

U.S. Policy on Public Access: post Scholarly Publishing Roundtable (SPR)

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Pre-Roundtable legislative initiatives in the US

Federal Research Public Access Act (S. 1373)

- free public access to results of federally funded research no more than 6 months after research published in peer-reviewed journal
- supported by librarians, public interest groups, and many college and university administrators

Fair Copyright in Research Works Act (H.R. 801)

- prohibits any federal agency from requiring, as a condition of research funding, the transfer to the agency of articles resulting from that funding
- supported by AAP and many publishers

Scholarly Publishing Roundtable (2009 - 2010)

- Created by Congressman Bart Gordon (D-TN), Chairman of the House Science and Technology Committee in June 2009
- In coordination with the White House Office of Science and Technology (OSTP)
- Charge: *“to explore and develop appropriate consensus regarding access to and preservation of federally funded research information that addresses the needs of all interested parties.”*
- Report posted and delivered to Congress in January 2010

http://www.aau.edu/policy/scholarly_publishing_roundtable.aspx?id=6894

Roundtable: Shared principles

- Peer review
- Adaptable business models
- Broad accessibility and improved functionality
- Sustained archiving and preservation
- Interoperability

Roundtable: Core recommendation

“Each federal research funding agency should expeditiously but carefully develop and implement an explicit public access policy that brings about free public access to the results of the research that it funds as soon as possible after those results have been published in a peer-reviewed journal.”

Note: important not to stop here!

More recommendations

- Open consultation with all stakeholders
- Policies guided by the need to foster interoperability
- The “Version of Record” as the version to which access is provided

Post-Roundtable events

- House Science and Technology Committee—press release, letter of commendation
- OSTP Public Access Policy Forum 12/2009 -1/2010
 - Scholarly Publishing Roundtable Report submitted as a formal response to the Forum's request for comment
 - OSTP Public Access report not yet released
- SPR recommendations appear in America COMPETES Reauthorization bill (signed into public law on Jan.4)

Reactions to report

Most stakeholders applaud:

- Respect for the approach
- Support of the general principles
- Support for the recommended consultative process

Balanced evaluation of the report in the **July 2010 issue of *Learned Publishing***:
<http://www.ingentaconnect.com/content/alpsp/lp/2010/00000023/00000003/art00009>

More reactions

Societies and for-profit publishers:

- Reservations about property and copyright issues and government intervention
- Concern about unfunded public access policies that could threaten the viability of scholarly publishing enterprise
- Differing opinions on embargo periods of ~12 months sufficient to recoup publisher investment
- Differing opinions for the recommendation that publishers provide access to the article's Version of Record (VoR)

More reactions

Advocates of a legislative public access mandate express:

- Disappointment—no specific recommendation for a public access mandate
- Disagreement—with the option that the public access articles be hosted by publishers at their own sites.

America **COMPETES** (HR 5116)—now law

A comprehensive reauthorization bill for the funding of the physical sciences by the US Congress for 2011-13

- Passed by both the House and the Senate in lame duck session before the holiday break
- Signed by President Obama on January 4, 2011
- Section 103 of the bill is devoted to the issues surrounding public access to publications and data
- This section contains many of the recommendations from the Roundtable report

America COMPETES (HR 5116)

Sec. 103 calls for OSTP to establish a “working group” under the NSTC ,to coordinate public access and stewardship policies:

- Identify **specific objectives and public interest** that need to be addressed by any such policies
- Account for **variability among science agencies** and scientific disciplines
- Develop standards for research data, full text metadata, and tools to **maximize interoperability**
”take into account existing (international) standards”
- Work with international science and technology counterparts to maximize interoperability

America COMPETES (HR 5116)

- *“Solicit input and and recommendations from and collaborate with non Federal stakeholders:”* the public, universities, nonprofit and for-profit publishers, libraries, etc.
- **Establish priorities** to maximize the benefits of policies with respect to their potential economic impact on the scientific and engineering enterprise...
- Take into account **distinction between publications and research data.**

America COMPETES (HR 5116)

- Take into consideration the role that publishers play in the peer review process.
- Examine agency practices for providing research reports.
- OSTP Director to provide a report to Congress in one year.

Desirable next steps

- Continue the collaborative process demonstrated by the Roundtable deliberations.
- Provide pragmatic stakeholder input to OSTP and the US federal agencies as they follow the guidance in the COMPETES legislation.
- Encourage public-private partnerships (e.g., ORCID, PEER).
- Encourage and stimulate new business models (e.g., PLoS, DeepDyve).

Who will provide this follow-up?

Roundtable's vision

- Interconnected global network of repositories supporting full-text interoperability, using VoR
- Volunteer collaboration of all stakeholders (including governments) beyond legislative and regulatory mandates in public-private partnerships
- Articles/Data: common goals and mechanisms for interconnection, interoperability, and identification

Blurring of article-data boundaries

- Digital articles contain embedded data behind figures and supplementary data
- Special data journals of peer-reviewed data:
<http://jpcrd.aip.org/>
<http://pubs.acs.org/journal/jceaax> (Journal of Chemical and Engineering Data)
- Data not subject to copyright laws

Broadly accessible publications and open data: Shared advantages

- Enables interdisciplinary, inter-institutional, and international research.
- Enables automated knowledge discovery.
- Allows for the verification of previous results.
- Results in greater returns from public investments in research.

Policy for US publicly funded scientific data: A muddled scene

- OMB Circular A-130, Copyright Act, Freedom of Information Act, Sunshine in Government Act, Federal Advisory Committee Act, Paperwork Reduction Act, E-Government Act, Information Technology Management Reform Act, Privacy Act, etc.
- Individual Federal agency legislation/regulation/policies/contracts and grants

Policy for US publicly funded scientific data: A muddled scene continues

- Different rules for each department or agency
- Different implementation within the organization's subunits
- Varying policies for government funded researchers based on institution, subunit, type of research, and funding instrument
- Implementation of the data policies depend on universities' rules and policies for data
- Practices differ by discipline

OSTP/NSTC role in scientific data policy developments

- OSTP/NSTC (data.gov) will provide guidance and coordination on:
 - Data research
 - Data systems development and deployment
 - Data assurance
 - Data quality
 - Integration and interoperability
- White House Inter-Agency Working Group on Digital Data published “Harnessing the Power of Digital Data” Jan. 2009
http://www.nitrd.gov/About/Harnessing_Power.aspx

Recent data policy efforts in the US

- The NRC Board on Research Data and Information, convened a symposium on the *“Value of Shared Access and Reuse of Publicly Funded Scientific Data”* (December 1, 2010)
- National Science Board (NSB) Task Force on Data Policies

http://www.nsf.gov/nsbcommitteestskforce_dp_charge.jsp

-deliberations on December 1 – 2, 2010 and upcoming workshop (March 27-29, 2011)

Ongoing EU efforts in data policy

- APARSEN: aims to create common standards and practices around digital preservation; 30 participants (research institutes, national libraries, IT providers and research funders) and will run for 4 years.

<http://www.alliancepermanentaccess.eu/>

- ODE (Opportunities for Data Exchange) an EU project to gather and promote best practices for treatment of scientific data

<http://www.alliancepermanentaccess.org/current-projects/ode>

Stakeholder collaborations making contributions

- CrossRef: promoting interoperability through journal-reference linking service providing access to article metadata through unique article Digital Object Identifier (DOI) (www.crossref.org)
- CrossMark: a new CrossRef service to certify Version of Record (www.crossref.org/crossmark.html)
- ORCID—Open Researcher & Contributor ID: central registry of unique identifiers for individual researchers and open, transparent linking mechanism with other current author ID schemes (www.orcid.org)

Providing funding agency credit

CrossRef can provide an additional valuable service to authors, readers, and the agencies funding scholarship by adding the funding agent(s) category to the standard metadata.

- Such data is provided inconsistently.
- A publisher led initiative (through CrossRef) for consistent provision of such data would be viewed favorably by funders.
- CrossMark provides a simple field where such data can be entered by the publisher/author.
- Value added providers of such information would not suffer (example: full and free available of US Patent Office data).

The screenshot shows a web browser displaying a PLoS Medicine article. The address bar shows the URL: pubtest.plos.org/003/journal.pmed.0050222.html. The page features the PLoS logo and navigation links. A CrossMark overlay is present, displaying the following metadata:

- CrossMark Metadata:**
- Content Type:** Research Article
- Received:** 2008-04-25
- Accepted:** 2008-09-30
- Published:** 2008-11-18
- Copyright:** 2008, Joanna Kempner
- License:** Creative Commons Attribution
- Funding:** Robert Wood Johnson Foundation
- Competing interests:** The author has declared that no competing interests exist.
- CrossMark Policy:** Public Library of Science (PLoS)

The background article is titled "The Chilling Effect: How Do Scientists React to Controversy?" by Joanna Kempner. The abstract and background sections are visible, discussing political controversies in science and the impact of grants on research agendas.

Parting comments

- The publishing community needs to be pro-active rather than reactive on all access issues.
- Following up on the COMPETES Act recommendations offers a unique opportunity for stakeholder input.
- Continue to develop access mechanisms for all underserved communities.
- Continue to innovate to drive up the value proposition.
- Continue to look for opportunities to partner with the public sector (e.g. ,funding agency credit, interoperability standards).

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