An Overview of the Evolving US Policies for Public Access to Scholarly Publications and Data

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Outline

• Brief review of the chronology of public access policy in the US
• The White House Office of Science and Technology Policy (OSTP) Directive (February 22, 2013)
• The evolving response to the Directive:
  Agencies
  Publishers (CHORUS)
  Universities/Libraries (SHARE)
  Standards Organizations
The Shared Goals of Public Access

• **Expand access** and broaden use of all scholarly publications and associated data

• **Identify pragmatic, cost-effective path forward** involving all stakeholders
  
  (researchers, research institutions, librarians, funding agencies, the public)
Open Access Funder Mandates

**OSTP**
Federal agencies with $100m+ budget must:
- Develop a mechanism to make research results available within 12 months of publication
- Make unclassified data available to the public

**HEFCE**
- From 1st April 2016
- Deposit AAM in repository on acceptance (12/24 month embargo)
- Gold – no specific licence, no new funding

**RCUK**
Compliant if:
- Gold – CC-BY, immediate access
- Green – CC-BY-NC, 6/12 months if gold unavailable, 12/24 months if gold available but no funding

**Wellcome Trust**
- Deposit in PMC and Europe PMC within 6 months of publication
- Provides funds for APCs
- Requires CC-BY for gold

**European Commission**
Research funded by Horizon 2020 made accessible from 2014:
- Gold (APCs can be reimbursed)
- Green – 6/12 months after publication

**Howard Hughes Medical Institute (HHMI)**
- Deposit in PMC within 12 months of publication

**FWF (Austria)**
- Gold – CC-BY, funding available
- Deposit AAM in sustainable subject/institutional repository under CC-BY-NC.
- 6 (or 12) month embargo
- Deposit in Europe PMC required for life sciences

**Chinese Academy of Sciences (CAS)**
- Deposit in institutional repository within 12 months of publication

**Telethon Italy**
- Deposit in Europe PMC within 6 months of publication
- Will cover APCs where appropriate

**European Research Council**
- Deposit of articles in an appropriate research repository within 6 months

**Australian Research Council (ARC)**
- Free availability after 12 months in institutional repository
- No central compliance checks
- Author versions and final versions acceptable
## Timeline on US Public Access Policy

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tr>
<td>2008</td>
<td>NIH Public Access mandate for article deposits in PubMed Central</td>
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<tr>
<td>2009-10</td>
<td>US House of Representatives sponsored Scholarly Publishing Roundtable</td>
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<tr>
<td>2011</td>
<td>America COMPETES Act; *includes many Roundtable recommendations</td>
</tr>
<tr>
<td>2013</td>
<td>OSTP Directive to many US research agencies to develop public access policies for publications and data</td>
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<td>2014</td>
<td>CHORUS and SHARE projects initiated to support agency plans</td>
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First agency plan released (Department of Energy)
US Congressional Action on Public Access for FY 2015

2015 Consolidated Appropriations Act

• Expands NIH mandate
  (But ONLY to certain agencies of the Department of Health and Human Services and the Department of Education)

• Requires submission to agencies

• Allows 12 month embargo

• Only applies to Fiscal Year 2015 (same as FY2014)
  – Requires quarterly reporting on costs

• “an estimate of the associated implementation costs for each agency and associated components, as well as the cumulative cost and a timeline for full implementation”

http://docs.house.gov/billsthisweek/20141208/CPRT-113-HPRT-RU00-HR83sa.pdf
Concerns as the OSTP Directive is Implemented

- Potential variability among the (~20) responding agencies
- Minimizing cost of implementation by agencies, the research and publishing communities
  ➔ Context: decreasing federal R&D budgets since FY2010 (see for example AAAS data)
- Minimizing the compliance burden to all stakeholders (authors, research institutions, agencies, publishers)
- Publisher’s concerns with the preponderance of a field independent 12 month embargo
- The economic viability of an embargo-based solution for public access (i.e., effect of embargoes on subscriptions).

in billions of constant FY 2014 dollars

Source: AAAS Research and Development reports and analyses of appropriations. FY 2014 figures are current estimates, FY 2015 is the request. R&D includes conduct and facilities. © 2014 AAAS
Increasing Access to the Results of Federally Funded Scientific Research

All federal agencies funding $100M or more annually in extramural research must develop public access plans.

Free public access to peer-reviewed research articles (guideline: 12-month embargo, adapted to agency/discipline need).

Ensure interoperability and long-term stewardship.

Issued February 2013
Agency plans under development with OSTP
DOE issued plan
24 July 2014

Need plans for both articles and data.
US Agency Public Access Plans

US Department of Energy announced their plan on 4 August 2014 which included a partnership with CHORUS

Other US federal agency plans are expected early this year (NSF, DOD, USDA, etc.)
US Office of Science and Technology Policy (OSTP) + CHORUS

OSTP Requirement

• Free public access to peer-reviewed research articles (guideline: 12 month embargo adapted to agency/discipline needs)

• Optimize search, archival, and dissemination features to encourage innovation

• Ensure interoperability and long-term stewardship

• Plans on public data also called for

• Develop plans in consultation with stakeholders

CHORUS Services

Publishers provide free public access to best available version (accepted author manuscript or Version of Record) post embargo or sooner if paid by article processing charge

Open APIs enabling content syndication and search services

Articles archived via CLOCKSS, Portico, and other government sponsored archives

Can link to data repositories when available

Up and running: already working with agencies
A broad coalition of scholarly publishers formed to develop, implement and steward a partnership with the federal research funders for providing public access to the peer-reviewed publications that report on funded research.

- Evolved from an ad-hoc group of publishers who initiated partnership discussions with several agencies in Spring 2011
- Incorporated as a 501(c)3 not-for-profit entity – CHOR Inc. – October 1, 2013
- 100+ signatories and growing
- Exploring international partnerships
- Pilot launched October 2013 • Went into Production July 2014
- US Department of Energy announces partnership August 2014
Ramp up February – June 2013

Proof of Concept Delivered 30 August 2013

Pilot Phase Sept 2013 - July 2014

In Production 31 July 2014

Membership Drive + Publisher Onboarding

AAP Startup Funding

CHOR incorporated: 501(c)(3) not-for-profit public charity (1 Oct 2013)

2013 Fundraising

US Dept of Energy Announces Partnership (4 August 2014)

2014 Fundraising International Exploration
CHORUS Builds on existing infrastructure of the scholarly community
How CHORUS Works: Access

Embargo Period Expires or Author/Funder Pays for Public Access

Accepted Author Manuscript becomes publicly accessible

Version of Record becomes publicly accessible
How CHORUS Works: Identification

...built into the author’s submission process
How CHORUS Works: **Preservation**

...use of existing, multiparty preservation strategy

Government maintained or other 3rd-party dark archive
How CHORUS Works: Discovery
...by any existing search engine

Text and Data-Mining Services
API Integration with Agency Portals

Access journal articles and accepted manuscripts resulting from DOE research funding

Search for: penguin

1. Size of direct CP violation in singly Cabibbo-suppressed D decays

2. CP asymmetries in singly-Cabibbo-suppressed D decays to two pseudoscalar mesons
   Bhattacharya, Bhubanjyoti; Gronau, Michael; Rosner, Jonathan L. (Mar. 2012, American Physical Society)

3. Shift in weak phase γ due to CP asymmetries in D decays to two pseudoscalar mesons
   Bhattacharya, Bhubanjyoti; Gronau, Michael; London, David; Rosner, Jonathan L. (Apr. 2013, American Physical Society)
How CHORUS Works: Compliance

API and dashboards for monitoring and tracking publisher contributions to CHORUS

Government Agency Reports
Institution Reports
Publisher Reports

Live dashboard: dashboard.chorusaccess.org/nsf
Total Articles Monitored

![Graph showing the total articles monitored from June 1, 2014, to January 1, 2015, with a peak of 60,681 articles as of January 9, 2015.](image-url)
## CHORUS Dataset Statistics

<table>
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<tr>
<th>DOIs / Articles</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>181,774</td>
<td>unique CrossRef DOIs with FundRef IDs</td>
</tr>
<tr>
<td>60,681</td>
<td>covered by CHORUS Dashboard</td>
</tr>
<tr>
<td>22,276</td>
<td>offer public access</td>
</tr>
<tr>
<td>19,391</td>
<td>offer no public access</td>
</tr>
<tr>
<td>19,014</td>
<td>yet to be audited</td>
</tr>
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*As of 9 January 2015*
• CHORUS objective: interoperate with scholarly repositories and other systems providing access to scholarly articles

• Agreed to work jointly on persistent identifiers, metrics, and notification system

• Active with SHARE workflow working group

• Exploring more areas of collaboration
WHAT IS SHARE?

• SHared Access Research Ecosystem

• A higher education and research community initiative to maximize research impact

• Aim: To ensure the widest possible preservation of, access to, and reuse of research outputs

• Deliverables: A series of interlocking layers that leverage the existing research ecosystem to better understand what research is being produced, and to render that research as accessible as possible
Who is SHARE?

• Steering Group
  – Provost, Library directors, CIO, SRO
  – ARL, AAU, APLU, CNI, SPARC, NLM (federal agency liaison)

• Staff
  – Director, Project Manager (ARL), Technical Director, Product/Community Lead, Development Team

• Technology Partner (Center for Open Science)

• Working Group
  – Expertise from Repository Community, Workflow, Technical, Communications
Maximizing Research Impact

Policy

Workflow

Infrastructure
The Four Layers of SHARE

- Notification Service
- Registry
- Discovery
- Reuse
Notification Service Layer

Gather

SHARE Notification Service

Notify
Statements of Support
Public Access to Data

• Only one US funding agency required researchers to submit “Data Management Plans” (DMP) with their proposals (NSF) prior to the OSTP Directive.

• DOE now requires submission of DMP’s for proposals submitted after Oct. 1, 2014.

• Suitable plans will be judged against evolving standards as infrastructure for data management evolves.

• Important roles for all stakeholders: standard organizations, repositories, publishers, and funders.
• Value of cross-linking data and articles
• CHORUS infrastructure can link to data repositories
• Unclear if there is one unified mechanism for data and publications
• Simplify procedures for researcher compliance and funding agency monitoring
• Member RDA-WDS Publishing Data Services Working Group
• CHORUS to use standard identifier schemes
Closing Notes: Keeping the Common Ground

Economic pressures are stressing all sectors in the research community—collaborative solutions for providing public access are essential.

Scholarly publications are too important for scholarship to allow a disruptive and unsustainable transition in the business models.

The US Government through vehicles such as the Scholarly Publishing Roundtable, the America COMPETES 2010, and the OSTP 2013 Directive have catalyzed multi-stakeholder discussions and solutions (such as CHORUS and SHARE) for public access.

This important role of government as an essential partner in the research enterprise should continue.
Acknowledgements

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