

Implementation
Guidance on Research
Security Programs:
Practical Considerations

Institutional Perspectives



Panelists

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Research Security Program Requirements

Overview of NSPM-33's Requirements





Requirements and Timeline

- Required for institutions receiving > \$50 million/year in federal science & engineering support
- Research security Point of Contact
- Program documentation
- Institutional certification



90-day community engagement period

120-day development period of standardized requirements

Issuance of standards and development of implementation plan

Institutional compliance deadline:
1 year from issuance of formal requirement to comply



University of Pittsburgh

Institutional Approach

Allen DiPalma



University of Pittsburgh Institutional Profile

- Private State Affiliated University in Pennsylvania founded in 1787
- ▶ 645 Degrees and Certificate Programs offered among its 5 campuses
- ➤ Over 10,000 degrees and certificates issued in 2021
- ➤ Undergrad Students = 24,603; Grad Students = 6,799
- ➤ Full-Time Faculty = 4,878
- ➤ <u>Strong Biomedical Focus:</u> Medical firsts include first polio vaccine and heart liver transplant
- > FY 2021 research expenditures = \$915 million
- Fundamental Research supported by Policy
- ➤ Long-standing Openness in Research Statement



Cybersecurity



- <u>Communications:</u> Multi-directional discussions. Clear message, casual approach.
- Requirements: Baseline cyber standards listed, but stem from FAR 52.204-21 "Basic Safeguarding of Covered Contractor Information Systems."
- <u>Scope:</u> We know what is not included: research that specifies certain cyber safeguards (CUI). What's left? Fundamental Research.
- <u>Concerns:</u> Broad application of 52.204-21 cyber standards to fundamental research results. Potentially high expense with challenging application especially for personally owned devices.
- Bottom Line: Uncertainty remains. Hoping for flexibility here.



Foreign Travel Security



- <u>Communications:</u> Very targeted discussion with those involved with travel systems: Pitt's Office of Global Operations, and SVC Research.
- Requirements: Very proscriptive. Written policies/guidelines expected. Pre-registration review and approvals. Travel assistance for security briefings, electronic devices.
- **Scope:** Faculty and staff traveling for organizational business, teaching, conference attendance, research purposes, or any offers of sponsored travel that would put a person at risk.
- Concerns: Faculty reaction. Policy alignment. Systems.
- **Bottom line:** Well defined expectations.



Export Controls







- <u>Communications</u>: Office of Trade Compliance analysis and outreach to affected stakeholders.
- Requirements: Provide export controls training, as appropriate, to those involved in R&D projects subject to export control restrictions.
- **Scope:** Relevant Pitt personnel (faculty, staff, students, visitors).
- <u>Concerns:</u> Awareness of Pitt's export control program requirements, "export controls" spotting/identification, existing training.
- **Bottom line:** It's a good time to evaluate export program manuals, training, and restricted party screening management.



Research Security Training



- <u>Communications:</u> Office of Trade Compliance, Research Protections, and SVC Research Offices sharing/analyzing information.
- Requirements: Provide training to relevant personnel on research security threat awareness and identification, including insider threat training where applicable.
- **Scope:** Relevant Pitt personnel (faculty, staff, students, visitors)
- Concerns: Research security topics are numerous-Will any training developed now satisfy future requirements?
- <u>Bottom line:</u> It's a good time to start thinking about training content, available delivery methods, central website, and RS POC.



Research Security/Export Controls Training Series

1.

Introduction to Exports & University Activities that Intersect with Export Control Regulations

2

Department of Commerce: Dual Use Commodities, Software & Technical Data 3

Department of State:
Defense Services,
Articles, and Technical
Data

4

Department of Treasury: Embargoes, Sanctions & Distance Learning/Research

5

Catch-All Controls Including U.S. Restricted Party Lists 6

Technology, Deemed Exports, and Foreign Nationals

7.

Fundamental Research, Contracting & Other Export Control Exclusions 8

CUI, Critical Technologies & Emerging/Foundational Technologies

9.

Biologicals, Chemicals & Related Equipment

10.

Foreign Shipments, Foreign Travel and Procurement 11.

Academic Visitors, International Delegations & Export Controls 12.

Research Security, Undue Foreign Influence, and Export Controls





Brown University

Institutional Approach

Stephanie Endy





About Brown

"The mission of Brown University is to serve the community, the nation and the world by discovering, communicating and preserving knowledge and understanding in a spirit of free inquiry, and by educating and preparing students to discharge the offices of life with usefulness and reputation."



- 786 regular faculty
- 6,600 undergraduates
- 2,500 graduate students
- 600 medical students
- 4 major academic divisions
- >40 academic departments
- \$200 million annual research expenditures
- Located in Providence, RI
- Largest Research Funders: NIH, NSF
- Organization: Chancellor, President, Provost, VPR





Openness in Research Policy

■ Brown University is committed to preserving and protecting the freedom of research and to maintaining a teaching and research environment that is open and that promotes the free exchange of research results.





Openness in Research Policy

- Brown University will not undertake classified or secret research;
- Brown University will not accept terms and conditions that allow modification to or approval of publications by an external sponsor;
- Brown University will not accept publication restrictions, including unspecified publication delays or terms that prohibit or restrict dissemination;
- Brown University will not permit an external sponsor to exercise technical direction of the work or require re-performance of the work until the sponsor views it as acceptable;
- Foreign faculty, students, and scholars will not be singled out for restriction in access to Brown University's educational and research facilities and activities;





Openness in Research Policy

- Brown University will not enter into a contract or grant to carry out research if the contract or grant restrains the freedom of the University to disclose the:
 - Existence of the contract or grant; or
 - Identity of the sponsor or contracting entity; or
 - Type of the research to be conducted; or
 - Research results





Brown's Approach

- With publication of JCORE and NSPM-33 Corporation (our Board of Trustees) initiated an Ad Hoc Committee
- Ad Hoc Committee reviewed COI, COC, Travel,
 Information Security, Export Controls and other areas that are impacted
- Report found that for Brown's current profile we are doing the right things
- BUT: also analyzed our activities relative to the suggested requirements and made recommendations





Ad Hoc Committee "To Do List"

- Specific recommendations related to some of the suggested requirements
- Areas of opportunity related to the guidance
- Educational needs related to the above
- Resourcing needs related to the above





Where are we now?

- Ad Hoc Committee report has been reviewed and accepted by the President and presented at a Corporation meeting
- We have just formed an "implementation working group" to map out the steps to take for opportunities and recommendations
- We have strong collaborations with IT, Dean of Faculty, and Global Engagement
- OVPR includes COI, some COC, Export Control





Where are we focusing?

- Increasing collaboration with non-research COI and COC
- Creating a more nuanced approach to implementing security and training where appropriate
- Surfacing areas that are not resourced for the new world
- Double checking our processes





Washington State University

Institutional Approach

Dan Nordquist



Institutional Profile

- WSU, public land-grant
- 79 master's degree programs, 65 doctoral degree programs, 3 professional degree programs:
 - Medicine
 - Pharmacy
 - Veterinary Medicine
- 31,159 students across 6 campuses
- \$357.6M NSF HERD FY21
- Fundamental research focus
- Mascot: Butch T. Cougar (Go Cougs!)









My First Read...of the Guidance

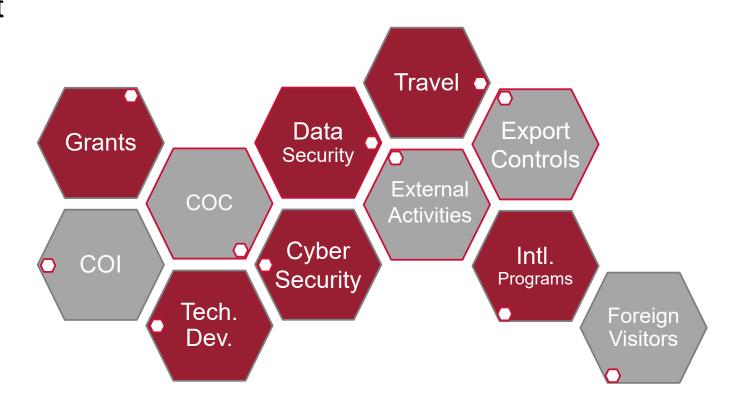
- Disclosure, disclosure, disclosure
- Then #5 "Research Security Programs" (the good stuff)
- What do I do now? Who do I talk to? Who do I involve? Why am I leading the effort?
- Bottom line Sponsors will ask me a document or a link





My Second Read...

- Divide and Conquer, get the ball rolling
- Started with emails to Campus Subject Matter Experts
- Brief the VPR
- Now committees, presentations, campus wide communications, President involved







My Third Read...

- Dig in a bit deeper
- Cyber: we meet 11 of 14 criteria (really analyzing "the three").
 - Limit information system access to the types of transactions and functions that authorized users are permitted to execute.
 - Verify and control/limit connections to and use of external information systems.
 - Identify information system users, processes acting on behalf of users, or devices.
- IT POC Teams Chat
 - Big fiscal worry is documentation and enforcement





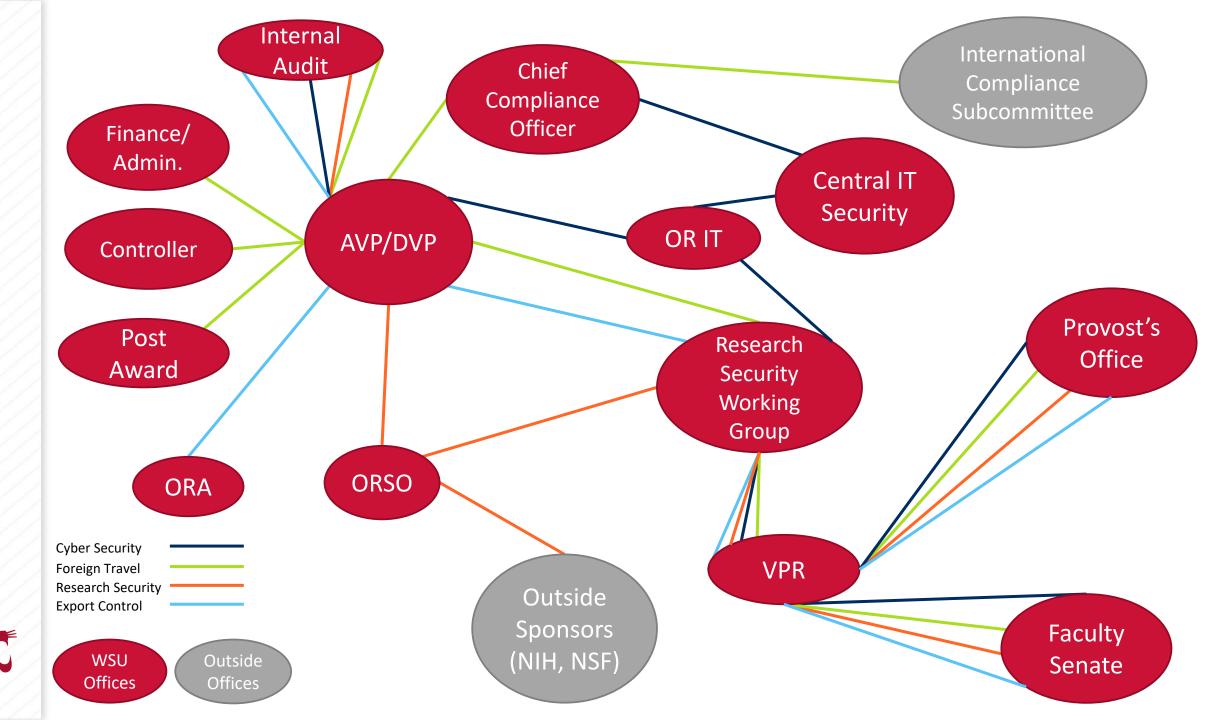
Still on Third Read...

- Foreign Travel Security
 - Big worry for us: Security Briefings
- Research Security Training
 - Well....what's supposed to be in it?
- Export Control Training
 - As appropriate
- Research Security POC
 - Who should this be?









Our Guiding Principles

• WSU <u>is committed</u> to enhancing and growing our international research collaborations with respect, openness, and transparency!

This includes those with backgrounds from China and

other countries.







University of Chicago

Institutional Approach

Jennifer Ponting



UChicago: Institutional Profile

Established in 1890 by John D. Rockefeller

Faculty: 2,377 full-time faculty

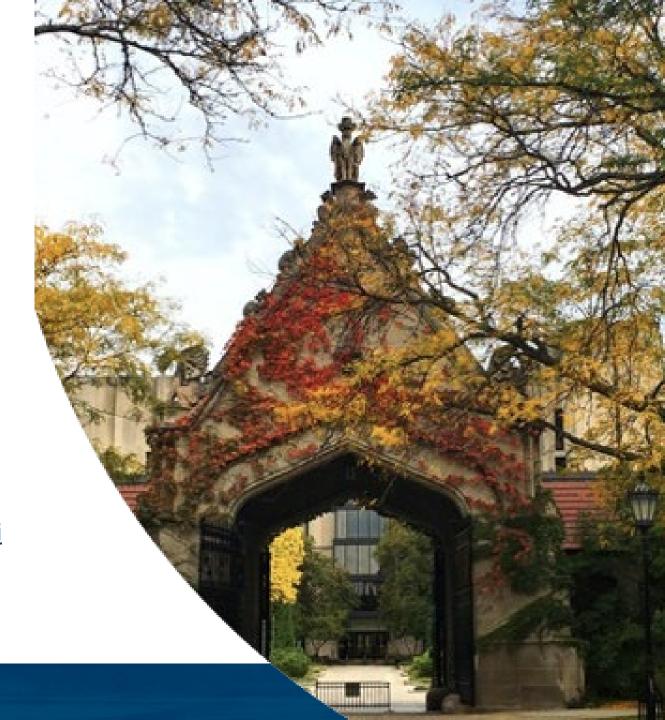
52 majors and 41 minors in the undergraduate College and 5 divisions and 6 professional schools for graduate study

Undergraduate Students: 6,800

Graduate & professional students: 10,159

Honors: 92 <u>Nobel Prize</u> winners, including 6 current faculty

Manages <u>Argonne</u> National Laboratory and <u>Fermi</u> National Accelerator Laboratory for the Department of Energy as well as <u>Marine</u> Biological Laboratory

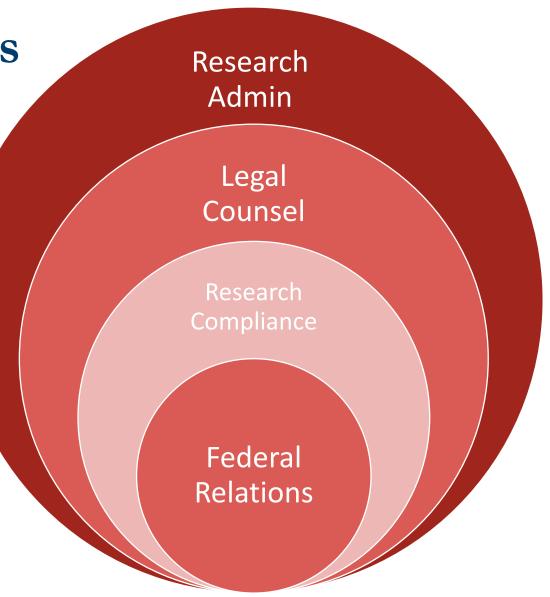




UChicago: Current Analysis

Focused Analysis for the Institutional Approach In a de-centralized model

- ☐ Identify the Gaps in Current Process and Policies
- ☐ Coordinate Research and Non-Research Stakeholders
- ☐ Identify Function Areas and necessary resource allocations





UChicago: Elements of Research Security

Focused Analysis for Institutional Approach

- Cybersecurity
 - UChicago does not have cybersecurity program that meets all of these requirements.
 - Expansion of the current cybersecurity program will be needed.
- ☐ Foreign Travel Security
 - UChicago has robust Travel Tools but currently no prior approvals required for travel
 - Major Cultural Change for UChicago if all International Travel becomes "Research Security"
- □ Research Security Training
 - Vague requirements
 - Expansion of researcher training will be needed
- Export Control Training
 - UChicago utilizes CITI export control training modules

