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Office of Science and Technology Policy
White House
Washington, D.C. 20500

On behalf of the Duke University Office of Scholarly Communications, thank you for the opportunity to comment on the best methods and policies for implementing public access to federally-funded research. The call for comments and the online conversation have created a stimulating and productive conversation about this important topic, and the OSTP is to be commended for its sustained and in-depth attention to the benefits that can be gained through public access policies.

The perspective of these remarks is that public access policies benefit both the public at large and researchers themselves. Beyond this, we wish to emphasis that it is important to implement public access policies in a way that encourages compliance and does not add a significant administrative burden to the workload of researchers. In this regard, the public access policy implemented by the National Institutes of Health has been a successful model, and should be emulated as much as possible.

At Duke University, one of the "enduring themes" that underlies our 2006 strategic plan "Making a Difference" is "knowledge in the service of society." From that perspective, Duke's history of support for public access policies makes great sense; public access to research performed at Duke that is funded with taxpayer monies is part of our core self-identity. Such access also increases the public accountability for how research money is spent, which is beneficial both to the funding agency and to the University that carries out the research.

In the Office of Scholarly Communications, our commitment to public access is fundamentally driven by the belief that such access is beneficial for scholars themselves, since it increases the efficiency with which they can locate prior work to support their current research. Also, public access, especially if managed in a way that facilitates searching across databases and agency repositories, improves the possibilities for serendipitous discoveries and for locating unexpected collaborations.

Duke University has had a leading role in guiding academic compliance with the NIH Public Access Policy. Our policy and procedures, developed in collaboration between the Medical Center Library, the Office of Scholarly Communications and the offices for Research Support, provided a model for many other institutions. We have been pleased to discover through that process that most of our researchers have adapted fairly easily to the process of NIH submission and approval. Neither the NIH procedures themselves nor the contract review necessary to prevent conflicts over copyright have proved to be significant barriers, and most researchers report that the benefits they perceive from public access outweigh the challenges. Thus the NIH is an excellent model to emulate in many ways.

Access to scholarship is a continuing problem, for researchers as much as for the general public. Before becoming Duke's Scholarly Communications Officer, this author was the library director at a small liberal arts college in the Midwest. In spite of the presence of a large cohort of science majors and a committed faculty at that

college, in 2004 the library lacked even one current subscription to a scholarly journal in chemistry. Rapid price increases in the commercial publishing industry had made subscription costs prohibitive; research and teaching at the College was more difficult and less efficient as a result. This problem exists even at major research universities, where budget increases, even if they do occur, cannot keep pace with periodical subscription costs. Cancellations are a fact of life in all academic libraries, and these cuts hamper research and the training of new scientists and scholars. And this significant problem for academic libraries reflects an even greater barrier for laypeople without university affiliation who want to access current research out of interest or to gain greater insight into, for example, a medical condition or the issues around environmental protection.

The success of a public access policy depends on the willingness of researchers to comply with its requirements, which in turn requires a carefully considered structure that is easy and intuitive. The following points suggest some of the elements of a successful public access policy:

- Consistent policies across multiple agencies are vital. It certainly makes sense for all federal agencies that provided significant funding for research to implement a public access policy, but the success of that implementation depends on not having a wide variety of different policy requirements that would confuse busy researchers and discourage compliance.
- The speed at which scientific research occurs is increasing rapidly. Thus public access, in order to show the anticipated benefits, should occur as shortly after publication as possible. The Federal Research Public Access Act of 2009, which is currently before Congress and which Duke University supports, suggests a maximum embargo of six months. This rule would facilitate the improved access that is important for the progress of science.
- Researchers often worry about the proliferation of multiple versions of a research article. To minimize this concern, public access policies should call on researchers to deposit their final author's manuscript, after the changes that occur during the peer-review process, or the final published version, whenever the researcher's agreement with her publisher will permit that.
- The choice of archives to house these research articles is extremely important. In the case of the NIH the PubMed Central database was already in place and available; other agencies will not have such ready-to-use infrastructure. The digital archives that are developed should be permanent, interoperable and support public search across multiple platforms.
- Progress toward successful public access platforms can be facilitated by partnerships between the funding agencies and private or public academic institutions. Especially where a university has a signature program or research emphasis, the opportunity to create a partnership that exploits the public access repositories and other infrastructure that is already in place or being developed offers both efficiency and the potential for greater impact on a particular field of study.
- The possibility of using a distributed system of repositories, rather than a single archive, should be explored. Again, the purpose is to make the products of federally-funded research accessible and usable by the public. The location and management of the archive, even if distributed, should not matter as long as both the researcher who is depositing work and the user see a seamless interface.
- For some of the most important benefits of public access to be realized, it is important that repositories be interoperable and support searching at a very

granular level. In order to discover relevant research or potential collaborators in a field different than that which the researcher is familiar with, it is necessary that searching be possible on very specific concepts and words, across agency platforms. This means that the PDF format, although probably the best format to require for deposit, will not suffice on the public end of the repository. XML, used by PubMed Central, is the preferred standard.

- Compliance with a public access policy is best ensured by requiring researchers to indicate that prior research was made accessible when they report progress on a funded project, apply for grant renewals or make new applications. This requirement is not punitive, but simply congruent with the way other funder requirements are enforced, and it is familiar to researchers.

- Success of a public access archive can be measured in many ways. The number of unique hits and downloads is an obvious criteria of success. These metrics can be made more sensitive and significant if types of users could be determined. A large number of users from academia would indicate one type of success – improving the efficiency of research – while a large number of "unaffiliated" hits, such as those from commercial ISPs, would indicate success in improving access for those who might otherwise lack it. These kinds of specific metrics should be designed, of course, so that the privacy of individual users is not compromised.

- When considering success, it is important to compare the current situation to that which can be created. In the environment where paid subscriptions are virtually the only reliable means of access, there are tremendous "lost opportunity" costs such as those imposed on the small liberal arts college described above. The ability to significantly reduce these lost opportunities and leverage more access into better, more effective, science is the most significant mark of success for public access policies.

Thank you again for the opportunity to share these comments, and for the OSTP's sustained interest in the important question of public access. The Scholarly Communications Office at Duke University encourages the OSTP to support the implementation of public access policies in ways that encourage compliance, do not overburden researchers, and improve the efficiency of scientific research.

Sincerely,

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