



INTERAGENCY OVERVIEW

U.S. GOVERNMENT ACTION TO PROTECT RESEARCH SECURITY AND INTEGRITY

Rebecca Keiser

Chief of Research Security Strategy and Policy

National Science Foundation

August 26, 2020

Federal Demonstration Partnership

Strengthening Integrity and Security of the U.S. Research Enterprise

“This important [JASON] report underscores the need for a robust, coordinated approach to strengthen the integrity and security of the U.S. research enterprise.”

- OSTP Director Kelvin Droegemeier in a news release: *NSF releases JASON report on research security*, December 11, 2019.

Joint Committee on the Research Environment (JCORE)

In May 2019, the National Science and Technology Council (NSTC) established JCORE to address issues related to **research environment safety, integrity, and productivity**.

JCORE examines:

- Rigor and integrity in research
- Safe, inclusive, and equitable research settings
- Open research environments balanced with security
- Administrative burdens on federally-funded research

Source: SUMMARY OF THE 2019 WHITE HOUSE SUMMIT OF THE JOINT COMMITTEE ON THE RESEARCH ENVIRONMENT (JCORE), Nov. 2019

JCORE Subcommittee on Research Security

- Forum for substantive interface and coordination among White House, Departments, and Agencies with different roles in research security
- Subcommittee Actions:
 - Developing guidance for Federal departments and agencies
 - Developing best practices for universities and other research institutions
 - Letter from OSTP Director to the United States Research Community
 - Developing education and outreach materials that highlight examples of risks to research

JCORE Subcommittee on Coordinating Administrative Requirements (CAR)

- Seeks to reduce the time and administrative workloads research organizations need to meet federal policies and requirements for federal funding
- Subcommittee working closely with Research Security Subcommittee
- CAR will work on implementation of Research Security Subcommittee policies and best practices in a harmonized way to focus on as little additional administrative workload as possible

Source: SUMMARY OF THE 2019 WHITE HOUSE SUMMIT OF THE JOINT COMMITTEE ON THE RESEARCH ENVIRONMENT (JCORE), Nov. 2019

Transparency and Full Disclosure Are Needed to Properly Assess Risk

A conflict of interest is a situation in which an individual, or the individual's spouse or dependent children, has a financial interest or financial relationship that could directly and significantly affect the design, conduct, reporting, or funding of research.

A conflict of commitment is a situation in which an individual accepts or incurs conflicting obligations between or among multiple employers or other entities. Many institutional policies define conflicts of commitment as conflicting commitments of time and effort, including obligations to dedicate time in excess of institutional or funding agency policies or commitments. Other types of conflicting obligations, including obligations to improperly share information with, or withhold information from, an employer or funding agency, can also threaten research security and integrity, and are an element of a broader concept of conflicts of commitment.

Interagency Collaborations

- **Study on Foreign Influence on Research Integrity**
 - MITRE Corp. is gathering input to help identify, counter, and deter improper foreign government influence on the integrity of Federally funded fundamental research
 - Stakeholder interviews underway | Report in October/November 2020
- **NDAA National Academies Science, Technology and Security Roundtable**
 - NIH, NSF, DoD, and DOE in coordination with OSTP JCORE subcommittee for a series of workshops conducted by NASEM
 - Purpose: Open exchange of ideas; identify effective approaches for communicating threats and risks
 - Participants: Federal agencies & labs, academic institutions, industry, non-profits
- **Ongoing Communications with Congress**
 - Regular briefings and coordination to provide updates on agency actions and input on policy challenges

Harmonizing Efforts Among Agencies

- **Standardizing processes** – e.g., Current and Pending Support fillable form template – developed by NSF and shared among other agencies
- **Analytical tools** – Information exchanges on use of analytics and most effective tools for better understanding what datasets and analytics methods can help in addressing emerging security challenges
- **Synthesizing information** – e.g., Defining “research integrity” as related to science and security in the academic community to clarify misconceptions of term between different segments of the research and security space

Agency Collaboration with Office of Inspector General (OIG)—NSF Example

NSF –

- Formulate policy
- Review disclosures for capacity/duplication/overlap issues
- Refer concerns of waste, fraud and abuse to OIG
- Take administrative action when recommended by OIG
- Work with institutional awardees on PI reassignments/other actions if needed

OIG –

- Investigate potential waste, fraud and abuse
- Work with Department of Justice on potential legal/civil infractions
- Recommend administrative actions to NSF

US Government Funding Agency Actions Following Referrals by OIG

US Government funding agencies have recouped millions of taxpayer dollars through actions such as:

- Award suspension
- Award termination
- Debarment of researcher from receiving federal funding and serving as reviewer, panelist, or consultant

These actions are in addition to civil and criminal actions pursued by the Department of Justice

What Does International Collaboration Look Like?

- International scientific research collaborations with transparent and reciprocal exchanges for mutual benefit
- Leveraging of complementary skills, facilities, sites, and resources
- Exchange of personnel when clear intellectual contributions are identified and organizational affiliations and sources of funding are transparent

International collaboration benefits the scientific enterprise
Improper foreign government interference \neq International collaboration

Example Talent Plan Contract Terms: Publication Requirements

“...Upon completion of this 5-year initiation term, the research accomplishments in the chosen areas of emphasis...shall reach the highest levels in the nation, as codified in standard metrics associated with these disciplines. For instance, the total number and the quality of SCI papers in these two research areas shall rank in the top 5 among the same disciplines in the country [China]. **The number of papers published in top-level journals including *Nature*, *Science*,...etc., shall be greater than 20**, which is **more than the number produced by Prof. xxxx** [another prolific researcher] during the same time frame. Moreover, it is expected to match the number being published by the School of Chemistry and Chemical Engineering at [xxx rival Chinese university] over the same period.”

Note: This NSF-funded researcher is a full-time tenured professor at a prominent US university.

Example Talent Plan Contract Terms:

Publication, Outside Funding, Patent, and Recruitment Requirements

- “The first author and primary affiliation of these papers will be [xxx Chinese university].”
- “Party B (researcher) should lead the team to **obtain overall research funding that equals or exceeds 10 million RMB (\$1.4M US) from outside** of [xx Chinese university]”
- “Party B (researcher) will develop at least one lead compound that shows promise as a pre-clinical candidate and **achieve a number of patents.**”
- “Party B [researcher] will...hire at least one professor who has won **recognition in the ‘National Outstanding Young Scientist Fund’ program** or two professors that have or will receive **‘One Thousand Talent Program for Youth’ funding.**”

Note: This NSF-funded researcher is a full-time tenured professor at a prominent US university.