with the export control laws and regulations. Three government organizations have jurisdiction for enforcement of export controls:

- Bureau of Industry and Security, U.S. Department of Commerce - oversees the Export Administration Regulations (EAR) which control dual-use technology on the Commerce Control List (CCL).
- Directorate of Defense Trade Controls, U.S. Department of State – oversees the International Traffic in Arms Regulations (ITAR) which controls items designed and developed for military use on the U.S. Munitions List.
- Office of Foreign Assets Controls in the Department of Treasury controls interactions with nations in which the U.S. has trade embargos, e.g. Cuba, Iran, Syria, North Korea, Myanmar and Sudan.
- More: [Export Controls: ITAR and EAR; DOJ's China Initiative](#)

**Fundamental Research Exclusion:** Excludes most campus-based research at U.S. universities from export controls. Applies to: unrestricted publicly available technology and software arising during or resulting from fundamental research undertaken at U.S. universities where the resulting information is ordinarily published and shared broadly.

**Deemed Exports:** Deemed exports was added to the export regulations in 1994 and is the export or release of information about a “controlled technology” to a foreign national in the U.S. or abroad for which a government export license is required. Defines “Technology” as specific information necessary for the “development”, “production”, or “use” of a product.

**National Security Directive (NSDD) 189:** Issued in 1985 by the Reagan Administration and reaffirmed in November 2001 by then-National Security Advisor Condoleezza Rice, established a “fundamental research” classification as the appropriate means for protecting national security while encouraging necessary research. Declared fundamental research should remain unrestricted.

- More: [Secretary Condoleezza Rice’s 2001 reaffirmation of NSDD-189](#)

**Controlled Unclassified Research (CUI):** Established by Executive Order 13556, the Controlled Unclassified Information (CUI) program standardizes the way the Executive branch handles unclassified information that requires safeguarding or dissemination controls pursuant to and consistent with law, regulations, and Government-wide policies.

- More: [CUI Categories; Official CUI Policy Documents; Additional Background Documents](#)
**Dual Use Research of Concern (DURC):** Life sciences research that, based on current understanding, can be reasonably anticipated to provide knowledge, information, products, or technologies that could be directly misapplied to pose a significant threat with broad potential consequences to public health and safety, agricultural crops and other plants, animals, the environment, materiel, or national security.

**2010 DOD Memo on Fundamental Research Policy:** Signed by then Under Secretary of Defense Ashton Carter, provides clarifying guidance and reinforces earlier guidance, to ensure DOD will not restrict disclosure of the results of fundamental research, unless such research efforts are classified for reasons of national security or as otherwise required by applicable federal statutes, regulations, or executive orders.

**Classified Research and Information, Presidential Executive Order 13526:** 2009 Executive Order signed by President Obama that prescribes a uniform system for classifying, safeguarding, and declassifying national security information, including information relating to defense against transnational terrorism.

**Additional Background Reading Material**

**Federal Security Agency Briefs**
- “Academic Engagement Report on China PLA,” FBI (June 2020)
- “China: Risks to Academia,” FBI (March 2019)
- “Huawei,” FBI (March 2018)
- “Preventing Loss of Academic Research,” FBI (June 2015)
- “Chinese Talent Programs,” FBI (Sept. 2015)
- “Foreign Visits,” Defense Security Service and National Counterintelligence and Security Center
- “Academic Solicitation,” Defense Security Service and National Counterintelligence and Security Center
- “How China Operates on Campus,” National Counterintelligence and Security Center (NCSC)
Science and Security Resources
continued

Relevant Reports

Association Reports


China & U.S. Higher Education

- “America Challenges China’s National Talent Programs,” Center for Strategic and International Studies (CSIS), May 2020.
  - Summary of Report Recommendations for Universities

Confucius Institutes


Federal Research Agencies

Science and Security Resources

continued

• “Opportunities Exist for the NIH to Strengthen Controls in Place to Permit and Monitor Access to Its Sensitive Data,” NIH Office of Inspector General, February 2019.

Export Controls

International Perspectives
• “Guidelines to Counter Foreign Interference in the Australian University Sector,” University Foreign interference Taskforce, November 2019.
• “Picking Flowers Making Honey,” The Australian Strategic Policy Institute, October 2018.

Tools, Experts, and Compliance Resources

AAU-APLU Effective Practices Summary: 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.).

Updated May 2020
Science and Security Resources

continued

Science and Security Experts List: List developed by AAU of experts who can speak to various science and security topics including: China, Export Controls, and National Security and Technology Policy. Updated October 2019.


Department of Commerce Bureau of Industry and Security (BIS) ‘Entities’ List: List of names of certain foreign persons – including businesses, research institutions, government and private organizations, individuals, and other types of legal persons – that are subject to specific license requirements for the export, reexport and/or transfer (in-country) of specified items.

More: CSIS Backgrounder on Understanding the Entities List

Current Security Controls of Research: Includes a list of current federal regulations, security requirements, and agency contract clauses that control university research. The chart was compiled by COGR.

Categories of Controlled Unclassified Information (CUI): NARA’s comprehensive listing of the 122+ CUI categories that currently exist.

Technology Alert List (TAL): The list was created by the federal government in 2000 as a guideline for consular officials to use in reviewing visa applications. The purpose of this guideline is to prevent the export of "goods, technology, or sensitive information" through activities such as "graduate-level studies, teaching, conducting research, participating in exchange programs, receiving training or employment..."

More: Visas Mantis & Extreme Vetting

Case Study Examples Involving Security Concerns
DOJ Indictments & Verdicts

• “Former Emory University Professor and Chinese “Thousand Talents” Participant Convicted and Sentenced for Filing a False Tax Return,” May 11, 2020
• “University of Arkansas Professor Arrested for Wire Fraud,” May 11, 2020
• “Former Cleveland Clinic Employee and Chinese “Thousand Talents” Participant Arrested for Wire Fraud,” May 14, 2020
• “Former West Virginia University Professor Pleads Guilty to Fraud that Enabled Him to Participate in the People’s Republic of China’s “Thousand Talents Plan,” March 10, 2020
• “Researcher at University Arrested for Wire Fraud and Making False Statements About Affiliation with a Chinese University,” February 27, 2020
• “Harvard University Professor and Two Chinese Nationals Charged in Three Separate China Related Cases,” January 28, 2020
  ○ “Affidavit in Support of Application for Criminal Complaint,” January 28, 2020
• “Department of Justice Reaches $5.5 Million Settlement with Van Andel Research Institute to Resolve Allegation of Undisclosed Chinese Grants to Two Researchers,” December 19, 2019
• “Chinese National Who Worked at Monsanto Indicted on Economic Espionage Charges,” November 21, 2019
• “Chinese National Sentenced to 40 months in Prison for Conspiring to Illegally Export Military-and Space-Grade Technology from the United States to China,” October 18, 2019
• “Couple Who Worked at Local Research Institute for 10 Years Charged with Stealing Trade Secrets, Wire Fraud,” September 16, 2019
• “Chinese Government Employee Charged in Manhattan Federal Court with Participating in Conspiracy to Fraudulently Obtain U.S. Visas,” September 16, 2019
• “Former Virginia Tech Professor Sentenced for Grant Fraud, False Statements, Obstruction,” September 9 2019
• “U.S. Files Criminal Charges Against Chinese Professor Linked to Huawei,” The Wall Street Journal, September 9, 2019
• “University of Kansas Researcher Indicted for Fraud for Failing to Disclose Conflict of Interest with Chinese University,” August 21, 2019
• “Electrical Engineer Convicted of Conspiring to Illegally Export to China Semiconductor Chips with Missile Guidance Applications,” July 2, 2019
• “U.S. Nuclear Engineer Sentenced to 24 Months in Prison for Violating the Atomic Energy Act,” August 31, 2017
• “Manhattan U.S. Attorney and FBI Assistant Director-in-Charge Announce Criminal Complaint Against Three New York-Based University Researchers for Conspiring to Receive Bribes From a Chinese Company and a Chinese Government-Supported Research Institute,” May 20, 2013
• “Defendant Charged With Attempting to Damage a Protected Computer,” April 11, 2013