



Report of the Boston University *ad hoc* Committee on
Research Security and Conflicts of Commitment

JANUARY 2020

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1. Executive Summary and Key Recommendations

The *ad hoc* Committee on Research Security and Conflicts of Commitment was convened in May 2019 to deliberate and make recommendations about how to secure research on the Boston University campuses against theft and ensure that Boston University researchers' commitments to the University and to the agencies supporting their research are not compromised by external relationships.

The group met in person seven times between July and December 2019. They reviewed existing Boston University policies and procedures related to research security to determine whether they adequately addressed the concerns or whether additional policies were needed. They also interviewed key University officials, contacted the NIH Office of Grants Policy and NIH Program Officers to ask for clarifications of policies, and researched the policies, practices, tools, and resources other universities are using. In addition, they held two town hall meetings to discuss research security and funding agency requirements, one on the Charles River Campus and one on the Medical Campus.

The committee made recommendations in five areas:

- communication and education
- creation of additional policies
- faculty reporting obligations
- restricted and denied party screening
- relationships with regional federal security officials

Given the importance of ensuring that Boston University complies with existing regulations and that faculty are informed of new regulations as they emerge, the committee began to implement many of the recommendations as they were made. The recommendations that were implemented, as well as the remaining work to be done, are outlined in the report.

2. Membership of the *ad hoc* Committee

Members of the *ad hoc* Committee appointed by President Brown:

- Professor Ronald Corley, Director, NEIDL
- Professor Michael Sorenson, Associate Dean of the Faculty, Natural Sciences, CAS
- Professor Joyce Wong, Department of Biomedical Engineering, ENG
- Professor Stacey Dogan, Associate Dean for Academic Affairs, LAW
- Professor John Byers, Department of Computer Science, CAS
- Rebecca Ginzburg, Associate General Counsel, Office of the General Counsel
- Maureen O'Rourke, Associate Provost for Faculty Affairs

Additional leadership and staff who joined the committee included:

- Diane Baldwin, Associate Vice President Sponsored Programs
- Kate Mellouk, Associate Vice President Research Compliance
- Emma Bonanomi, Director of Communications, Office of Research
- Steve Marois, Director of Faculty Actions, Office of the Provost

3. Background

Open science and international collaboration are essential components of the American research enterprise and highly valued by Boston University. Boston University is committed to sharing scientific findings, analytical tools, data, and research methods developed by federally-funded research programs, advancing science through information sharing, and ensuring that the results of federally-funded research are freely available to the public, industry, and the scientific community.

Boston University values and has benefited tremendously from its foreign trainees, investigators, and employees, as well as its collaborations with researchers from foreign institutions. Just in the past three years, Boston University faculty have collaborated with researchers from 4,543 institutions and have co-authored 18,565 publications with researchers from around the globe. The faculty's ability to work on scholarly topics of their choosing, to share scientific findings and to collaborate openly with researchers anywhere is an important component of academic freedom. As outlined in the BU Faculty Handbook, "Academic freedom is essential in institutions of higher education if they are to make their proper contribution to the common good. The common good depends upon the free search for truth and its free exposition. It is that which justifies academic freedom, not the interest of the individual faculty member or even the interest of a particular university." BU faculty members are "entitled to full freedom to engage in research, scholarship, and creative work and to publish or produce the results, subject to responsible performance of these and other academic duties." ¹

In the past several years, federal intelligence agencies and federal agencies that sponsor research, as well as Members of Congress, have increasingly expressed concern that some foreign governments do not hold the same values as the U.S. related to ethics in science and that these foreign entities are taking advantage of the openness of the research and development environment at U.S. universities. Concerns have been raised about the funding relationships that U.S. universities have with certain foreign organizations, such as Huawei, and certain foreign government programs, such as the Thousand Talents Recruitment program in China, through which U.S. intellectual property may be siphoned; about the failure of some faculty to disclose foreign funding for their research; about U.S. faculty running "shadow laboratories" to duplicate, enhance, and potentially divert work being done at U.S. institutions; and about breaches in the NIH peer-review system. Concerns have also been raised about the unlawful transfer of research materials and samples; and targeted cyberattacks, and other forms of foreign interference relating to research performed at U.S. universities.

Efforts to spread the word about these concerns ramped up in 2018. [Francis Collins](#), Director of the National Institutes of Health (NIH), and [France Cordova](#), Director of the National Science Foundation (NSF), wrote letters to the academic community, alerting the research community to threats from foreign entities. The Hoover Institution issued a report entitled [China's Influence & American Interests: Promoting Constructive Vigilance](#) in November 2018, which outlined concerns specific to China and recommended steps that universities might take to mitigate risk.

NIH also convened an [Advisory Committee to the Director on Foreign Influences on Research Integrity](#), which issued a report in December 2018 with recommendations for maintaining both research integrity and the important role that international collaboration plays in the US scientific enterprise. In a similar

¹ From the BU Faculty Handbook:
www.bu.edu/handbook/ethics/academic-freedom

vein, the AAU and the APLU surveyed their members and published a report entitled [Actions Taken by Universities to Address Growing Concerns about Security Threats and Undue Foreign Influence on Campus.](#)

More recently, the FY19 National Defense Authorization Act required the Department of Defense to work with academic institutions performing defense research and engineering activities to protect researchers from undue foreign influence and other security threats. The NIH and the NSF issued additional guidance and stressed the importance of researchers disclosing all affiliations and appointments, including non-financial support, and outlined concerns related to Chinese Talent Programs. This fall, the AAU, ACE, APLU and FBI coordinated an [FBI Academia Summit](#), hosting over 100 higher education leaders and agency intelligence leaders to discuss these topics. Science and security were also addressed at a White House Summit of the [Joint Committee on the Research Environment \(JCOPE\)](#) in November 2019. The Joint Committee has stressed the importance of increasing transparency and research integrity, at the same time as working to reduce the administrative burden associated with reporting by harmonizing requirements across agencies.

On November 19, 2019, the U.S. Senate Homeland Security and Governmental Affairs Committee's Permanent Subcommittee on Investigations (PSI) held a hearing entitled, "Securing the U.S. Research Enterprise from China's Talent Recruitment Plans." The hearing included witnesses from the FBI, NSF, NIH, Department of Energy's Office of Science, and the U.S. Department of State's Bureau of Consular Affairs. In conjunction with the hearing, a bipartisan PSI staff report, [Threats to the U.S. Research Enterprise: China's Talent Recruitment Plans](#), was released. The report outlines particularly problematic components of the Chinese Talent Plan contracts that some U.S. researchers have entered into including that: the researchers will not disclose the content of the contract to unrelated parties and shall observe relevant laws and regulations of the People's Republic of China; that intellectual property rights are owned by the Chinese institution; that much of the work will be performed remotely in the researchers' U.S. lab and that it may be difficult to avoid comingling the results of the U.S. and Chinese work; that the researchers will recruit a specified number of Chinese students to their lab each year; that when the researcher is not in China their lab in China will be overseen by a Chinese researcher; and that the researchers will serve as a judge and reviewer on domestic and international research groups.

Additionally, the NSF released the JASON Report entitled "[Fundamental Research Security](#)." The report, authored by an independent group of elite scientists, stressed the value and need for foreign scientific talent in the U.S.; outlined the significant negative impacts of placing new restrictions on access to fundamental research; the need to extend our notion of research integrity to include disclosures of commitments and potential conflicts of interest; and the need for a common understanding between academia and U.S. government agencies about how best to protect U.S. interest in fundamental research while maintaining openness and competing in the global marketplace for STEM talent.

Over the past several months there have been reports of U.S. researchers at the [MD Anderson Cancer Center](#), the [University of Texas at Arlington](#), the [Moffitt Cancer Center](#), the [University of California at San Diego](#), [Kansas State University](#), the Van Andel Research Institute and others who have failed to report ties to China, such as Chinese funding for their research, remunerated faculty appointments at Chinese Universities, or whose work with China has resulted in the theft of intellectual property. There have also been reports of Chinese researchers who have [stolen biological samples](#) from U.S. labs and attempted to smuggle them to China. In some cases, universities have had to [pay significant fines](#) and/or return research funding and the faculty involved have been fired or have resigned.

In FY19, Boston University received \$579.4 million in total award funding—63% of which was from the federal government. It is critical that the University remain aware of the threat and the federal government’s concerns. Policies and procedures need to be put in place that ensure that we and our faculty comply with the requirements that apply to our federal awards, while remaining committed to international collaboration and partnerships with universities world-wide.

4. Charge to the Committee and Process

Given the concerns outlined above, in May 2019 President Brown asked Gloria Waters, Vice President and Associate Provost for Research, to organize an *ad hoc* committee to “deliberate and make recommendations about how to secure research on our campuses against theft and ensure that our researchers’ commitments to Boston University and the agencies supporting their research are not compromised by external relationships.” President Brown noted that the recommendations should aim to maintain the open atmosphere, which is vital to the integrity of academic research.

Specific questions President Brown asked the committee to address included:

- “How should we communicate with all faculty about the issues surrounding research espionage, theft of intellectual property and the need for disclosure about potential conflicts of commitment and interest, and compliance with federal and university rules on export controls?”
- “How do we use annual reporting by faculty and staff to identify external affiliations, relationships, financial interests, and sources of financial support that may conflict with a faculty member’s responsibilities to Boston University or to federal funding agencies?”
- “How do we strengthen our systems for approval of visiting faculty and staff who receive Boston University appointments?”
- “How do we support our faculty traveling abroad to help safeguard their communications and research results and ensure export control compliance?”

The group met in person seven times between July and December 2019. We interviewed University officials, contacted the NIH Office of Grants Policy and NIH Program Officers to ask for clarifications of policies, and researched the policies, practices, tools, and resources other universities are using. In addition, we held two town hall meetings to discuss research security and funding agency requirements, one on the Charles River Campus and one on the Medical Campus.

The list of campus stakeholders we met with included:

- Eric Jacobsen, Executive Director, Information Security
- Jeanne Kelly, Managing Director, International Students & Scholars Office, Global Programs
- Heather Skinner, Assistant Director, Research Integrity
- Adeline Wong, Managing Director, Operations, Global Programs

In preparing our report, we relied heavily on the results of the [AAU and APLU survey which outlines effective security and compliance practices](#) in place at member universities. We also relied upon the report of the NIH Advisory Committee to the Director (ACD) [Working Group for Foreign Influences on Research Integrity](#).

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In particular, the AAU/APLU report recommended that campuses:

1. Conduct an inventory of current campus security-related activities.
2. Communicate with faculty about potential security threats and provide reminders of federal and university disclosure and export controls compliance requirements.
3. Consider implementation of additional campus policies and practices to bolster security and mitigate risk.

As outlined in Table 1, Boston University has a number of existing policies and procedures related to research security concerns. The committee reviewed the relevant University policies to determine whether they adequately address the issues or whether additional policies may be needed.

Table 1

1. Policies and procedures related to disclosure of potential conflicts of commitment and interest	<ul style="list-style-type: none">• Investigator Financial Conflicts of Interest Policy for Research• Senior Program Effort Certification Procedure• Responsible Conduct of Research Process• Institutional Conflicts of Interest in Research Policy• “General” COI Policy• External Professional Activity
2. Policies and procedures related to intellectual property	<ul style="list-style-type: none">• Intellectual Property Policy• Material Transfer Agreements
3. Policies related to compliance with federal laws on export controls	<ul style="list-style-type: none">• Export Control Policy
4. Policies related to travel abroad	<ul style="list-style-type: none">• International Travel Risk Policy
5. Policies and procedures related to safeguarding communications and research results	<ul style="list-style-type: none">• Network Security Monitoring• Access to Electronic Information• Traveling abroad with computers and personal information
6. Policies related to approval of visiting faculty and staff who receive Boston University appointments	<ul style="list-style-type: none">• EHS Visitor Policy

5. Recommendations

The committee made recommendations in 5 areas:

- communication and education
- creation of additional policies
- faculty reporting obligations
- restricted and denied party screening
- relationships with regional federal security officials

These recommendations are outlined below.

I. Communication and Education

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The committee felt that communication with the faculty and education related to foreign collaboration and the potential for foreign influence in research could be enhanced in several ways. In particular, the committee recommended:

- a) Providing resources and support to help faculty navigate the disclosure and compliance requirements, including a website outlining requirements of federal funding agencies and background reading and resources.
- b) Communicating reminders and updates about requirements to the faculty through *Research Revealed* and to research administrators through the *Sponsored Programs Blog*. The committee also recommended that the Office of Research send notifications to faculty and research administration staff when there are changes in regulations or reporting requirements. Finally, the committee recommended regular updates at the monthly meeting of the Research Council (Associate Deans for Research) and the Advisory Council for Research Administration (staff in research administration).
- c) Hosting town hall meetings for faculty and staff with presentations geared to increasing faculty and staff awareness of existing reporting and disclosure requirements and to answer questions.
- d) Incorporating a module on foreign collaboration and reporting requirements into the existing *Responsible Conduct of Research* process.
- e) Establishing a University-wide committee with representatives from a wide range of university offices (OGC, Research Compliance, Sponsored Programs, Development, ISSO, IS&T) which would meet quarterly in order to keep central offices informed and to coordinate efforts.

II. Policies

The committee recommended that the University put in place two new policies:

- a) a policy on Conflict of Commitment
- b) a policy on Visiting Scholars

The committee surveyed peer university policies and previewed drafts of proposed policies on these topics. The University Council Committee on Faculty Policies and the Research and Scholarly Activities Committee, respectively, will take responsibility for drafting the final policies and bringing them through the University Council process.

III. Faculty Reporting Obligations

a) Grant Submission

Currently faculty are required to fill out a *Proposal Summary Form* (PSF) when submitting applications for funding. The current PSF requires faculty to certify that they have the appropriate approvals, such as from the IRB and IACUC if required. The PSF must be signed by their Dean or Dean's delegate. The committee recommended revising the PSF to include questions requiring the faculty to indicate that they have appropriately disclosed foreign collaboration and sources of funding. In addition, the *Renewal Summary Form* (RSF) (NIH RPPR submission) should be updated to reflect the same disclosures.

b) External Activity

Faculty are currently required to complete an “*External Activity Report*” annually in which they provide information about compensated and uncompensated activities outside of their Boston University obligations. The committee recommended renaming the existing “*External Activity Report*” as the “*External and International Activity Report*” and adding questions specifically related to sources of international support, international employment and appointments held, and patents filed and received. This reporting will allow the University to identify foreign affiliations, relationships, and financial interests which may conflict with a faculty member's responsibilities to Boston University or federal funding agencies.

IV. Restricted and Denied Party Screening

Restricted Party Screening (RPS) is a critical component of BU’s efforts to prevent violations of U.S. Export Control laws. RPS is the process by which BU checks a business partner against one or more of the restricted party lists to ensure they are not doing business with a restricted party. RPS verifies whether an organization, individual, or country has had its export privileges restricted or revoked per the [Department of Commerce](#), [Department of State](#), and [Department of Treasury](#) and is listed on any of the federal restricted party lists.

The screening that BU currently does is limited in scope. Sourcing & Procurement and Sponsored Programs conduct some screening in addition to the screening done by Research Integrity but comparatively, BU’s peers have a more robust screening process. The 2019 Association of University Export Control Officers (AUECO) survey, for which 79 universities responded, showed:

- 94%-97% of schools screen H1-B visas and grants at least some of the time
- 79% screen J, Fs and O-1s
- 84% screen international post-docs
- 78% screen international grad students
- 91% screen foreign travel

The committee recommended that the University put in place a stronger RPS program and that in order to do so, the University put in place a software solution to enhance RPS of new sponsors and to meet additional sponsor requirements². Currently, Research Integrity uses software from OCR to perform RPS while other departments across the university manually use the [Consolidated Screening List](#). While the Consolidated Screening List is useful, it is not a complete list and the nine lists it includes are just a fraction of the lists exporters must check. Additionally, the Consolidated Screening List is not updated in real time and this presents a risk to BU. It is BU’s responsibility to check all names added to the Federal Register and names could be missed due to delays in being added. Another issue with this list is that it only provides a list of names and does not provide variations on foreign names or aliases, so obtaining an exact match on a spelling of a name can be limited.

V. Maintaining a Relationship with Regional Federal Security Officials

Boston University has an excellent relationship with federal security officials. Each year, BU participates in the annual conference on U.S. Export Controls and Espionage organized by the Counter-Proliferation Working Group (CPWG). In 2013, [BU hosted the conference](#). Chaired by the US Attorney’s Office for the District of Massachusetts, the CPWG is made up of representatives from law enforcement and intelligence agencies, including the U.S. Department of Homeland Security's Homeland Security Investigations, Department of Commerce's Office of Export Enforcement, Federal Bureau of Investigation, Defense Criminal Investigative Service, Defense Security Service, Naval Criminal

² One such solution is *Visual Compliance*, which is used by over 450 research institutions.

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Investigative Service, Air Force Office of Special Investigations, U.S. Army, U.S. Customs and Border Protection, Missile Defense Agency, and Defense Intelligence Agency. The CPWG shares information about current threats, including illegal transfers of sensitive U.S. technology, and coordinates investigations. BU continues to participate in these annual conferences.

In addition, in 2013, when the AAAS, AAU, APLU, and FBI organized several meetings on “Bridging Science and Security for Biological Research” BU leadership attended and provided input on the resulting [reports](#).

BU also has a close working relationship with the FBI’s local office and the agents assigned to the Weapons of Mass Destruction Directorate, which is part of the FBI’s National Security Branch. FBI agents have met with BU researchers to discuss biosecurity related to our National Emerging Infectious Disease Laboratory. BU has also co-sponsored an annual meeting, the Three I’s (IACUC, IBC, IRB), co-organized by the Massachusetts Society for Medical Research (MSMR) and the FBI, at which foreign influence and research security are discussed. BU staff attend, present, and/or serve on the planning committee for the conference each year.

Maintaining the positive relationships BU has developed with regional federal security officials will be invaluable as the university navigates threats to research security.

6. Implementation

Given the importance of ensuring that Boston University complies with existing regulations and that faculty are informed of new regulations as they emerge, the committee began to implement many of the recommendations as they were made. These are outlined below.

I. Communication and Education

A [website](#) devoted to International Collaboration in research and scholarship was launched in the fall semester to help the faculty stay abreast of current agency regulations and best practices. The website is updated as new reports and/or regulations are issued.

Discussion of new regulations or concerns is a regular topic at the monthly meeting of the Research Council which is comprised of the Associate Deans for Research of all 17 schools and colleges, as well as at the Advisory Council for Research Administrators.

New issues of concern are communicated to the faculty on a regular basis through [Research Revealed](#), our internal Research newsletter, a blog for research administrators maintained by Sponsored Programs and with [memos](#) to the faculty about reports from funding agencies, new areas of concern such as the recent issue with transporting [biological samples](#).

Two [Town Halls on International Collaboration](#) were held in the fall to allow the faculty to learn more about the evolving regulatory landscape and current requirements for research proposals, reporting, disclosures, and agreements. The town hall featured a [presentation](#) and discussion with representatives from the BU faculty, Sponsored Programs, Office of the General Counsel, and the Office of Research.

II. Policies

a.) Conflict of Commitment

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The issue of creating a Conflict of Commitment Policy was brought to the University Council Committee on Faculty Policies. The committee is currently seeking to incorporate the important principles related to conflict of commitment identified by the ad hoc committee in a policy that will, in effect, be a robust conflict of commitment policy, whether under that name or another.

b.) Visiting Scholars

The Research and Scholarly Activities Committee of University Council has drafted a Visiting Scholars and Researchers Policy which is currently under consideration.

Guidelines created by the Council on Governmental Relations (COGR), [Framework for Review of Individual Global Engagements in Academic Research](#), have been circulated to research leadership and posted on the Foreign Collaboration website. The guidelines are aimed at helping the research community establish a “Know your Collaborator” culture, and institutions can use these to assess potential risks of individual engagements.

III. Faculty Reporting Obligations

a.) Federal Grants

As recommended by the committee, the [proposal summary form](#) (PSF) was revised in the fall to explicitly ask faculty if the proposal involves foreign collaboration, and if so, what the nature of that collaboration is.

The [summary form](#) which accompanies NIH progress reports (RPPR) was also revised to remind researchers of the need for prior approval if there is a foreign component in the proposal.

b.) BU External Activity Reports

The External Activity Report (EAR) was expanded to become the [External and International Activity Report](#) (EIAR). In addition to the standard reporting of external compensated and uncompensated activities, faculty are also expected to disclose any international appointments or employment (paid, unpaid, honorary, volunteer, or advisory board), international support (funding, research resources, or in-kind support), and patents (filed or issued).

IV. Recommendations Still to be Implemented

Additional recommendations that need to be implemented over the next several months include:

- Incorporating a module on foreign collaboration and reporting requirements into the existing *Responsible Conduct of Research* process.
- Establishment of a university-wide committee with representatives from a wide range of university offices (OGC, Research Compliance, Sponsored Programs, Development, ISSO, IS&T) which would meet quarterly in order to keep central offices informed and to coordinate efforts.
- Putting in place a stronger Restricted Party Screening process, enhanced by a software solution.