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From: Lizbet Boroughs, MSPH, Associate Director of Federal Relations Kate Hudson, JD, Associate Vice President and Counsel Association of American Universities

Date: April 24, 2023

RE: Comments in Response to <u>NOT-OD-23-091</u>, Request for Information on the NIH Plan to Enhance Public Access to the Results of NIH-Supported Research

The Association of American Universities (AAU) thanks the National Institutes of Health for the opportunity to comment on <u>NOT-OD-23-091</u>, the NIH Plan to Enhance Public Access to the Results of NIH-Supported Research. Founded in 1900, AAU is composed of America's leading research universities. AAU's 65 research universities transform lives through education, research, and innovation.

AAU strongly agrees with NIH's statements that "increasing access to publications and data resulting from federally funded research offers many benefits to the scientific community and the public," and that access "can accelerate research, generate higher quality scientific results, encourage greater scientific integrity, and enable future inquiry, discovery, and translation for NIH-supported research." Indeed, in 2021, AAU and its sister organization, the Association of Public & Land-grant Universities (APLU), published a joint <u>Guide to Accelerate Public Access to Research Data</u> to help inform our respective member institutions' activities on accessible research data. Leading up to the publication of this document, with funding from NIH and the National Science Foundation (NSF#1837847 and #1939279), AAU and APLU held a series of workshops and conferences with researchers, senior research officers, librarians, chief information officers, and organizations in support of increasing public access to research.

Given our past work and strong interest in public access, AAU is carefully monitoring various federal research agencies' implementation of the <u>August 2022 guidance</u> released by the Office of Science and Technology Policy (OSTP). Our joint response with APLU in January 2020 to NOT-OD-20-013 highlighted that additional specific clarification, outside the scope of the RFI, would enable robust participation and engagement by researchers and universities with <u>NIH's Data Management and Sharing Policy</u>. AAU's comments on NOT-OD-23-091 are informed by our collaborations and discussions with our members, APLU, the Association of American Medical Colleges (AAMC), the Federation of American Societies for Experimental Biology (FASEB), and the Council on Governmental Relations (COGR).

Inequities in publishing opportunities

AAU appreciates that NIH is engaged in clarifying reasonable costs for publications that can be charged directly by individual PIs to grants. This approach should also encompass cost considerations at the broader university level. Preparations for publications are not only supported by direct costs but also pooled mechanisms such as facilities and administrative costs, library subscriptions, and additional university support from other available revenue sources. Indeed, oversight of Data Management and Sharing (DMS) is a collaborative process and not solely the researcher's responsibility during an award's arc. Data curation; compliance with federal, state, and tribal laws; metadata requirements related to fields of study; and proper data storage are tasks that require resources and an integrated approach well beyond the individual researcher's scope of direct costs. Universities with robust financial resources, data infrastructure, and library and faculty support may have the capacity to leverage these resources to respond to the added costs involved in ensuring that the new public access requirements are met, however, many institutions and their faculty may struggle to support these additional costs.

AAU suggests that NIH could ensure data access and help minimize costs by creating and supporting one agency-wide data repository, similar to the creation of PubMed Central, to serve this purpose for publications. This would be particularly useful for areas where no current NIH-supported disciplinary repository exists. AAU also suggests that agencies create overarching disciplinary-specific repositories to ensure that universities do not create a myriad of different repositories, which will diffuse the accessibility of data access overall.

Additionally, we urge the NIH to explore ways to ensure that faculty and institutions have the means to receive support for publication and data storage costs well beyond the length of an individual grant. Without financial support after the terms of a grant, researchers and universities will be unable to comply with open access and data management standards for NIH without incurring the costs themselves, which will undoubtedly have a more significant and inequitable impact on researchers and institutions without robust research infrastructure funding.

AAU appreciates NIH's continued engagement with the community on the unanticipated costs of its DMS policy.

Improving equity in access and accessibility of publications to diverse communities and end users

Ultimately, data is limited in its utility if research data stewardship is not fundamental to the research endeavor. Conceptualizing and planning for data access and interoperability is a continually iterative process involving researchers, funders, institutions, health professionals, and the public. Data technology and analysis are not stagnant, and their evolution will require flexibility within NIH's public access guidance and continual training for program officers at the individual NIH institutes. AAU is, therefore, supportive of NIH's collaborations with scientific societies, such as FASEB's "DataWorks! Help Desk," to improve data management at the individual researcher level. AAU also strongly supports the creation of disciplinary based data repositories to improve and ensure access to federally funded research results and believes that it is important for NIH to support and facilitate the creation of such repositories. As previously stated, we also recommend the creation of one overall NIHsupported data repository for areas where disciplinary repositories do not currently exist or are not feasible.

Methods for monitoring evolving costs and impacts on affected communities

NIH proposes to actively monitor trends in publication fees and policies to ensure that they remain reasonable and equitable. This monitoring will be very important as we are concerned that the impact of the new public access policy could result in increasing publication fees in the form of Article Processing Charges (APCs), making the affordability of the costs of publishing significantly more challenging for some researchers and institutions. NIH's evidence of trends should also encompass not only fees and policies, but also monitor which institutions, disciplines, and labs have decreasing appearances in the most accessed journals to provide a more accurate picture of this effect.

Additionally, AAU emphasizes that publication fees are only one narrow measure to determine evolving costs and impacts of the NIH public access policy, and that simply monitoring trends in publication costs will not fully encapsulate this impact. We echo our colleagues at FASEB who stated in their response to

NOT-OD-23-91 that the scientific peer review process required to ensure the highest standard of scientific integrity is not adequately reflected in publication fees. The human effort of oversight and compliance, long-term data access, and impacts on society journals must be considered, too.

Input on considerations to increasing findability and transparency of research and effort to improve the use of PIDs and metadata

AAU supports NIH's efforts to provide near term data points for utilizing Persistent Identifiers (PIDs) for different research products and metadata. We remain concerned, however, that without clear standards on PIDs and metadata, different approaches will inadvertently hamper accessibility and reproducibility. As NIH refines its recommendations regarding certain PID platforms and metadata storage, consistency across federal agencies will be key to effectuating more robust adoption; we applaud NIH's continued collaboration with the National Institute of Standards and Technology (NIST) and their efforts to develop a <u>Research Data Framework</u>. Developing and adopting standard metadata approaches could help facilitate the use of metadata across different datasets and disciplines, reducing barriers to sharing and reusing data.

The Association of Research Libraries, the California Digital Library, APLU, and AAU released a report, <u>Implementing Effective Data Practices: Stakeholder Recommendations for Collaborative Research</u> <u>Support</u>, in 2020 with recommendations for data practices supporting an open research ecosystem. AAU stands by the 2020 recommendations. The report identified five core PIDs that are fundamental and foundational to an open data ecosystem. Using these PIDs will ensure that basic metadata about research is standardized, networked, and discoverable in scholarly infrastructure:

1. Digital object identifiers (DOIs) to identify research data, as well as publications and other outputs

- 2. Open Researcher and Contributor (ORCID) IDs to identify researchers
- 3. Research Organization Registry (ROR) IDs to identify research organization affiliations
- 4. Crossref Funder Registry IDs to identify research funders
- 5. Crossref Grant IDs to identify grants and other types of research awards

We encourage NIH's efforts to identify and pilot a DOI system that would overlay existing NIH grant identifiers to allow for greater interoperability. NIH's current award identifiers have extremely limited utility outside of NIH. Such a DOI system should be further coordinated with other federal agencies and affected research stakeholders. Further, the use of services and tools such as DataCite, ORCID, Crossref, figshare, and others should be allowed as a direct cost in the grant proposal. Many of these tools require membership fees or charge fees for additional services. These entities are critical to local data management on university campuses and may require significant campus investment through direct fees or human capital.

Conclusion

AAU commends NIH's outreach and engagement with the scientific community to inform refinements to its DMS policy. A collaborative approach with stakeholders is imperative to ensure public access to federally funded research outputs. AAU strongly urges NIH to consider the creation and maintenance of discipline-specific repositories and to address the need for financial support following the end of a grant in order to allow for greater compliance with open access and data management obligations. In addition to the specific areas delineated within NOT-OD-23-091, AAU suggests other areas for further engagement in NIH's DMS policy: (1) longer-term costs of data to researchers and universities, (2) data interoperability challenges, (3) more clarity on researcher compliance guidance, and (4) the broad definition of "scientific data." AAU looks forward to additional opportunities for discussion.