May 6, 2020

Office of Science and Technology Policy
Executive Office of the President
Eisenhower Executive Office Building
1650 Pennsylvania Avenue
Washington, DC 20504

Re: Request for Information: Public Access to Peer-Reviewed Scholarly Publications, Data and Code Resulting from Federally Funded Research (85 FR 9488)

Submitted electronically to: PublicAccess@ostp.eop.gov

The Association of American Medical Colleges (AAMC) appreciates the opportunity to comment on the White House Office of Science and Technology Policy (OSTP) request for information on public access to the results of federally funded research. The AAMC is a not-for-profit association representing all 155 accredited U.S. medical schools, nearly 400 major teaching hospitals and health systems, and more than 80 academic and scientific societies. Through these institutions and organizations, the AAMC represents nearly 173,000 faculty members, 89,000 medical students, 129,000 resident physicians, and more than 60,000 graduate students and postdoctoral researchers in the biomedical sciences.

The AAMC supports the efforts to facilitate implementation of the 2013 OSTP memorandum on increasing access to the outputs of federally funded research, including publications, data, and code. Making these outputs more readily available advances science by enabling further validation of experimental results, facilitating reuse of hard-to-generate data, catalyzing new research and scientific collaboration, and generally promoting more responsible stewardship of federal resources. Additionally, increased transparency is essential to building trust and confidence in publicly funded research.
What current limitations exist to the effective communication of research outputs (publications, data, and code) and how might communications evolve to accelerate public access while advancing the quality of scientific research? What are the barriers to and opportunities for change?

Opportunities to achieving increased public access of research outputs vary by agency and scientific discipline, and include clear federal policies and guidance, sufficient investment in infrastructure and relevant training, and common standards for curation and discoverability. We note that agencies are already in the process of implementing public access plans and have further guidance on how to move forward in the recommendations detailed in the 2019 report1 from the Government Accountability Office, which the AAMC agrees are important steps to improve current public access to data and publications.

The AAMC has specifically detailed challenges and opportunities specific to data management, sharing, and access in previous responses to the NIH draft data management and sharing plan2 and OSTP’s request for comments on desirable characteristics of data repositories.3 One primary consideration for agencies is that the development of consistent guidelines and clearly defined characteristics for repositories to preserve and provide access to research data are critical. With the expanding policies for data sharing and public access, many institutions are planning to expand and use their own repositories. Without federal guidance on standards for data storage and discoverability as well as some level of centralized infrastructure or coordination, holding data in such disparate platforms and systems will place a significant technical burden on anyone who wants to access or reuse the data.

In addition to appropriate storage, public access to data, code, and other research outputs is only meaningful provided that the information itself is understandable to users outside of the original researcher. Thus, it is critical that agencies define common standards and formats, require the use of metadata where relevant, and ensure adequate curation of any shared resources.

In terms of publications, the largest barrier is the lack of models that will make a switch from pay-to-read (i.e. subscriptions) to pay-to-publish sustainable. Academic society’s journals may

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not be able to transition and those avenues for publication may cease to exist, particularly at a time when the other key source of revenue for academic societies, meetings, has dried up for a period of time. An additional problem is assuring that less well funded investigators will be able to publish in peer reviewed journals. While a researcher may be willing to expend grant funds on their own publication, they may not be willing to spend those grant dollars on the work of a trainee. We have not, collectively, solved all the problems of the pay-to-publish model. We believe that journals still have an important peer-review function, that they curate information in a way that makes it more valuable to a broad audience, and that any transition to other models must find a way to retain these crucial aspects.

What more can Federal agencies do to make taxpayer funded research results, including peer-reviewed author manuscripts, data, and code funded by the Federal Government, freely and publicly accessible in a way that minimizes delay, maximizes access, and enhances usability? How can the Federal Government engage with other sectors to achieve these goals?

Continued engagement with other sectors is also a necessary component to facilitate the broader dissemination of research results. The federal government must engage with publishers, including scientific societies, to enable access to published research results. PubMed Central, a free full-text archive of biomedical journal literature maintained by the National Library of Medicine and currently utilized by a large number of agencies, is one model of a successful federal partnership to make publications freely available to a wider audience.

Academic institutions, and particularly their libraries, also play a key role in the organization and availability of research outputs from faculty. Supporting these efforts will require funds for the creation and maintenance of repositories, as well as supporting personnel who have specialized knowledge and can help scientists share the outcomes of their research. Institutions can also provide valuable insight into challenges for public access and share community-developed processes and standards to inform federal policies. There are many existing initiatives which provide valuable insight into increasing the accessibility of data and scholarly communications, including AAMC’s Credit for Data Sharing project⁴, and the Association of Public and Land-grant Universities and Association of American Universities (APLU-AAU) workshops on Accelerating Access to Research Data.⁵

⁴ Credit for Data Sharing. [https://www.aamc.org/what-we-do/mission-areas/medical-research/data-sharing](https://www.aamc.org/what-we-do/mission-areas/medical-research/data-sharing)
How would American science leadership and American competitiveness benefit from immediate access to these resources? What are potential challenges and effective approaches for overcoming them?

Public access to research outputs is an essential step in the scientific process, especially it relates to the biomedical and clinical research conducted at the AAMC’s member institutions. Collaborative science and access to other researchers’ work is critical to our understanding of biological phenomena and the translation of basic research into treatments and cures. Increased knowledge dissemination and collaborative science will further American competitiveness and speed the timeline of positive outcomes of federal research funding on health and disease. However, the rapid dissemination of poorly executed science could be a by-product of a failure to build new models that retain the standard setting of a peer-review based system.

The AAMC appreciates OSTP’s efforts to seek input from stakeholders and looks forward to continued engagement as the federal government develops guidance relevant to public access of research outputs. Please feel free to contact me or my colleagues Anurupa Dev, PhD, Lead Specialist for Science Policy (adev@aamc.org) and Heather Pierce, JD, MPH, Senior Director for Science Policy and Regulatory Counsel (hpierce@aamc.org) with any questions about these comments.

Sincerely,

Ross McKinney, Jr., MD
Chief Scientific Officer