



January 27, 2020

Chloe Kontos
Executive Director
National Science and Technology Council
Joint Committee on the Research Environment
Office of Science and Technology Policy
Executive Office of the President
Eisenhower Executive Office Building
1650 Pennsylvania Avenue
Washington, DC 20504

Dear Director Kontos:

On behalf of the Association of Public and Land-grant Universities (APLU), we thank you for the opportunity to provide input on actions that federal agencies could take, working in partnership with academic institutions and others, to maximize the quality and effectiveness of the U.S. research environment.

APLU is a research, policy, and advocacy organization dedicated to strengthening and advancing the work of public universities. Annually, its 200 U.S. member campuses enroll 4.2 million undergraduates and 1.2 million graduate students, award 1.1 million degrees, employ 1.1 million faculty and staff, and conduct \$42.4 billion in university-based research.

We applaud the Joint Committee on the Research Environment (JCORE) for looking to address key areas that impact the U.S. research enterprise. Academic research is a global enterprise. U.S. universities strive to attract and educate the best and brightest students from home and around the world, employ international scholars, foster research collaborations with partners around the world, and support workforce development by advancing cutting-edge research that is licensed and commercialized by U.S. companies. Key to these activities is an open and rigorous research environment where faculty and students can share information and learn from one another. Yet given the rise in concerns about foreign governments acting to take advantage of the unique openness of the U.S. research enterprise, we recognize the need to bolster research security at institutions.

Research Rigor and Integrity

The Association of Public and Land-grant Universities affirms the importance of research reproducibility, replicability, and quality. Public access to the data underlying federally funded research is essential to achieving these aims. Working with the Association of American Universities (AAU), APLU has led an effort with institutions to accelerate public access to research data since 2017. Informed by that work, we highlight these actions federal agencies can take to promote public access. The federal agencies can:

- Encourage and support the use of data management plans;
- Invest in data workflow systems;
- Work with the community to develop data standards and practices;
- Work with the community to develop requisite training for researchers, reviewers, and federal agency staff; and
- Invest in data repositories to reduce the burden on researchers for making available the scientific data that underlies peer-reviewed publications.

It is also important that universities strive to put in place the structures that acknowledge and promote faculty expertise and time investments in these areas.

The recent GAO report on [*Federal Research: Additional Actions Needed to Improve Public Access to Research Results*](#) (2019)¹ identified leading practices for the agencies from interviews with key nonfederal stakeholders. These practices, included but were not limited to: establishing mutually reinforcing or joint strategies between the agencies, identifying and addressing needs by leveraging resources across the agencies, and establishing compatible policies, procedures, and other means to operate across agency boundaries. We affirm these as leading practices for the agencies. We encourage OSTP to coordinate with other federal agencies to implement these leading strategies in their cross-agency work.

Further, we outline below the major recommendations for federal agencies from the [*AAU-APLU Public Access Working Group Report and Recommendations \(2017\)*](#)².

- All federal agencies should strive to harmonize their policies, documentation (e.g., data management plan, data use agreement terms, and data sharing certifications), and compliance approach to public data access to the greatest extent possible to minimize the administrative requirements and costs for both agencies and funding recipients.

¹ Neumann, J. (2019). FEDERAL RESEARCH: Additional Actions Needed to Improve Public Access to Research Results. Available at <https://www.gao.gov/assets/710/702847.pdf>.

² <https://www.aau.edu/sites/default/files/AAU-Files/Key-Issues/Intellectual-Property/Public-Open-Access/AAU-APLU-Public-Access-Working-Group-Report.pdf>.

- Agencies should provide clear information on how compliance with data sharing requirements will be monitored, evaluated, and enforced, being mindful of the need for institutions and agencies to manage constrained resources. This includes providing clear guidance on when the compliance period for data sharing expires. In addition, we strongly recommend that once a project is completed, agency research staff oversee compliance with data management plans since they are in the best position to work with principal investigators (PIs) and universities in providing an ongoing assessment of the value of specific data and overseeing and managing ongoing data access commitments.
- Agencies should provide clear information on expectations regarding what data do and do not need to be shared, and, at least initially, agree upon a minimum standard across agencies regarding the data subject to public access requirements. Specifically, we recommend that the minimum standard be defined as data that are essential to understanding and reproducing peer-reviewed publications and conference proceedings (i.e., that are reasonably expected by the discipline to be accessible for re-analysis). Additional requirements could be added at the discretion of the program to facilitate specific goals, e.g., where the data outputs are a main goal of the funding, where disciplinary conventions call for other kinds of data outputs, or where a negative result may not be published but still could be useful for other researchers or the public.
- The length of availability of data and the possible embargo of availability should be specified in the award documents based on the set standards created for each discipline where available and should depend on the specific costs and benefits associated with public access to the data. Agency expectations for data access after the funding period has ended should be specific and finite in duration and should be accompanied by additional funding if they require more than a nominal cost.
- Agencies should recognize that before an institution publicly shares data, it must be evaluated for quality and well-documented to ensure the data adds value to the scientific discussion, can be understood and effectively reused, and can withstand public scrutiny.
- Agencies should continue to promote public access rules for data that are consistent with rules protecting human subjects (e.g., IRB and HIPAA), proprietary information, national security, and controlled unclassified information (CUI).
- Federal agencies should look to universities and the broader research community to collectively set standards and guidance on retention, security, and data use terms. Federal agencies should then use these standards as a basis to harmonize their own policies.

- Agencies should clarify and continue to explicitly note in their calls for proposals that costs to support a program’s requirements for data accessibility are allowable as direct or indirect charges in research program budgets.

Further, we support the recommendation outlined in [NASEM’s Open by Design \(2018\)](#)³ report that “research funders should support the development of training programs in the principles and practices of open science by design.”

We also highlight the draft [NIH Policy for Data Management and Sharing from November 2019](#), which has some desired policies and guidance. Specifically, we support the possibility of Just-in-Time Data Management Plans (DMPs) that could reduce applicant burden, the opportunity for the researcher and NIH program officer to discuss specific elements of the plan, the ability to update plans over the course of the award, and that during the funding period that compliance with the DMP be determined by the NIH program officer. We note that there should be a requirement that the institution is involved in the approval process as the contract for carrying out the award is with the institution. The Office of Sponsored Research should have to approve any changes to the DMP, along with the researcher and NIH program officer.

Coordinating Administrative Requirements for Research

Numerous reports over several years, including those of the National Academies of Science⁴, Engineering, and Medicine and the Government Accountability Office (GAO)⁵, have raised concerns about the growth of research regulations and reporting requirements, and their impact on scientific productivity and international competitiveness. Researchers on our APLU member campuses are spending more and more time engaged in administrative activity as part of their federally funded research, draining from resources that could otherwise be devoted to scientific research. We, COGR, and AAU have long called for clear, consistent, streamlined, and **coordinated** regulations across the federal research agencies to help decrease these burdens.

As JCORE continues to examine ways to reduce administration burden, it should consider:

- Working with federal agencies to create a single financial conflicts of interest policy to be used by all agencies that includes standardized definitions, disclosure forms, and

³ National Academies of Sciences, Engineering, and Medicine. (2018). *Open science by design: Realizing a vision for 21st century research*. National Academies Press. Available at <https://www.nap.edu/catalog/25116/open-science-by-design-realizing-a-vision-for-21st-century>

⁴ “Optimizing the Nations Investment in Academic Research, A New Regulatory Framework for the 21st Century,” (2016) <https://www.nap.edu/catalog/21824/optimizing-the-nations-investment-in-academic-research-a-new-regulatory>.

⁵ “Federal Research Grants: Opportunities Remain for Agencies to Streamline Administrative Requirements,” (2016) <http://www.gao.gov/assets/680/677949.pdf>

monetary thresholds;

- Continuing to harmonize federal agency forms, systems, and frequency for collecting grant application and management information such as project budgets and biographical information.
- Limiting research proposal requirements to the information needed for peer evaluation of the merit of the proposal. Supplementary information—such as IRB approval, conflict-of-interest disclosures, and fully detailed budgets— should be provided “just in time,” after the research proposal is deemed likely to be funded; and
- Ensuring any subrecipient monitoring requirements are limited and appropriate for preserving accountability but not overly burdensome or duplicative of other reporting.
- Standing up the Research Policy Board called for in the 21st Century Cures Act⁶. As called for in statute this board, with members from both government and the public non-profit research community could assist longer term in examining and coordinating policies and reducing regulatory burdens.

Research Security

The nation’s public research universities have a unique, long-standing partnership with the federal government conducting research on behalf of the American people. This research represents one of the nation’s greatest assets, which is why foreign governments may attempt to take advantage of our open and collaborative research ecosystem. APLU is working with its member institutions to help protect against foreign government interference, influence, and theft of research and the discoveries that come from it. In addition, we want our institutions to remain open and inviting in order to attract the best minds and ideas throughout the world.

APLU partnered with AAU and conducted a survey of our member institutions on policies, practices, tools, and resources. Our organizations released an [Effective Practices Summary](#) in April 2019, based on that survey. Many universities are working to address new and emerging security threats by:

- Examining their existing policies to see where there are gaps;

⁶ <https://www.congress.gov/114/plaws/publ255/PLAW-114publ255.pdf>

- Making sure faculty members are aware of, and in compliance with, existing security and disclosure requirements;
- Implementing additional campus policies and procedures to bolster security;
- Creating high-level, cross-campus working groups and task forces to facilitate coordination on research security issues; and
- Sharing any identified threats with relevant members of the campus community.

Our organizations are currently conducting a new survey to update the Effective Practices Summary for 2020.

As the recent JASON report [JSR-10-21 Fundamental Research Security](#)⁷ points out, the typical U.S. academic researcher has little contact with the U.S. intelligence community or law enforcement, but does have daily contact with foreign scholars and frequent contact with faculty peers in other nations. Federal agencies could do more to share information about specific security risks on campuses – far too much information remains classified and unavailable to guide and inform effective and appropriate campus responses. We were pleased that Congress included language in the Fiscal Year 2020 National Defense Authorization Act (NDAA) calling on the Department of Defense to provide training and advice to universities for protecting sensitive national security information in an unclassified manner⁸. In addition, federal agencies should be cautious to avoid rhetoric regarding foreign influence that suggests possible "racial profiling," which is at odds with American values and cannot be tolerated in any situation. We suggest that guidance to address the threat be chosen carefully to avoid targeting certain ethnic groups.

APLU also strongly supports the Securing American Science and Technology Act provisions in the FY 2020 NDAA.⁹ This legislation will help to support the JCORE framework of interagency collaboration to address research security issues but also calls for the creation a new Science, Technology, and Security Roundtable. The Roundtable to be convened by the National Academies of Science, Engineering and Medicine would bring together key stakeholders from the scientific enterprise, including federal agencies, universities, and industry to help address these issues across sections.

⁷ https://www.nsf.gov/news/special_reports/jasonsecurity/JSR-19-21FundamentalResearchSecurity_12062019FINAL.pdf

⁸ Section 1281 of the Conference Report <https://rules.house.gov/bill/116/conference-report-s-1790>

⁹ Section 1746 of the Conference Report <https://rules.house.gov/bill/116/conference-report-s-1790>

Conflict of interest policies should be harmonized across agencies, but with a clear eye towards not discouraging beneficial international and industrial collaboration. As APLU and other associations laid out in our June 2018 response to the [NIST Request for Information \(RFI\) on Federal Technology Transfer Authorities and Processes \(Docket No. 18022019-819-01\)](#)¹⁰, we believe the 2012 Public Health Service (PHS) conflict of interest regulations had the unintended effect of dissuading some faculty from working with industry to commercialize their ideas and placed significant new cost burdens on universities without a concomitant measurable reduction in conflicts of interest.

Conflict of interest reporting is only one part of a security framework needed to address economic and national security risk. A shared, data-informed framework or guidelines that can be used by both universities and the federal government to analyze potential international collaborations could help mitigate some of these risks. Federal agencies should designate one point of contact for institutions or faculty to seek advice on security considerations.

Changes to conflict of interest reporting regulations and guidance should not be made retroactively. Faculty should be encouraged to come forward to correct any filings that should be updated to meet current expectations. Perhaps agencies should consider a grace period to bring any conflict of interest filings into compliance under new interpretations.

We strongly oppose the Department of Education's efforts to reinterpret Sec. 117 of the Higher Education Act and significantly expand reporting requirements to include submitting "true copies" of gift agreements and contracts. This presents a huge risk of disclosure of intellectual property agreements and other proprietary research information. If the "true copies" of gift agreements and contracts are collected by the Department of Education, there are not sufficient exceptions to FOIA to prevent the release of this information¹¹. We urge the Department of Education to engage in a more collaborative negotiation to determine appropriate Sec. 117 compliance regulations.

Safe and Inclusive Research Environments

In order to provide a productive and safe work environment and foster the free exchange of ideas, APLU and our member institutions are committed to providing a harassment-free work environment for all students, faculty, and personnel. We support federal research agency efforts to institute appropriate and timely reporting requirements pertaining to principal investigators

¹⁰ <https://www.aplu.org/members/councils/governmental-affairs/CGA-library/higher-ed-associations-rfi-response-to-federal-technology-transfer-authorities-and-processes/file>

¹¹ 12/19/19 -ACE- higher education community comment letter and memo on Sec. 117 <https://www.regulations.gov/document?D=ED-2019-ICCD-0154-0056>

and co-PIs at awardee institutions that engage in inappropriate behavior. The aim should be to ensure all researchers feel welcome in safe, inclusive, and equitable research environments.

As federal research agencies move forward with new or revised policies aimed at preventing harassment, we would urge you to consider previous public comments submitted by APLU and others to the new [NSF policies](#)¹² and proposed [NASA policies](#)¹³.

In addition, we have outlined a few overarching principles:

- New regulations must be coordinated among federal funding agencies. Common definitions, clarity on confidentiality of records, understanding of the intersection of the expected new Department of Education Title IX rules are essential to creating appropriate campus policies.
- Timing of misconduct notification requirements must be weighed carefully. Federal agencies should be notified when a respondent is found responsible for misconduct or when an institution takes an administrative action that would affect the ability of the grant personnel or their trainees to carry out the activity of the grant, not at an earlier stage in an institution's inquiry. Federal notification at an earlier stage could lead to under-reporting, promote retaliation, undermine the regulations, and unduly harm people innocent of wrongdoing.
- If an event prior to the final determination of a misconduct case is used as the trigger for agency action, a process must be created to clear the name of an alleged perpetrator if the claim of misconduct is not substantiated.
- Federal agencies should be encouraged to place more emphasis on reintegrating victims of harassment back into the workforce. This includes counseling services as well as possible augmented agency funding as a [recent report](#) to NIH has suggested.
- Agencies and universities must work together to identify a solution to what has been referred to as "passing the harasser." Pilot projects, such as the one at the University of California, Davis, to review information about academic appointment candidates' personal conduct in their previous appointments¹⁴ is an interesting model to explore.

¹² <https://www.aplu.org/members/councils/governmental-affairs/CGA-library/comments-re-nsf-new-reporting-of-sexual-assault-sexual-harassment-or-other-harassment/file>

¹³ <https://www.aplu.org/members/councils/governmental-affairs/CGA-library/associations-letter-on-nasas-notification-requirements-on-sexual-harassment/file>

¹⁴ <https://science.house.gov/imo/media/doc/Kass%20Testimony.pdf>

- Federal agencies must lead by example. Leadership positions should reflect the make-up of our community. The National Academies of Sciences, Engineering, and Medicine released a report in 2018 titled *Sexual harassment of women: climate, culture, and consequences in academic sciences, engineering, and medicine*¹⁵. The first recommendation in the report was to create diverse, inclusive, and respectful environments. NASEM recommended that academic institutions take, “explicit steps to achieve greater gender and racial equity in hiring and promotions at every level” and “take steps to foster greater cooperation, respectful work behavior and professionalism.” Directly in line with these recommendations, APLU is co-leading the Aspire Alliance, a National Science Foundation INCLUDES alliance. It is a collaborative effort with 40 national partners and our member institutions to diversify the faculty by effectively recruiting, hiring, and retaining underrepresented STEM faculty, by transforming practices, policies, and resources to support these efforts, and by fostering institutional cultures that recognize and value inclusivity and diversity broadly. The National Science Foundation (NSF) awarded a five-year, \$10 million NSF INCLUDES Alliance grant to support the effort.

Thank you again for the important work the Joint Committee on the Research Environment is undertaking. APLU stands ready to work with you to advance and promote research and discovery to improve society, foster economic growth, and address global challenges.

Sincerely,



Peter McPherson,
President, APLU

¹⁵ National Academies of Sciences, Engineering, and Medicine. (2018). *Sexual harassment of women: climate, culture, and consequences in academic sciences, engineering, and medicine*. National Academies Press.