Research Security

April 24, 2024

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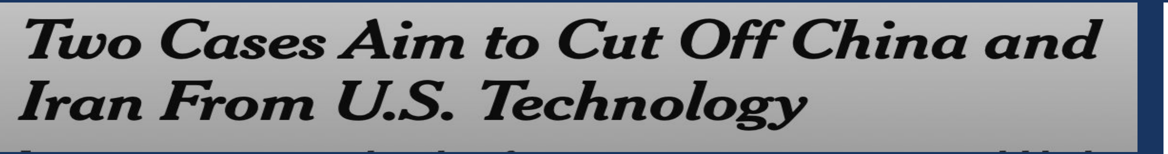
International Partnerships and Collaboration

International collaboration is essential to Berkeley’s outstanding research, bringing together diverse perspectives, enabling large-scale scientific experiments, improving understanding across cultures, and addressing some of the most challenging global problems.

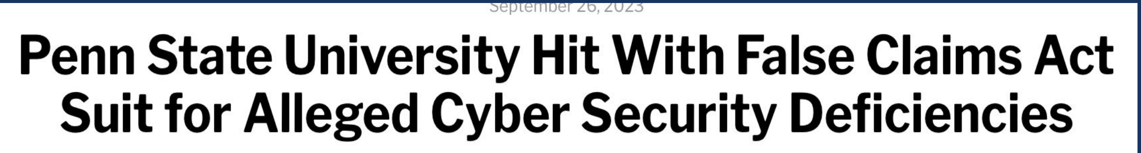
International Partnerships and Collaboration

Our goal is to support and encourage these partnerships while ensuring the safety and security of our researchers, data, equipment, and intellectual property in compliance with university and federal policy.

Universities under the microscope

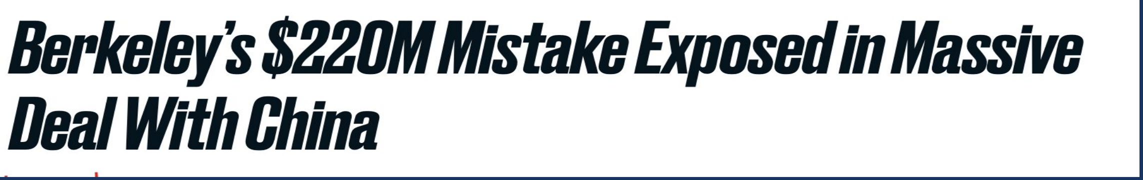


Two Cases Aim to Cut Off China and Iran From U.S. Technology

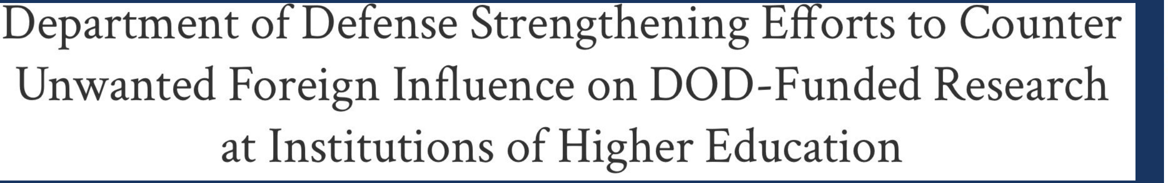


September 26, 2023

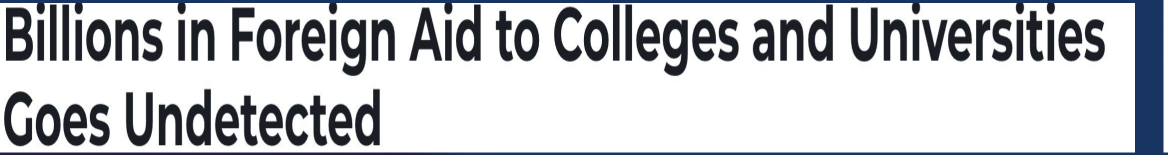
Penn State University Hit With False Claims Act Suit for Alleged Cyber Security Deficiencies



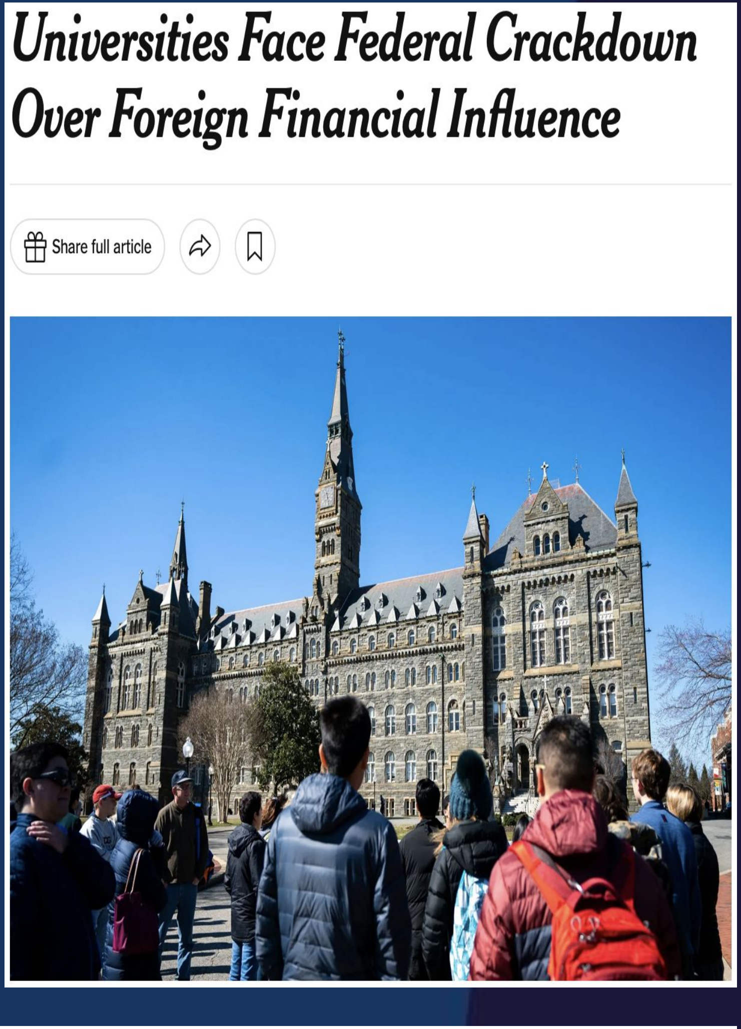
Berkeley's $220M Mistake Exposed in Massive Deal With China



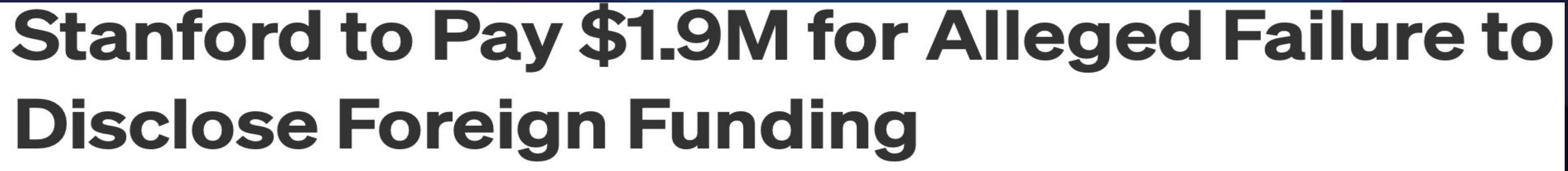
Department of Defense Strengthening Efforts to Counter Unwanted Foreign Influence on DOD-Funded Research at Institutions of Higher Education



Billions in Foreign Aid to Colleges and Universities Goes Undetected



Universities Face Federal Crackdown Over Foreign Financial Influence



Stanford to Pay $1.9M for Alleged Failure to Disclose Foreign Funding

What is research security?

Standardized policies and practices among researchers and research organizations applying for Federal Research and Development (R&D) awards, in the interest of strengthening protections of US Government supported R&D against undue foreign government interference and exploitation.

What's Next in Research Security Compliance?
Considerations from the NSPM-33 Guidance to Federal Funding Agencies
COMPLIANCE
LEGAL
RULES

Regulatory Background on Research Security since 2021

EXECUTIVE OFFICE OF THE PRESIDENT OF THE UNITED STATES
NATIONAL SCIENCE AND TECHNOLOGY COUNCIL

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

EXECUTIVE OFFICE OF THE PRESIDENT OF THE UNITED STATES

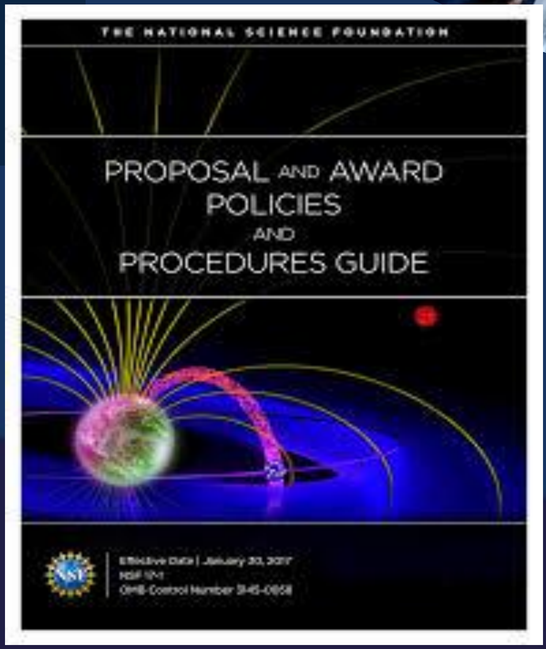
RECOMMENDED PRACTICES FOR STRENGTHENING THE SECURITY AND INTEGRITY OF AMERICA'S SCIENCE AND TECHNOLOGY RESEARCH ENTERPRISE

Product of the
SUBCOMMITTEE ON RESEARCH SECURITY

JOINT COMMITTEE ON THE RESEARCH ENVIRONMENT

of the
NATIONAL SCIENCE & TECHNOLOGY COUNCIL

2024
NATIONAL DEFENSE
AUTHORIZATION ACT



THE NATIONAL SCIENCE FOUNDATION

PROPOSAL AND AWARD POLICIES AND PROCEDURES GUIDE

Effective Date | January 30, 2017
NSF 17-1
OMB Control Number 3145-0058

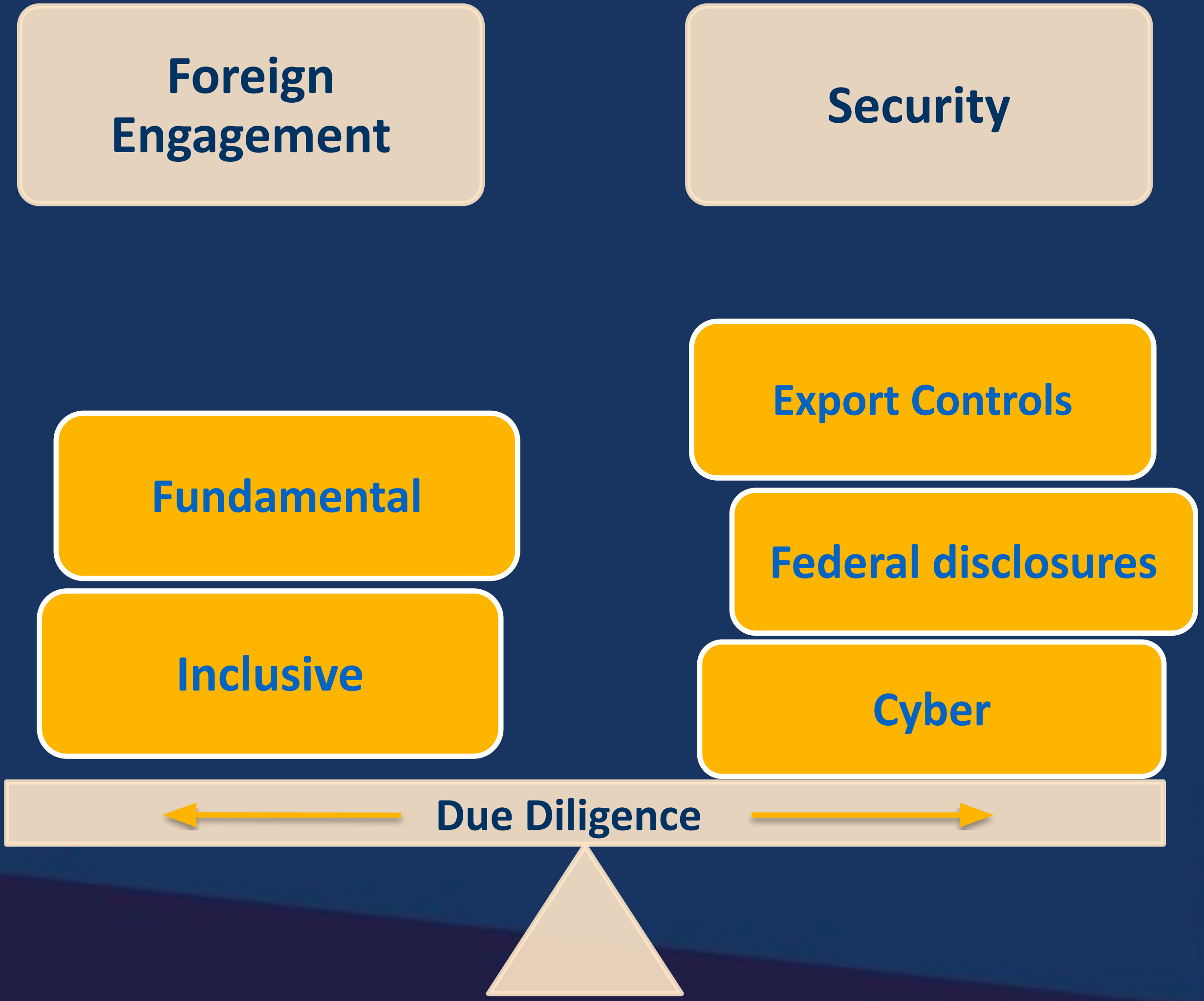
Increasing pace of regulatory actions

- Expansion of U.S. Sanctions Lists
- DoD “Policy for Risk-Based Security Reviews of Fundamental Research”
- New export control regulations concerning semiconductors and supercomputers
- President Biden Executive Order 14105
- OSTP memo on Foreign Talent Recruitment Programs
- NSF annual reporting of foreign gifts and contracts

What must Berkeley do?

- Develop a research security program.
  - Conduct risk assessments to identify vulnerabilities and potential threats to research security.
  - Developing strategies for mitigating risks.
  - Ensure compliance with evolving federal regulations.
- Safeguard intellectual property and federally funded research.
- Provide greater awareness
- Reduce risks to federal funding

Collaboration and Partnerships



Foreign Engagement

Security

Fundamental

Inclusive

Export Controls

Federal disclosures

Cyber

Due Diligence

NSPM-33: Research Security Program

- Universities who receive $50 million in federally funded research.
- UCB will be required to:
  - certify the institution's Research Security program to the Federal government;
  - designate an institutional point of contact for the program; and
  - create a written research security program description.

Fundamental Components of a Research Security Program

National Security Presidential Memorandum 33 (NSPM-33)

- Main Elements
  - Disclosure requirements, standardization, and consequences for violation
  - Cybersecurity
  - Foreign Travel security
  - Research security training
  - Export Control training

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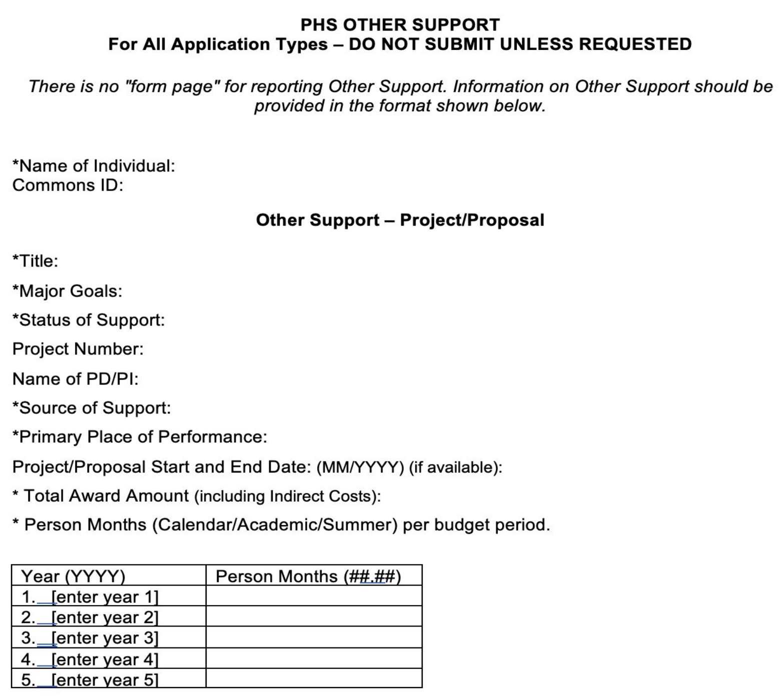
Fundamental Components of a Research Security Program (continued)

National Security Presidential Memorandum 33 (NSPM-33)

- Additional elements
  - Hosting international visitors
  - Foreign Talent Recruitment Programs
  - Section 117 reporting of foreign gifts and contracts

Disclosures

- Current and pending support
  - NSTC Pre-award and Post-award Disclosures
- Conflict of commitment
- Conflict of interest
  - NASA, DOE
- Support from foreign entities
- In-kind support
- Including outside activities



PHS OTHER SUPPORT
For All Application Types – DO NOT SUBMIT UNLESS REQUESTED

There is no "form page" for reporting Other Support. Information on Other Support should be provided in the format shown below.

*Name of Individual:
Commons ID:

Other Support – Project/Proposal

*Title:

*Major Goals:

*Status of Support:

Project Number:

Name of PD/PI:

*Source of Support:

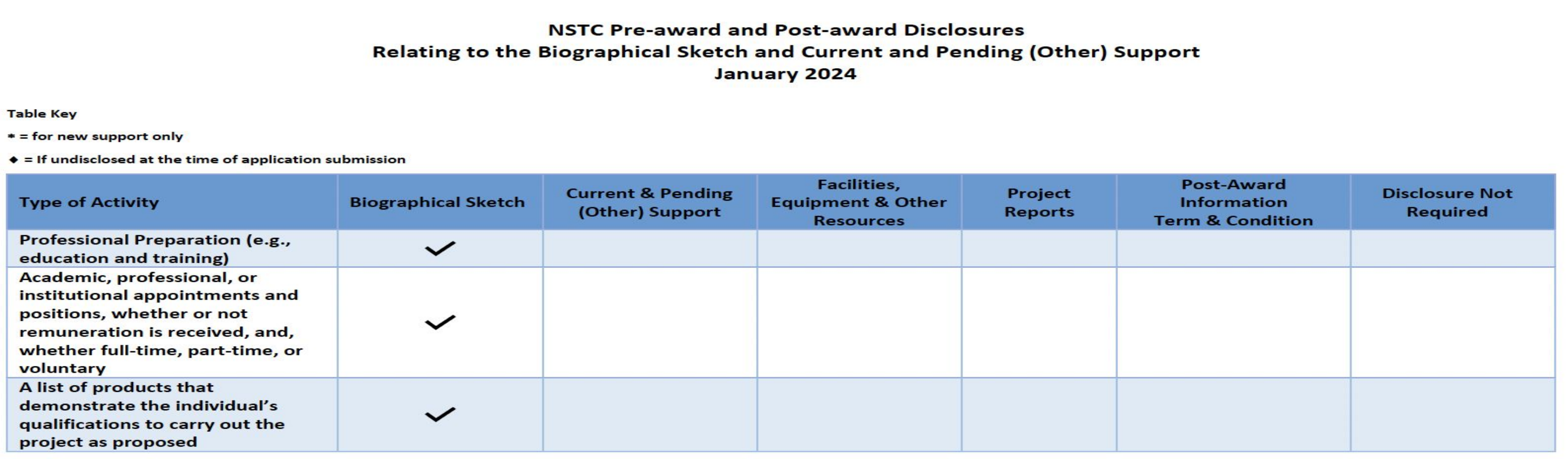
*Primary Place of Performance:

Project/Proposal Start and End Date: (MM/YYYY) (if available):

* Total Award Amount (including Indirect Costs):

* Person Months (Calendar/Academic/Summer) per budget period.

Year (YYYY)	Person Months (##.##)
1. __[enter year 1]	
2. __[enter year 2]	
3. __[enter year 3]	
4. __[enter year 4]	
5. __[enter year 5]	



NSTC Pre-award and Post-award Disclosures
Relating to the Biographical Sketch and Current and Pending (Other) Support
January 2024

Table Key

* = for new support only

◆ = If undisclosed at the time of application submission

Type of Activity	Biographical Sketch	Current & Pending (Other) Support	Facilities, Equipment & Other Resources	Project Reports	Post-Award Information Term & Condition	Disclosure Not Required
Professional Preparation (e.g., education and training)	✓					
Academic, professional, or institutional appointments and positions, whether or not remuneration is received, and, whether full-time, part-time, or voluntary	✓					
A list of products that demonstrate the individual's qualifications to carry out the project as proposed	✓					

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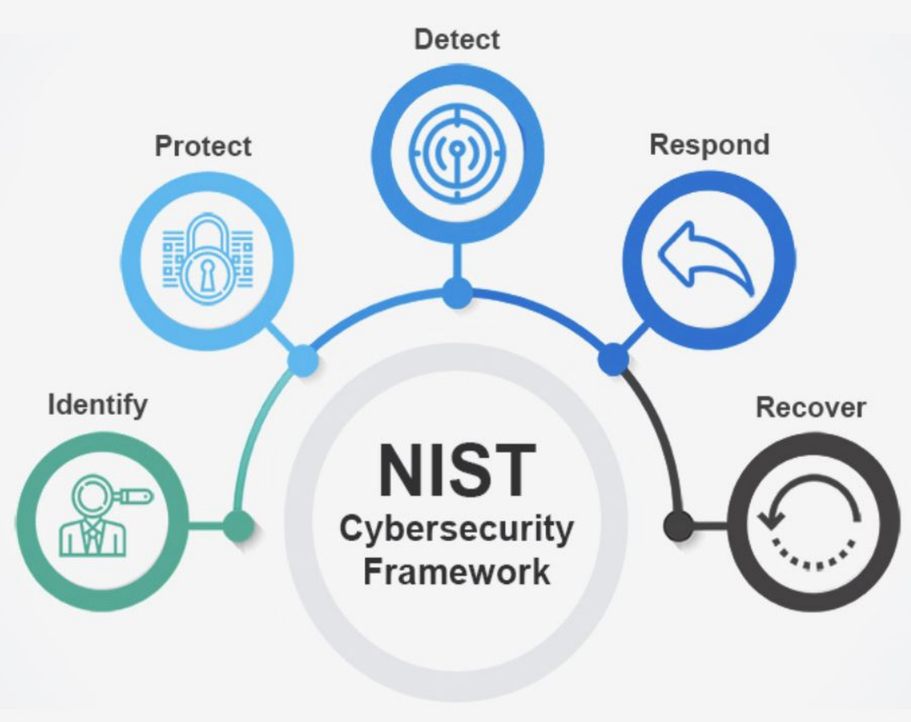
Reporting Examples

- Common BioSketch form
- Common form for Current and Pending Support, e.g.,
  - **Postdoctoral scholars, students, or visiting scholars** who are supported by an external entity, and whose research activities are **intended for use** on the project/proposal being proposed
  - **Postdoctoral scholars, students, or visiting scholars** who are supported by an external entity, whose research activities are **not intended for use** on the project/proposal being proposed and have an **associated time commitment**
  - **Travel supported**/paid by an external entity to perform research activities with an **associated time commitment**
  - **Startup company** based on **non-organization-licensed IP**
  - **Startup packages from other** than the proposing organization

Cybersecurity

- Cybersecurity Training
- Certifying cybersecurity standards
- Controlled Unclassified information
- NIST Cybersecurity Framework



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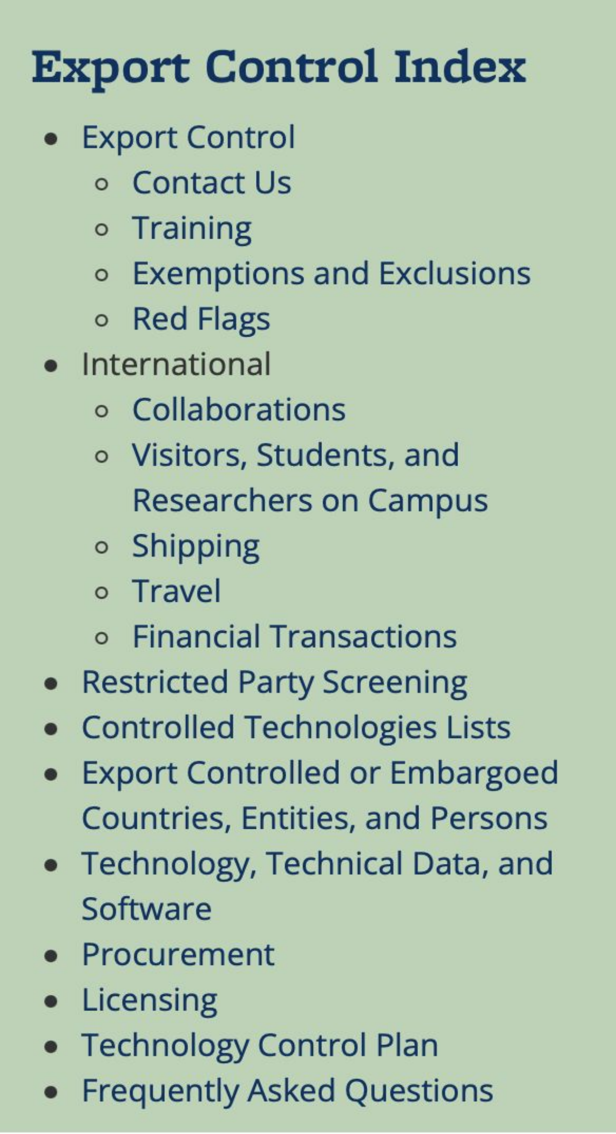
Foreign Travel Security

- Registering travel
- Security briefings
- Export control considerations
- Laptop and data security

Export Controls

- Export control training for researchers
- Restricted party screening
- Emerging technology



Export Control Index

- Export Control
  - Contact Us
  - Training
  - Exemptions and Exclusions
  - Red Flags
- International
  - Collaborations
  - Visitors, Students, and Researchers on Campus
  - Shipping
  - Travel
  - Financial Transactions
- Restricted Party Screening
- Controlled Technologies Lists
- Export Controlled or Embargoed Countries, Entities, and Persons
- Technology, Technical Data, and Software
- Procurement
- Licensing
- Technology Control Plan
- Frequently Asked Questions

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Foreign Talent Recruitment Programs

- OSTP Feb 24, 2024, memo to the heads of the federal research agencies
- Disclosure to federal agencies required
- Defines foreign talent recruitment program and malign foreign talent recruitment program

A **foreign talent** recruitment program is any program, position, or activity that includes compensation in the form of cash, in-kind compensation, including research funding, promised future compensation, complimentary foreign travel, things of non de minimis value, honorific titles, career advancement opportunities, or other types of remuneration or consideration directly provided by a foreign country at any level (national, provincial, or local) or their designee, or an entity based in, funded by, or affiliated with a foreign country, whether or not directly sponsored by the foreign country, to an individual, whether directly or indirectly stated in the arrangement, contract, or other documentation at issue.

Malign Foreign Talent Recruitment Programs

- Restricted for federal employees and awardees
- Talent program that also includes but not limited to:
  - engaging in the unauthorized transfer of intellectual property, materials, data products, or other nonpublic information owned by a United States entity or developed with a Federal research and development award ...
  - being required to recruit trainees or researchers...
  - establishing a laboratory or company, accepting a faculty position, or undertaking any other employment or appointment...
  - being unable to terminate the foreign talent recruitment program contract or agreement...
  - substantial overlap or duplication with a Federal research and development award...
  - being required to apply for and successfully receive funding from the sponsoring foreign government's funding agencies with the sponsoring foreign organization as the recipient.

Emerging Technology & Countries of Concern

- UCOP Mandate
  - Elevated review and approval process
  - Country of concern inventory
- International Research Review Faculty Committee

White House Releases Updated Critical and Emerging Technologies List

Countries of Concern

Federal (NDAA 2019) List:

- Russian Federation
- People’s Republic of China
- Democratic People’s Republic of Korea
- Islamic Republic of Iran

UCOP List adds:

- Saudi Arabia
- United Arab Emirates
- Qatar

Emerging Technology

White House Releases Updated Critical and Emerging Technologies List

OSTP list of Critical and Emerging Technology

- Advanced Computing
- Advanced Engineering Materials
- Advanced Gas Turbine Engine Technologies
- Advanced and Networked Sensing and
- Signature Management
- Advanced Manufacturing
- Artificial Intelligence
- Biotechnologies
- Clean Energy Generation and Storage
- Data Privacy, Data Security, and Cybersecurity Technologies
- Directed Energy
- Highly Automated, Autonomous, and Uncrewed Systems, and Robotics
- Human-Machine Interfaces
- Hypersonics
- Integrated Communication and Networking Technologies
- Positioning, Navigation, and Timing Technologies
- Quantum Information and Enabling Technologies
- Semiconductors and Microelectronics
- Space Technologies and Systems

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Ongoing Activities at UC Berkeley

- Building research security program
- Implementation of UCOP Mandate
  - Elevated review process
  - Inventory
- Research compliance audit
- Research cybersecurity audit
- Developing website content
- Faculty messaging
- Coordinating with APO on APM-025 and OATS changes
- Ethics & Compliance Briefing for Researchers
- Additional research security training resources available

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Questions?

Reach out to Brian Warshawsky, researchsecurity@berkeley.edu, or myself with any questions.