

The CHIPS and Science Act of 2022: The New Compliance Challenges It Created, and Those That Are Still to Come

Callan G. Stein
Michael S. Lowe

June 2023

troutman
pepper

Meet The Presenters



Callan G. Stein

Partner

Boston

callan.stein@troutman.com

617.204.5103



Michael S. Lowe

Partner

Philadelphia | Los Angeles

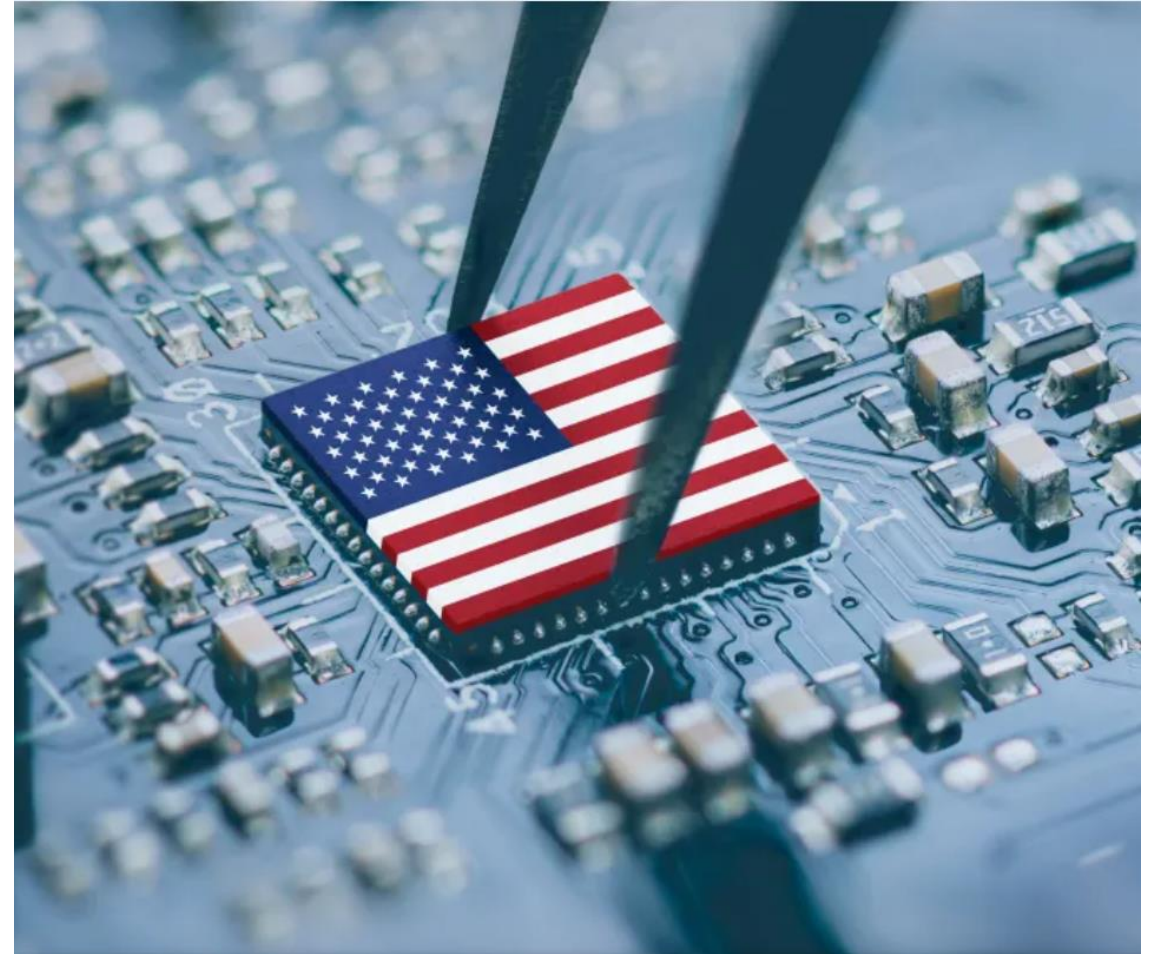
michael.lowe@troutman.com

215.981.4364

The CHIPS and Science Act of 2022: The New Compliance Challenges It Created, and Those That Are Still to Come

Table of Contents

- I. Background on the CHIPS and Science Act of 2022
- II. Research Security Provisions in the CHIPS and Science Act
- III. Possible Additional Research Security Obligations to Come
- IV. Compliance and Risk Mitigation Strategies



Background of the CHIPS and Sciences Act of 2022

Background on the CHIPS and Science Act of 2022

What is the CHIPS and Science Act of 2022?

The CHIPS and Science Act of 2022 is a bipartisan piece of legislation President Biden signed into law in 2022. It appropriates more than \$50B over five years to stimulate research, training, and manufacturing in the microelectronics and semiconductor fields.

The key focuses of the CHIPS and Science Act are:

- Expanding US semiconductor manufacturing capability
- Enhancing US semiconductor research and development
- Providing tax credits to stimulate semiconductor manufacturing
- Increasing US research security



Background on the CHIPS and Science Act of 2022

Why does the CHIPS and Science Act focus on research security?

The federal government—lawmakers and certain agency personnel—have become increasingly critical of federal research agencies in recent years for not taking sufficient steps to guard the US against security issues, primarily those posed by foreign entities. While there has been response to this criticism, it has been somewhat inconsistent. For example:

- In mid-2018, NIH began to more strictly enforce some of its existing rules related to grantees disclosing foreign connections.
- In late 2018, the DOJ announced its “China Initiative,” a campaign launched for the stated purpose of thwarting espionage activities by the Chinese government.
- More recently, specific units within the Department of Energy and the Department of Defense have developed “risk matrices” to aid them in identifying security threats.

Background on the CHIPS and Science Act of 2022

The CHIPS and Science Act aims to change that.

In addition to the allocation of tens of billions of dollars to the semiconductor industry, the CHIPS and Science Act also codifies into law numerous practices designed to mitigate research security risks.

These practices include things like:

- Requiring the assessment of what types of research are most vulnerable to theft.
- Additional training to researchers on reducing security threats.
- Obtaining more information (and more detailed information) from institutions.
- Prohibiting US researchers from participating in certain foreign programs.

Research Security Provisions in the CHIPS and Science Act

Research Security Provisions in the CHIPS and Science Act

The CHIPS and Science Act contains different types of research security provisions that generally fall into two categories:

- Provisions that require action by the government.
- Provisions that create obligations for research institutions.

It is important to understand all of these types of research security provisions to get a full picture of an institution's present and future compliance obligations.



OR



Research Security Provisions in the CHIPS and Science Act

Provisions That Require Action By the Government

Many provisions in the CHIPS and Science Act require action by the government, usually some government agency. The directed activities are designed to address research threats.

These provisions are aimed at a number of different government agencies, offices, and individuals, including:

- Department of Energy (DOE)
- National Science Foundation (NSF)
- Office of Science and Technology Policy (OSTP)
- Comptroller General
- All other “federal research agencies”

Research Security Provisions in the CHIPS and Science Act

Provisions That Require Action By the Government

Title II, Sec. 10331-10332 – Creation of Research Security and Policy office

These provisions require NSF to maintain a Research Security and Policy office within the Office of the NSF Director with at least four full-time staff members. This new office will:

- Coordinate all research security policy issues across NSF;
- Identify and address potential security risks that threaten research integrity;
- Develop research security policy and best practices;
- Conduct outreach and education activities for recipients;
- Communicate reporting and disclosure requirements;
- Perform risk assessments of NSF proposals and awards;
- Establish policies to ensure compliance with National Security Presidential Memorandum 33 (Presidential Memorandum on US Government-Supported Research and Development National Security Policy); and,
- Conduct or facilitate due diligence with regards to applications for NSF research and development awards.

Research Security Provisions in the CHIPS and Science Act

Provisions That Require Action By the Government



Title II, Sec. 10338 – Creation of Research Security and Integrity Sharing Organization

This provision requires NSF to establish a Research Security and Integrity Information Sharing Organization. The purpose of this new organization is to enable the research community to:

- Share information;
- Identify research security risks; and,
- Implement risk assessment and risk mitigation best practices.

Research Security Provisions in the CHIPS and Science Act

Provisions That Require Action By the Government

Title VI, Sec. 10631 – Directives to White House Office of Science and Technology Policy (OSTP)

This provision issues several directives to the OSTP to issue guidance on numerous topics:

- OSTP must issue guidance to prohibit federal research agency personnel from participating in “foreign talent recruitment programs”;
- OSTP must issue additional clarifications to the research community regarding which activities are considered “foreign talent recruitment programs”;
- OSTP must issue guidance clarifying that researchers working on federally funded research must disclose participation in “foreign talent recruitment programs” in federal research awards proposals; and,
- OSTP must issue guidance for federal research agencies to prohibit researchers working on agency-funded projects from participating in “malign foreign talent recruitment programs.”

Research Security Provisions in the CHIPS and Science Act

Provisions that create obligations for research institutions.

There are also a good number of research security provisions that create obligations for research institutions more directly. These provisions fall into two general categories:

1. Provisions that apply directly to institutions.
2. Provisions that “authorize” federal agencies to require things of institutions.

Research Security Provisions in the CHIPS and Science Act

Provisions that create obligations for research institutions.

Title III, Sec. 10337 – Expanded Training Requirements

This provision amends Section 7009 of the America COMPETES Act of 2007, which is a federal law that addressed requirements on institutions related to “Responsible Conduct of Research.” The CHIPS and Science Act expands the training required by the America COMPETES Act by:

- Expanding the individuals who must receive such training to include faculty and other senior personnel on NSF award; and,
- Expanding the scope of the required training to include mentoring training and training to raise awareness of research security risks and export control, disclosure, and reporting requirements.

Research Security Provisions in the CHIPS and Science Act

Provisions that create obligations for research institutions.

Title III, Sec. 10339A – Confucius Institute Restrictions

This provision restricts NSF funding to any institution that maintains a contract or agreement with a Confucius Institute (absent a waiver).

- Confucius Institutes are China-sponsored institutes that purport to promote the study of Chinese culture and language.
- Many of them that existed in the US have since closed, though recently some have started to reopen under different names.

Research Security Provisions in the CHIPS and Science Act

Provisions that create obligations for research institutions.

Title III, Sec. 10339B – Financial Support Reporting Requirement

This provision requires institutions to report to NSF, annually, current financial support of \$50,000 and above that the institution receives from any foreign source associated with a country of concern.

- For purposes of this provision, “financial support” includes gifts and contracts.
- Any institution that fails to comply with this section may be subject to reduction or termination of awards.

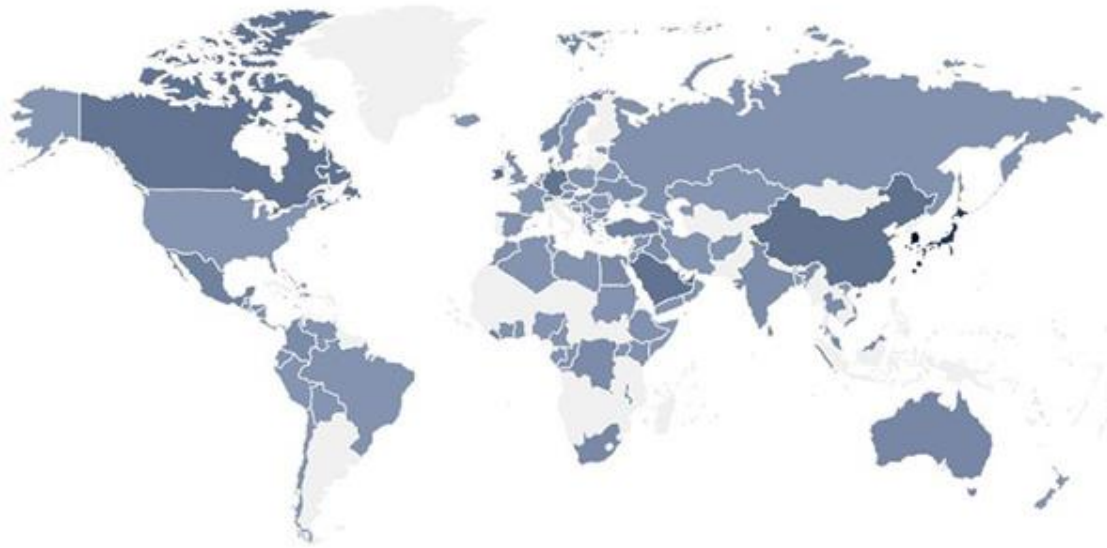
Research Security Provisions in the CHIPS and Science Act

Provisions that create obligations for research institutions.

Title VI, Sec. 10633 – Required Documentation

This provision authorizes each federal research agency to require, upon request, that an institution provide supporting documentation for covered individuals in a research and development award. The documentation that these agencies may request includes copies of contracts, grants, or other agreements related to:

- Foreign appointments;
- Employment with foreign institutions; and
- Participation in foreign talent recruitment programs.



Research Security Provisions in the CHIPS and Science Act

Provisions that create obligations for research institutions.

Title VI, Sec. 10634 – Training Certifications

This provision requires each federal research agency to establish a requirement as part of any application for a research and development award that each covered individual listed on the award application certify that they have completed research security training.

This provision also requires that institutions certify that each covered individual who is employed by the institution has completed such training.

The required training modules include:

- Cybersecurity;
- International collaboration;
- International travel;
- Foreign interference;
- Rules for proper use of funds;
- Disclosures;
- Conflict of commitment; and
- Conflict of interest.

Research Security Provisions in the CHIPS and Science Act

Provisions that create obligations for research institutions.

Title VI, Sec. 10632 – Malign Foreign Talent Recruitment Programs

This provision again deals with “malign foreign talent recruitment programs.” Here, the CHIPS and Science Act requires each federal research agency to establish a policy as part of the research grant proposal process that requires covered individuals to certify that they are not part of a malign foreign talent recruitment program at the time of the proposal and annually thereafter.

- Institutions applying for an award must also certify that each covered individual who is employed by the institution has been made aware of this requirement.
- Recipient institutions must also provide training on the risks of malign foreign talent recruitment programs to covered individuals.

Research Security Provisions in the CHIPS and Science Act “Malign Foreign Talent Recruitment Program”

The CHIPS and Science Act defines “malign foreign talent recruitment program, but the definition is very long and detailed. In summary, there are two key features:

1. The program, position, or activity must be sponsored either by: (i) a foreign country of concern; (ii) an entity based in a foreign country of concern; or. (iii) an academic institution or foreign talent recruitment program that appears on the list developed under 2019 NDAA.
2. The program involves a foreign country providing compensation to an individual in exchange for the individual doing one or more enumerated activities.

Research Security Provisions in the CHIPS and Science Act “Malign Foreign Talent Recruitment Program”

In the definition of “malign foreign talent recruitment program,” the CHIPS and Science Act lists out the types of quid-pro-quo activities that are prohibited and the existence of which will constitute such a program. They include, but are not limited to, the following types of activities:

1. Transferring IP, data, or unauthorized materials;
2. Recruiting trainees or other researchers to the program;
3. Establishing a laboratory, accepting a faculty position, or taking other employment in a foreign country or with an entity based in a foreign country (if doing so violates a federal research award);
4. Applying for and receiving funding from the foreign government in the name of the sponsoring foreign entity; or,
5. Omitting or not disclosing the recipient institution with which the individual is affiliated.

Possible Additional Research Security Obligations to Come

Possible Additional Research Security Obligations to Come

In passing the bipartisan CHIPS and Science Act, Congress left many research security obligations on the cutting room floor. There are many reasons why these provisions were cut from the final bill, but some include:

- Input from institution administrators indicated that they would be too burdensome for research institutions; and/or,
- Concern over duplicating work between and among agencies.

That drafters of the Act chose to include these provisions in early drafts of the Act suggest some level of support for them, notwithstanding the above criticism.

Thus, there is every possibility that Congress will take up these items again in future legislation, perhaps as soon as after the upcoming midterm elections.

Possible Additional Research Security Obligations to Come Subjecting Institutions to CFIUS Review

One such provision would have expanded authority for the Committee on Foreign Investment in the United States (CFIUS), to review foreign gifts to institutions to support research in fields identified as being important to US national security. These could include certain research in fields like:

- Artificial intelligence;
- Microelectronics;
- Quantum computing;
- Biotechnology and biomanufacturing; and,



Possible Additional Research Security Obligations to Come

More Foreign Gift Reporting Requirements

There were also a number of provisions in drafts of the CHIPS and Science Act (ultimately removed) that would have increased regulation on foreign gifts. These included:

- A provision that would have required individual faculty members to report any foreign gifts they receive.
- A provision that would have lowered the existing threshold for institutional reporting under the Higher Education Act of 1965 to \$50,000.
- A provision would have made it a criminal offense for an individual to fail to disclose foreign sources of research support, including potential criminal sentences for violators.
- A provision that would have provided more flexibility for the Department of State to reject visa applications from foreign researchers, including creating an interagency council on research security.

Compliance and Risk Mitigation Strategies

Compliance and Risk Mitigation Strategies

How the research security provisions of the CHIPS and Science Act will ultimately be implemented and enforced remains to be seen. But for now, here are some compliance and risk mitigation strategies institutions should consider.

1. Educate yourself!

- a. CHIPS and Science Act legislation
- b. Future policies, guidance documents, and best practices from agencies
- c. Changes in grant proposal and award procedures
- d. Additional legislation

2. Update your policies.

- a. Analyze areas of risk given new CHIPS and Science Act requirements
- b. Identify gaps in your policies and individuals in your organization who can help fill them
- c. Update your written policies
- d. Ensure your personnel are aware of and understand changes

Compliance and Risk Mitigation Strategies

3. Carefully consider the new reporting obligations.

- a. How will you obtain the required information?
- b. How will you maintain that information?
- c. Who will be responsible for collection and maintenance?
- d. Who will coordinate the actual reporting?

4. Consider the implications of all “certifications.”

- a. Who will be responsible for “certifying” compliance?
- b. Ensure sufficient backup for any certification.
- c. Create a culture of compliance to avoid whistleblowers

5. Anticipate violations and cover yourself!

- a. Trust....but verify.
- b. Treat everyone the same.
- c. Document everything.
- d. Rely on your experience to anticipate where individuals will falter.

Questions?



Callan G. Stein

Partner

Boston

callan.stein@troutman.com

617.204.5103



Michael S. Lowe

Partner

Philadelphia | Los Angeles

michael.lowe@troutman.com

215.981.4364



Thank You!



**troutman
pepper**