|NU-RESearch Quarterly

A research compliance newsletter focused on raising awareness across the NU research enterprise

To subscribe, please click <u>here</u>.

HIGH PROFILE CASES HIGHLIGHT FALLOUT FROM RESEARCH MISCONDUCT CASES

By Jeff Seo

In March 2022, the then Vice-Chancellor for Research at the University of North Carolina resigned following a <u>report by the Office of Research Integrity (ORI)</u> that he had plagiarized text in a federal grant proposal for cancer research. Then in July 2023, the President of Stanford University resigned following an <u>investigation by its Board of Trustees</u> that twelve papers on which the President was either the principle author or co-author contained falsified information even though he apparently had little involvement or knowledge of the actual manipulations. More recently, scrutiny of former Harvard President's academic record <u>revealed instances</u> in several published articles where she may have failed to appropriately cite academic sources. Then <u>media outlets reported</u> that more than 50 papers were being reviewed for image manipulations involving Dana-Farber researchers including several authored by its CEO.

While these examples are perhaps newsworthy because of the high-profile positions held by the authors, the reality is that allegations of research misconduct is on the rise. According to Ivan Oransky as <u>reported in the Boston Globe</u>, founder of Retraction Watch (website that tracks retractions in scientific journals), there were more than 10,000 retractions last year, representing approximately .2% of all scientific papers. One source where these allegations are becoming more prevalent is from PubPeer, a website that containing an exhaustive database of published papers where reviewers can anonymously identify issues and concerns, often leading to bona fide allegations sent to ORI and/or the research institution to which the authors are appointed.

SPECIAL POINTS OF INTEREST

- International Travel and Research Security
- RCR Spring Schedule
- Updates Resources for Researchers
- Cybersecurity weaknesses
- NIH Updates

CYBERSECURITY WEAKNESSES

By Tessa Seales

In November 2023, the U.S. Department of Defense (DoD) Inspector General released "Special Report: Common Cybersecurity Weakness Related to the Protection of DoD Controlled Unclassified Information on Contractor Networks". The report, which summarizes a series of DOD OIG audits, outlines 24 open recommendations focused on cybersecurity challenges that DoD contractors are facing, including common weaknesses in the cybersecurity protocols of DoD contractors who process, store, and transmit controlled unclassified information (CUI)1 as outlined in NIST SP 800-1712.

NIST SP 800-171 provides contractors with security requirements for safeguarding DoD CUI. Contractors must implement or develop a plan to implement 110 security requirements. A prospective contractor must attest that they comply or will comply with these security requirements to receive a DoD contract and it is incorporated into the DoD contract through DFAR clause 252.204-7012. If a contractor fraudulently attests their compliance with NIST SP 800-171, they will be held accountable by the Department of Justice's (DOJ) Civil Cyber-Fraud Initiative (CCFI)4, which works to combat new and emerging cyber threats to the security of sensitive information and critical networks and systems5. The DOJ can pursue cybersecurity-related fraud by government contractors and charge recipients under the False Claims Act6 and through the CCFI, including the ability to hold contractors accountable who fraudulently attest on cybersecurity compliance self-assessments.

The DoD OIG audits highlighted that DoD contracting officials failed to establish processes to verify that contractors complied with specific NIST SP 800-171 requirements, especially these critical factors:

- Access control
- Audit and accountability
- Identification and authentication
- Physical protection
- Media protection
- Risk assessment

Between the DoD OIG audit reports and the CCFI assessments, the common cybersecurity weaknesses are:

- Multifactor authentication or strong passwords
- System activity and user activity reports disabling inactive user accounts
- Physical security
- Network and system vulnerabilities
- Scanning for viruses and malicious code

Ensuring a contractor is complying with NIST SP 800-171 requirements helps to reduce the risk of cyber-attacks and the loss of DoD CUI. As a recipient of DoD CUI, Northeastern is required to comply with the NIST SP 800-171 requirements as required by DFARS 252.204-7012. Northeastern is additionally working to achieve CMMC Level 2 certification which is comprised of standard security practices and processes around protecting information and data associated with DoD funded research.
For questions regarding CUI and/or CMMC please contact: CMMC_Program_Office@northeastern.ecu, ResearchCompliance@northeastern.edu, cui@northeastern.edu.

HIGH PROFILE CASES HIGHLIGHT FALLOUT FROM RESEARCH MISCONDUCT CASES

Many of the issues spotted by PubPeer users highlight honest or careless mistakes that be easily corrected. However, others are more serious, leading to extensive and costly investigations. In addition to retractions, resignations or loss of titles, ramifications can also include suspension and debarment by ORI, reimbursement to sponsors, or in some serious cases, criminal prosecution by federal law enforcement.

Quality publications remains an important measure of success in research. Nonetheless, high volumes of publications, often co-authored with visiting scientists and graduate students who generate much of the data, figures and images, have embroiled reputable, corresponding authors in these difficult situations. The increasing number of research misconduct allegations reinforces the significance of mentoring and training in the responsible conduct of research (RCR). NU-RES offers an extensive RCR program that is open to all, including graduate students and international visiting scientists. The RCR calendar is available here.

NEW RESOURCES AVAILABLE FOR RESEARCHERS

By Paula Robinson

In an effort to increase and promote transparency, our office is continually working on developing resources and guidance documents to best support the university staff and faculty. Part of Northeastern University's mission is to bridge the gap between research and industry. To that end, faculty are encouraged to broaden their horizons and participate in external agreements where knowledge can be used to serve the public. While we know that much time and effort is put into ensuring contracts between our faculty and outside entities are mutually beneficial, as well as compliant with university and federal policies, Northeastern requires the completion of a Consulting Agreement Addendum to protect our faculty and the integrity of the institution. Our department has developed guidance for the Consulting Agreement Addendum to succinctly explain the necessity of the addendum and walk faculty through its completion. This document can be found on our website.

HOW WILL THE NIH FOREIGN SUBRECIPIENT DATA SHARING REQUIREMENTS IMPACT YOUR RESEARCH PROJECT

By Amanda Humphrey

Many research stakeholders in the US and around the world were concerned by NIH notice NOT-OD-23-133, in May 2023. This notice documented several obligations that Pass-Through Entities (PTEs) should memorialize in written subaward agreements, but none stoked as much fierce debate as the requirement that all foreign subrecipients provide all their data, including lab notebooks, to the PTE on a quarterly basis. NIH received an outpouring of commentary on this policy change. As a result, on September 16th, 2023, the NIH released notice NOT-OD-23-182 that clarified and expanded upon the earlier Notice. The most important revision was the modification to the requirement that foreign subrecipients provide their records on a quarterly basis. NOT-OD-23-182 lessened the requirement to an annual basis and clarified that access can be 100% electronic. Allowing this access to be electronic can streamline the process but also increases the risk of violating a privacy requirement or an IT security breach.

The Notice states that "If a subrecipient is unwilling to accept the requirements [of the NIH Notice] then an agreement cannot be issued." Thus, Northeastern will be requiring a Letter of Intent from all foreign subrecipients that documents their willingness and ability to comply with the NIH requirements.

When exchanging data with any collaborator (whether domestic or foreign), please keep in mind these best practices.

1. IT Security:
   A. We recommend that you use a Northeastern approved solution to send and receive research data. Northeastern offers several file sharing solutions that have robust security provisions and are covered by our institutional license. You can find more information on those solutions in the Knowledge Base.

   B. Your subrecipient may offer to provide you with access to their systems. This poses a security risk to you, as well as your collaborator. Before agreeing to access another institution's system, we recommend that you speak to the Office of Information Security (OIS) in advance. You can either request a consultation here or email ois@northeastern.edu .

2. Data Privacy
   A. To the maximum practicable extent, please exchange de-identified data with collaborators. This minimizes your compliance risks because you will not have to comply with foreign regulations.

   B. Make sure you have clearly outlined what data needs to be transmitted between institutions in your IRB protocol and consent forms. This information is critical because you may need to seek consent to share your data with your collaborator (and vice versa).

   C. Remember to ask your collaborator about privacy protections in their home country (ideally before you start writing a proposal). If you have any questions about if Northeastern has the systems to comply with the data security provisions of your collaborator, reach out to OIS@northeastern.edu.

3. Logistics

   A. There are fieldwork situations where notes are hand-written. Talk to your subrecipients about how they will be recording data and the best ways for them to comply with the regulation. Make sure you contact NU-RES to document these expectations in the subaward agreement.

Currently Northeastern only has a handful of NIH subawards impacted by this Notice, but as our global network continues to grow, we anticipate these requirements will impact more faculty collaborations.

INTERNATIONAL TRAVEL AND
EXPORTS CONTROL (CONTINUED FROM FALL 2023 NEWSLETTER)

By Lissette Gilster

Before traveling abroad, faculty, staff, and students at Northeastern University should be familiar with the impact that export control regulations can have when traveling to foreign countries. In the previous NU-RESearch Quarterly Winter 2023 Newsletter article on international travel and export controls, we explained the type of research, items, and technology, subject to export controls when traveling abroad. This is a continuation of the article and provides some best practices and additional resources.

For reference, university travel includes academic, business, and extracurricular travel that is part of a university program or project, authorized by, at the request of, funded, coordinated, or administered by Northeastern University.

Best Practices When Travelling Internationally:

Maintaining Awareness

- You are free to take and openly discuss any information published or in the public domain, educational information taught in universities, or information resulting from Fundamental Research (FRE).

- Do not take any controlled or sensitive research with you abroad, including in digital form.

- Don't share or access information that is restricted, such as export-controlled data, proprietary information, or information linked to a research project not protected under the FRE.

- Be aware that your conversation may not be private or secure, many countries do not have legal restrictions against surveillance.

- Conduct due diligence – the export control office can complete restricted party screening to ensure you are not engaging with a restricted entity or person.

- Be aware of new acquaintances who probe for information and be aware of your surroundings.

- Reminder -If traveling with field research equipment contact exportcontrol@northeastern.edu to determine if there are export license requirements. Also, each country has its own import and export requirements. Just because a piece of equipment does not require a U.S. export license does not mean it will not require an import permit or other requirement for entry into a foreign

Traveling With Devices

- Loaner laptops are available for international travel and are highly recommended for travel to high-risk countries.

- Customs officials in any country, including the U.S., may inspect your belongings, including the electronic content of computers, phones, tablets, and storage devices. They may take possession of these items to inspect, so it is important not to travel with your controlled research.

- Don't allow foreign electronic storage devices to be connected to our computer or phone as these could automatically copy your stored electronic data. Similarly, do not use USB drives given to you at an international conference, as these may have spyware or malware.

- Assume that anything you do on any device, particularly over the Internet, will be intercepted, even encrypted data can be decrypted.

- Some countries also have import regulations that specifically prohibit travelers from bringing encrypted laptops into those countries. Violations of those countries' prohibitions could result in confiscating your device by customs authorities and fines or other penalties.

- Do not leave your devices unattended, keep your device physically secured.

- If your device is lost, stolen or you suspect you have been hacked or compromised, report it to the

SAFETY RESOURCES FOR RESEARCH STAFF AND FACULTY

By Paula Robinson

This past fall, the Research Compliance Team attended NU's annual Preparedness Day. We spoke with a number of staff from different departments across campus and learned of many resources from mental health support to assistance in finding off campus housing and understanding real estate phishing scams. All in all, it was a great day for learning.
However, one particular presentation piqued our interest and we wanted to make sure these resources were widely known within the research community:

◊   Safe Zone App – A mobile safety app that recruits GPS technology to connect users with campus police in the event of an emergency. Not only is this app helpful in a true emergency where assistance or medical care is needed, the app features a number of preventative tools as well. The Check-In feature allows you to share your location with campus police along with a time stamp. The app will prompt you to continually check in until your time in that location is complete. If you fail to check in, a member of campus police will come to your location to ensure your safety. Along with the Check-In feature, you're able to customize your profile to highlight specific needs. For example, if you are someone with an allergy and may need an EpiPen, someone coming to your assistance can see that on your profile and will come prepared in case there is an allergy-related incident. Last, but not least, the app features a help desk for non-emergency inquiries.

◊   Safety Escort Services – During those late nights when you're studying in the library or monitoring an experiment in the lab, don't feel that you have to travel alone. At any time of day, a safety escort is available to you. Simply provide your name, ID number, and location and an escort will make their way to you within 10-15 minutes. Safety escorts can be requested at any time during the day, but should not be used as a taxi service. For off-campus trips within two miles from the center of campus, you can request the RedEye van using the app between the hours of 5pm and 6am. The van picks up passengers at Egan Access Road behind Snell Library and rides must be booked ahead of time using the RedEye App.

◊   RAVE – This is NU's emergency Alert System. Use the link provided to sign up for text alerts regarding emergency situations on campus.

We recommend faculty consider posting information about these resources in their labs and/or encouraging lab staff download and set up these applications. Part of NU's commitment to research is the commitment to the safety of those who help us achieve our research goals. Continue to check back on the links provided for further updates.

HUSKY HEROES

Fred Cromp Jr.

Our featured NU-RES Husky Hero for this Winter issue is Fred Cromp Jr.! Fred is the Senior Research Compliance Specialist for the Research Finance team at NU-RES. He has worked at Northeastern for 14 years and in Research Administration for over 34 years. Fred is a prime example of a phenomenally dedicated member of the NU-RES community. This section will showcase an interview with Fred and why he is our featured NU-RES Husky Hero for this winter issue.

What is your background? Where were you before you started working here at Northeastern?

I grew up in the Dorchester neighborhood of Boston and graduated from Boston Technical High School before enrolling as a full-time day student at Northeastern University in the fall of 1980. I graduated from Northeastern in 1985 with a Bachelor of Science in Business Administration with a concentration in Accounting. As a Northeastern student, I participated in the cooperative education program. While on co-op I worked a couple of semesters in the VP of Finance Administration and Treasury office here at NU.

I began my career in research administration at Boston College in 1989 as the Manager of Contracts and Grants. Eventually I became the Associate Director of Financial Administration in the Office for Sponsored Programs at BC. I was responsible for the stewardship, management, and oversight of Post-Award Administration, which included cash management, financial reporting, audits, and compliance.

I came back to Northeastern University in 2010 to be the Assistant Director in the Office of Research Administration and Finance (ORAF). John Harris, a previously recognized Husky Hero, who currently serves as the Director of College Research Administration at Khoury College, hired me into the position. ORAF eventually became NU-RES where I have served multiple roles and am currently the Senior Research Compliance Specialist for the Research Finance team.

I found that working in post award research, especially at a University like Northeastern, which values research, experiential education, and lifelong learning, was a wonderful opportunity for me to apply my background and interest in accounting and research.

Could you briefly describe your current role here at Northeastern University?

As the Senior Research Compliance Specialist, my role is to review and approve all payroll expenses charged to research grants and contracts (5-ledger Index numbers). I conduct a compliance check to ensure that salaries charged to research grants and contracts are allowable and in compliance with federal regulations and university policies and procedures.

Additionally, I oversee Northeastern University's annual effort certification process. The annual effort certification reports are the University's primary means for complying with federal regulations.

The certified effort reports provide reasonable assurance to our sponsors that the salaries charged to the award are accurate, allowable, and properly allocated.

I also provide education and guidance to the research community on federal salary allocation procedures and effort reporting for research.

Could you briefly describe your typical day-to-day on the job?

My typical day-to-day job can vary throughout the calendar year. Daily, I monitor payroll charges to research grants and contracts and approve transactions in the K2 Payroll Distribution Change (PDC) process as well as the HR Workday system. Hundreds of PDCs and Workday transactions are processed monthly. During the months of May, June, July and August, we usually see almost double the transactions due to faculty members engaging in off-contract research

What is something you are proud of, and in what ways do you believe your work tends to go unnoticed by the broader Campus/NU-RES Community?

I am most proud of the working relationships that I have made within the research community here at Northeastern. I am proud of the contributions of the NU-RES team and the impact we have made on the university's trajectory in research. Because of the priority that was established by President Aoun and the infrastructure that the University's leadership team has provided, research expenditures have doubled over the last 6 years from approximately $111 million in FY17, to $220 million in FY2023. For us to have successfully managed that expansion and see our department, as well as so many other offices here, grow and obtain more resources is something to be really proud of. In terms of something that may go unnoticed, I think it's just remarkable how well we have all managed the growth in research from new and different types of sponsors and the concerted fiduciary responsibility to follow best practices, guidance, and procedures regarding research expenses. We have done a great job balancing the research slice of the University's operating budget pie. Looking forward to seeing us double our research expenses again!

What does it mean to you to be working at/with NU-RES? How would you describe the overall impact that individual NU-RES entities like yours have brought to the University?

We have a great team in NU-RES. I enjoy working with my colleagues on our post-award team that set up the accounts in the financial accounting system and manage the expenditures and receivables, as well as our pre-award team that work on proposals and negotiate agreements. I feel NU-RES contributes greatly to the mission and goals for fostering research and working with our faculty, research community, and funding partners. The efforts of NU-RES have certainly made an impact to the University as evident by the growth in new awards and research expenditures. I am thankful to have collaborated with so many wonderful colleagues, administrators, faculty, and researchers. In addition, I can always contact colleagues and folks within partnering institutes for guidance on policy, procedures, and managing awards.

If there is someone that you know and would like to nominate for this column, please reach out to ResearchComplance@northeastern.edu.

What are hobbies you like to do outside of work?

Outside of work, I love spending time with my family and friends. I love traveling and eating out in restaurants with them. I enjoy supporting the local sport teams including the Red Sox, Celtics, Patriots, and Bruins. I have lived in Needham, MA for the last 34 years with my wife who is a nurse at Tufts Medical Center. We have two adult children, a son and a daughter, who are both Northeastern University graduates. I have always been involved in my local community, working on local boards, organizations, and youth sports. I am always trying to develop social awareness and make meaningful contributions to the communities in which I am a part, and I have made it a point to instill that in my children. My wife and I recently joined a bowling league; we are empty nesters now. We enjoy making new friends with folks in our local community.

The Spring Responsible Conduct of Research (RCR) Registration is Open!

By Morgan Fielding

The Spring 2024 RCR program is now available on the Compliance website. Administrators are highly encouraged to share this information with your faculty and students. Through the website, anyone can view the RCR workshop schedule and register for any of the sessions. By attending all RCR workshops an individual would qualify for a brief Capstone session and receive a certificate of completion. For any questions, please email Morgan Fielding, Associate Director of Training and Learning at m.fielding@northeastern.edu.

THE IMPORTANCE OF RESEARCH SECURITY IN REMOTE LOCATIONS

By Morgan Fielding

Last year, following the implementation of National Science Foundation (NSF) PAPPG 23-1 several directorates began to require Safe and Inclusive Working Environment for Off-Campus and Off-Site Research (SAI) Plans, to be included as part of the proposal process for off-campus or off-site research. SAI Plans describe processes and policies that would address abuse of any person including harassment, stalking, bullying, or hazing whether verbal, physical, electronic, or written as well as conduct that is unwelcome, offensive, indecent, obscene, or disorderly. In light of this new requirement, during the NU-RES Summer Workshop in June 2023, the session "A Multi-Perspective on Safe and Inclusive Off-Site Work Environments" addressed this topic. The session included representatives from the Marine Science Center, the Office of Academic and Research Safety, the Office of University Equity and Compliance, Ombuds Offices, and the Office of Diversity, Equity, and Inclusion. We continue to work with these offices to ensure we are incorporating training and information sharing related to SAI Plans throughout relevant training.

In 2021, accusations of sexual misconduct within the U.S. Antarctic Program (USAP) surfaced. As a result, NSF's Office of Polar Programs (OPP) sent subject matter experts to examine sexual misconduct in the USAP Community and identify corrective actions. The NSF director characterized the situation as a "widespread issue," prompting an official investigation following the publication of a critical report by NSF. The report detailed a pervasive culture of harassment and assault within the USAP which sends more than 3,000 people from researchers to cooks down there with about one in three being women. This encompasses not only McMurdo Station but also cites concerns about sexual misconduct at South Pole Station, Palmer Station, and other U.S. research vessels in Antarctica.

Based on surveys conducted among 880 current and recent program employees, 59% of women reported experiencing negative incidents related to sexual harassment or assault. Furthermore, a staggering 95% of respondents indicated awareness of someone who had been assaulted or harassed within the program. According to NPR, the inquiry also revealed that a pervasive environment of sexual harassment and assault was compounded by fears of retaliation. "People on station fear, and rightfully so, that if they are harassed or assaulted and report it, they will be the ones who will be going home," one person told the report's authors. "When things happened on the ice, the number one thing I heard was 'don't report it or you will go home and be blacklisted from the program."

In November 2023, the leaders of the House Science Committee issued a letter to the National Science Foundation criticizing their management of sexual harassment and assault cases within the USAP. The committee's letter conveys ongoing doubts about the accuracy of information presented to Congress, emphasizing concerns that NSF has not sufficiently prioritized the well-being of victims. Additionally, they express apprehension that NSF has not taken adequate measures to address cultural issues within the program contributing to harassment. As a result, NSF has placed oversight agents at various research sites in Antarctica to continue to evaluate and mitigate sexual misconduct.

Northeastern University is committed to fostering a secure and supportive environment for all its faculty, students, and staff. Our dedication to safety and well-being is represented through initiatives such as the Responsible Conduct of Research (RCR) program and collaborative workshops conducted in partnership with the offices mentioned earlier in this article. These efforts underscore the institution's unwavering commitment to prioritizing and addressing these critical concerns.
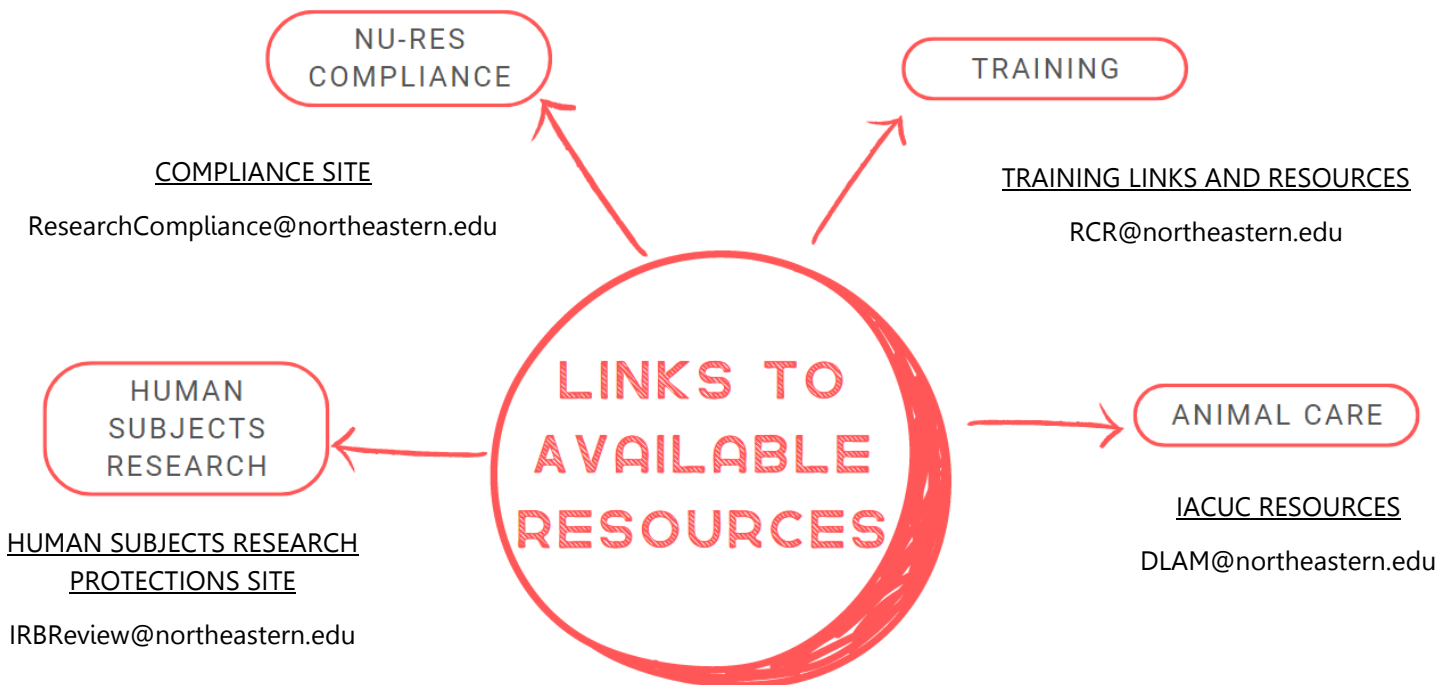
THE MOST WONDERFUL TIME OF THE YEAR

Annual disclosures are due soon!

By Paula Robinson

It's that time of year again! Next month you will receive an email reminder to complete your annual disclosure requirements. Within the disclosure, you will be asked to provide information regarding external activities you participated in during the 2023 calendar year. External activities include, but are not limited to, consulting activities, teaching or visiting scholar appointments, sponsored travel, and serving on review boards for both federal and non-federal organizations.

When completing your disclosure, be sure to provide important details about your external activities such as time spent on the external activities, payment received, and whether a formal appointment is held. If your external activity includes international travel, information regarding the duration of travel and any amount received in reimbursement or sponsorship will be needed as part of the disclosure.

The annual disclosure requirements are put in place to serve the best interests of the university and the faculty and staff that support the university. By providing the necessary details, together we can develop management plans as needed so that we may all work together to create a thriving research environment. For further guidance, please refer to the following policies: Policy on Conflict of Interest and Commitment, Policy on Financial Conflict of Interest Related to Research, Policy on External International Engagements. For additional questions, please reach out to researchcompliance@northeastern.edu

NU-RES COMPLIANCE

COMPLIANCE SITE

ResearchCompliance@northeastern.edu

TRAINING

TRAINING LINKS AND RESOURCES

RCR@northeastern.edu

LINKS TO AVAILABLE RESOURCES

HUMAN SUBJECTS RESEARCH

HUMAN SUBJECTS RESEARCH PROTECTIONS SITE

IRBReview@northeastern.edu

ANIMAL CARE

IACUC RESOURCES

DLAM@northeastern.edu

To continue to receive our quarterly newsletter, please visit this link to add yourself to list of subscribers.