## **Research Data Sharing and Security:** Increasing Access to the Results of Federally Funded Scientific Research

### **Jerry Sheehan**

Assistant Director for Scientific Data & Information White House Office of Science and Technology Policy

Cybersecurity and You: Issues in Higher Education and Beyond 8 April 2016, University of Maryland, Baltimore

### OSTP Memorandum - 22 February 2013

EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF SCIENCE AND TECHNOLOGY POLICY WASHINGTON, D.C. 20502

February 22, 2013

#### MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM: John P. Holdren

SUBJECT: Increasing Access to the Results of Federally Funded Scientific Research

#### 1. Policy Principles

The Administration is committed to ensuring that, to the greatest extent and with the fewest constraints possible and consistent with law and the objectives set out below, the direct results of federally funded scientific research are made available to and useful for the public, industry, and the scientific community. Such results include peer-reviewed publications and digital data.

Scientific research supported by the Federal Government catalyzes innovative breakthroughs that drive our economy. The results of that research become the grist for new insights and are assets for progress in areas such as health, energy, the environment, agriculture, and national security.

Access to digital data sets resulting from federally funded research allows companies to focus resources and efforts on understanding and exploiting discoveries. For example, open weather

## **OSTP** Memo: Specified Objectives

### **Digital Data**

- Maximize free access while
  - Protecting privacy and confidentiality, national security
  - Recognizing intellectual property rights
  - Balancing costs & benefits of long-term preservation
- Require data management plans (DMPs)
- Allow inclusion of costs in applications for funding
- Ensure appropriate evaluation of DMPs
- Monitor compliance by investigators
- Encourage deposit of data in public repositories, where possible
- Cooperate with the private sector
- Develop approaches for data citation & attribution
- Support training, education and workforce development
- Assess long-term needs for preservation and options for repositories

#### **Scholarly Publications**

- Public can read, download, analyze in digital form
- 12-month post-publication embargo as guideline, with stakeholder petitions to change
- Easy public search, analysis of, and access to publications
- Full public access to metadata without charge upon first publication
- Public-private collaboration
- Attribution to authors, journals, and original publishers
- Archival solutions that provide long-term preservation & access without charge
  - Uses widely available, nonproprietary standards/formats
  - Provides access for persons with disabilities (consistent with Section 508 of Rehabilitation Act)
  - Enables integration and interoperability with other Federal archival solutions and other appropriate archives

# U.S. Departments & Agencies with Completed Public Access Plans (as of April 7, 2016)

**Department of Agriculture (**Nov 2014**)** http://www.usda.gov/documents/USDA-Public-Access-Implementation-Plan.pdf

Department of Defense (Feb 2015) http://www.dtic.mil/dtic/pdf/dod public access plan feb2015.pdf

Department of Energy (Jul 2014) http://energy.gov/sites/prod/files/2014/08/f18/DOE Public Access%20Plan FI NAL.pdf

#### **Department of Health & Human Services**

http://www.hhs.gov/open/public-access-guiding-principles/index.html

- Administration for Community Living [*Publications*] (Feb 2016) http://www.acl.gov/Programs/NIDILRR/docs/ACL-PublicAcccessPlan-Jan2016.pdf
- Agency for Health Research & Quality (Feb 2015) http://www.ahrq.gov/funding/policies/publicaccess/index.html ٠
- Assistant Secretary for Preparedness & Response (Feb 2015) http://www.phe.gov/Preparedness/planning/science/Pages/AccessPlan.aspx ٠
- Centers for Disease Control (Jan 2015) http://www.cdc.gov/od/science/docs/Final-CDC-Public-Access-Plan-Jan-٠ 2015 508-Compliant.pdf
- **Food & Drug Administration** (Feb 2015) http://www.fda.gov/downloads/ScienceResearch/AboutScienceResearchatF ٠ DA/UCM435418.pdf
- National Institutes of Health (Feb 2015) ٠ http://grants.nih.gov/grants/NIH-Public-Access-Plan.pdf

**Department of Transportation (**Nov 2015) https://www.transportation.gov/open/official-dot-public-access-plan

**Department of Veterans Affairs** (Mar 2015) http://www.va.gov/ORO/Docs/Guidance/Plan for Access to Results of VA Fu nded Rsch 02 14 2014.pdf

National Institute of Standards & Technology (Apr 2015) http://www.nist.gov/open/upload/NIST-Plan-for-Public-Access.pdf

### National Aeronautics and Space Administration (Nov 2014) http://science.nasa.gov/media/medialibrary/2014/12/05/NASA\_Plan\_for\_increa sing\_access\_to\_results\_of\_federally\_funded\_research.pdf

#### **National Oceanic and Atmospheric Administration** (Feb 2015) http://docs.lib.noaa.gov/noaa documents/NOAA Research Council/NOAA PAR R Plan v5.04.pdf

National Science Foundation (Mar 2015) http://www.nsf.gov/pubs/2015/nsf15052/nsf15052.pdf

Smithsonian Institution (Aug 2015) http://public.media.smithsonianmag.com//file upload plugin/1f143b54-a9f9-4746-bef5-1c76151e3c7a.pdf

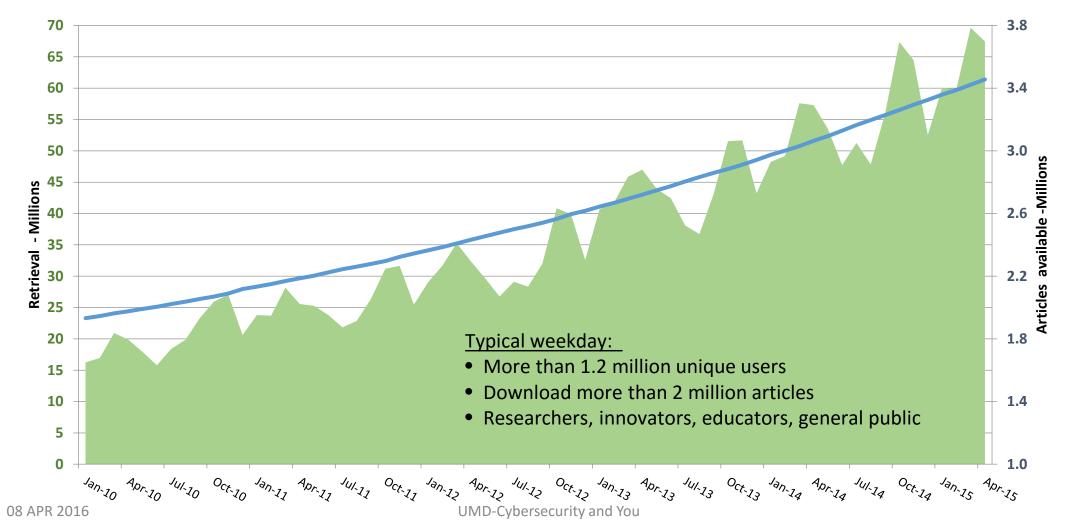
#### U.S. Geological Survey (Feb 2016)

http://www.usgs.gov/quality integrity/open access/default.asp

### Experience To-Date: NIH Public Access Policy

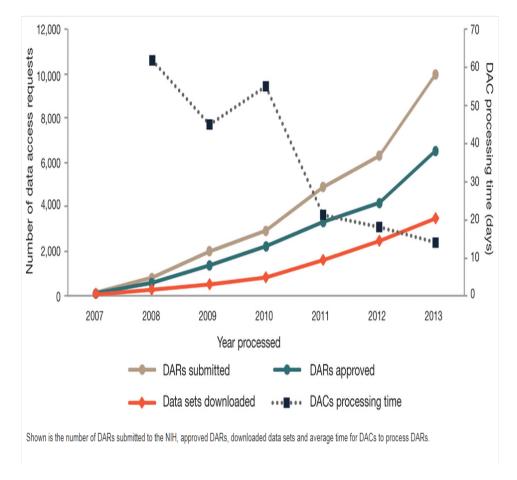
PMC articles available and retrieved, by month, Jan 2010 - Apr 2015

Articles Retrieved Articles Available

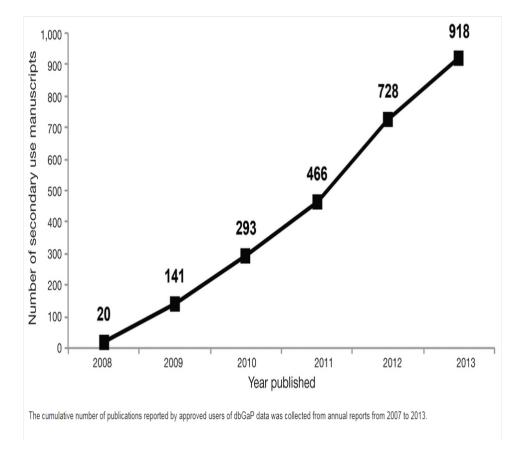


### Experience To-Date: NIH GWAS Policy

#### Increasing requests for GWAS Data



#### Publications based secondary use of GWAS data



Source: Paltoo, et al., "Data use under the NIH GWAS Data Sharing Policy and future directions," Nature Genetics 46, 934-938. Published online 27 Aug 2014. doi:10.1038/ng.3062.

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### Following Future Developments

Public Access Forum: <u>https://www.whitehouse.gov/administration/eop/ostp/library/publicaccesspolicy</u> OSTP Blog: <u>https://www.whitehouse.gov/blog/2016/02/22/increasing-access-results-federally-funded-science</u>

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#### **OSTP** Public Access Policy Forum

**UPDATE: January 29, 2016** - On January 29, 2016, OSTP Director John P. Holdren transmitted an update to Congress outlining progress toward the development and implementation of policies to increase public access to the results of federally funded scientific research.

Read the progress update here.

UPDATE: October 28, 2015 - On October 28, 2015, OSTP Director John P. Holdren transmitted an update to Congress outlining progress toward the development and implementation of policies to increase public access to the results of federally funded scientific research.

Read the progress update here.

**UPDATE:** July 29, 2015 - On July 29, 2015, OSTP Director John P. Holdren transmitted an update to Congress outlining progress toward the development and implementation of policies to increase public access to the results of federally funded scientific research.

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