Statement on Expanded Public Access to Publications

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National Research Council, NAS Forum

The Office of Science and Technology Policy (OSTP) Memorandum, "Increasing Access to the Results of Federally Funded Scientific Research," provides new opportunities for a productive partnership between research universities and Federal research funding agencies. Enhanced access to the results of federally funded research accelerates the pace of scientific discovery, promotes innovation, and enriches education.

Research institutions are mission-driven, and common to their individual missions is a shared commitment to create and build upon new knowledge, make accessible the results of their research, and preserve information for future generations. The member universities of the Association of American Universities and the Association of Public and Land-grant Universities conduct nearly two-thirds of federally funded research, and their members generate a significant percentage of the peer-reviewed scholarly publications covered by the OSTP memorandum. Research libraries, with others in their institutions, supply much of the infrastructure in support of this research and in many cases also provide access to the final peer-reviewed scholarly publications and digital data produced by institutional researchers. Research institutions also have a long history of and experience with collaboration.

It will be important that the policies federal agencies develop minimize the cost and complexity of compliance with grant requirements for both principal investigators and their institutions. University budgets are stretched thin with few discretionary resources. Federal research funding is under considerable pressure, and there is understandable concern within the university research community that implementation of a broad national public access policy should proceed, but in a manner that respectfully balances the rewards that will come from making research results more widely available with any sacrifices to current research progress the effort may entail.

The OSTP memorandum wisely provides agencies with latitude in developing and maintaining the public access repositories called for, stipulating that such repositories could be maintained by the agency funding the research, another federal agency, or through a public/private partnership with external parties. We believe that the most important issue at this time, however, is not who builds and operates the repository but the functionality of that public access resource.

Functional Properties of Public Access Repositories

Our three university and library associations believe that the following functionality considerations will be key to achieving the public access goals of the OSTP policy directive:

1. Copyright or IP rights should not be assigned to final peer-reviewed scholarly publications in an exclusive manner that would prohibit preservation, discovery, sharing, and machine-based services such as text mining. Similarly, federal policies can stimulate the development of new tools and services (human and machine), and licensing arrangements should ensure that no one single entity or group secures exclusive rights.

2. In order for the broad goals of the OSTP plan to be achieved, agency compliance requirements should be transparent, and deposit requirements should be easy for the researcher – or institution or publisher depositing on behalf of the researcher -- to accomplish. In addition, agencies should develop effective grant tracking tools in advance of public access policy implementation that will enable universities to better manage compliance with agency regulations. To the extent possible, agency requirements should be comparable across agencies to minimize the burden on universities of mandated compliance requirements.

3. Final peer-reviewed scholarly publications should be linked openly to their source data to the extent possible to allow for reuse and replication of results, and such links should be established in a generalizable, sustainable manner.

4. Open standards are necessary to ensure interoperability in repository system design for search and discovery, and the metadata describing publications should be based on open standards to ensure that the public can read, download, and perform text mining on the publications.

5. Agencies should require the use of persistent, unique identifiers for grants, publications, data, and authors to foster reuse of content and development of new services by individuals and machines.

6. A variety of forms of metrics and identifiers should be supported to provide information on access, use, and impact of final peer-reviewed scholarly publications.

7. Final peer-reviewed scholarly publications from publically funded research should be accessible to persons with disabilities consistent with Section 508 of the Rehabilitation Act of 1973.

8. Bulk downloads of the corpus of scholarly publications for research purposes should be allowed under specified terms and conditions developed by agencies in consultation their external constituencies.

The Role of University Repositories

The experience of many research university institutional repositories demonstrates that they can operate effectively with the functional properties noted above. Members of the higher education community are initiating a study of the feasibility of federating existing institutional repositories and other campus-based infrastructure into a virtual repository which, in cooperation with federal funding agency repositories and others, could serve as a distributed system in support of the goals of the OSTP Public Access Policy. Such an approach would build on extensive, existing cyberinfrastructure already in place. This feasibility study will build on earlier work already conducted, in particular, a recent NSF report, *A Feasibility Study for a National Science Foundation Open-Access Publication Repository*. Should this current study demonstrate that such a federated system could be integrated into and extend current capabilities and capacities in an efficient and effective manner, we suggest that OSTP, federal agencies and other pertinent partners carefully consider joining with research universities in its creation and use as one component of the requirements of the OSTP article repository. The feasibility study will have to address a realistic timeline for implementation and the sustainability of the institutional repository model, including stability and adequacy of the business/financing plan. The study also will need to address the development of common standards and capacities to support comparable functionality across institutional repositories and the incorporation of universities and organizations not included in the AAU/APLU/ARL memberships.