

Public Access to Scientific Data and Publications

Scientific Collections

Demographic Data Collection for Research Solicitations

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Agency Efforts

- In response to the OSTP Memo from February 2013 which directs each Federal agency with over \$100 million in annual conduct of research and development expenditures to develop a plan to support increased public access to the results of research funded by the Federal Government.
- The Agency developed the NASA Plan for Increasing Access to the Results of Scientific Research.
- A draft NPD 2230, Research Data and Publication Access is almost finalized.
- The CIO is also developing a data website as a front end for all of NASA data. This website will include FAQs, as well as links to NASA datasets. It will be located at nasa.gov/open/researchaccess
- NASA has selected NIH PubMed Central to house peer reviewed publications. It will have a NASA portal page entitled PubSpace

"Effective data management has the potential to increase the pace of scientific discovery and promote more efficient and effective use of government funding and resources." (Excerpt from the NASA Plan) NASA Data Access Strategy





Process

- Received OSTP Policy February 22, 2013
- Formed two teams: data and publications
- Each team assessed current status and provided recommendations to meet the policy
- Draft plan submitted to OSTP August 22, 2013
- Received feedback from OSTP February 21, 2014
- Submitted plan response to OSTP on May 21, 2014

Plan approved by OSTP December 2014; posted February 2015

<u>http://www.nasa.gov/news/reports/index.html</u> <u>http://www.nasa.gov/offices/ocs/index.html</u> <u>http://science.nasa.gov/researchers/sara/faqs/dmp-faq-roses/</u>



NASA's policy has always been to make scientific data available; the OSTP policy prompted NASA to search for ways to make it easier to access and search

Data Team

- All NASA's research solicitations will require a data management plan (DMP)
 - Language drafted and incorporated in current solicitations
 - DMP will not be counted in the overall proposal page count
 - DMP must be included in the proposal
- Data repository
 - Primary repository for research data will be one of NASA's approved data centers
 - On case by case basis other data centers or venues will be considered
- Our Chief Information Officer is developing searchable front end on existing repositories and linking them to a single or minimal number of sites (data.gov and nasa.gov for example)

NASA Research Data Access Plan: Research Data "Lifecycle"





Changes to Process

- NASA Policy Directives (NPD) NPD 2230, "Research Data and Publication Access" has been created
- NASA has integrated the new policy into existing research guidelines, such as
 - NPR/NPD 1080, Requirements for the Conduct of NASA Research and Technology (R&T)
 - NASA's Grants Handbook
 - NASA Science Mission Directorate Science Plan



Publications

NASA did not have a comprehensive publications management plan

Publication team –

- Commissioned an independent study of four platforms both internal and external to NASA
- Based on risk, budget, and schedule, team recommended using existing NIH PubMed Central platform under a public/private partnership

- All publications will be entered into this database



Current Activity

- **Data** Front end search engines under development
- Publications Currently working with NIH to create a NASA front page portal in PMC
- **Training** A series of training videos are currently under development to better explain to all NASAfunded scientists the purpose, applicability, and means to implementation of the new policy (end of calendar year 2015)
- **Socializing** Communicating implementation plan at venues such as: National Council of University Research Administrators, American Geophysical Union, American Society for Gravitational Research, Center town halls, and other events



Timeline

- Sep Dec 2014
 - Evaluate current databases and determine requirements to enable search capability
- Oct 2014
 - Begin updating NASA policy and directives
- Nov 2014
 - Begin building search capability
 - Identify websites for links
 - Receive AoA and select publication repository platform
- Feb Mar 2015
 - Incorporate data management requirements in solicitations
 - Draft publications management plan
- Oct 2015
 - Target date for kicking off publications management plan
- Spring 2016
 - Plan fully implemented



Status: NASA Policy Directive – Curation of Institutional Scientific Collections

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• March 20, 2014 OSTP memorandum entitled, "Improving the Management of and Access to Scientific Collections" directs federal agencies that own, maintain, or otherwise financially support *permanent scientific collections* to develop a draft scientific collections management and access policy.

• NASA has developed an agency-wide NPD *draft*(to replace the Extraterrestrial Materials NPD 7100.10E) that identifies:

• Definition of Institutional Scientific Collections: *objects in the custody of or owned by NASA that have been identified for long-term preservation and management, and are made available through formal procedures to qualified parties within and outside the agency for research, education or exhibition.*

- NASA Policy for maintaining the collections, including:
 - Roles and Responsibility of the Agency, Mission Directorates, and Centers in curation of the collections
 - Guidelines for Collection Planning and Management (including budgeting, facilities & equipment)
- Current NPD draft status:
 - Final draft has incorporated comments from the stakeholders involved in curation and management of samples (biological samples, physical materials, astromaterials, and space exposed hardware are the biggest collections identified).
 - Should be in NODIS by end of the year
- What's ahead for this effort:
 - The NPD will drive the creation of collection-specific NPRs by representatives at the Centers.



Agency Policy

NPD - Details agency guidelines, definitions, responsibilities, applicability, references at a high level for all Institutional Scientific Collections.

NPR- Documents requirements of sample-unique curation management to include: budget requirements; accessibility plans;

Directorate Level Management

Center Level

Management

Work Instructions- Documenting and implementing work instructions to manage the curated samples, to include: accessioning; providing access to physical samples; preparation; inventory monitoring; labeling; physical security; facility management; and, deaccessioning of samples.

accessioning/deaccessioning requirements; frequency of collection review,



Status: On Demographic Data Collection

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Demographic Data Collection on NASA Solicitations

- Studies indicating unconscientious bias in grant awards
 - NSF Gender
 - NIH Minority
 - Other agencies collecting these data are finding similar results
- NASA does not currently collect these data
 - September 2014 OCS began looking into the possibility of collecting the data to ensure a level playing field in our awards
- GAO report March 2015 "Women in STEM Research: Federal Agencies Differ in Data They Collect on Grant Applicants"
 - Reported on six federal agencies; only three of those collecting demographic data – NIH, NSF, USDA – NIFA
 - Reported NASA does not currently collect the data but included a foot note indicating we are in the process to put in place



Demographic Data Collection on NASA Solicitations

Where are we?

- Data collections of this type fall under the paperwork reduction act and must be approved by the Office of Management Budget prior to implementation
 - Received clearance by general council to collect these data
 - Survey form developed
 - Supporting statements for OMB completed
- Package sent to OMB September 2015
 - Received feedback and making minor edits
- Next steps
 - Re-submit to OMB this week (Nov 9)
- Target implementation January 2016
 - Plan to include in all NASA solicitations



NASA Form 1839 Demographic Data Collection

Remember:

- This is strictly voluntary
- It will not be included in the proposal review package
- It will not be used in any way to determine grant award

NARA	National Aeronautics and Space Administration	Demo	graphic Data Co	llection	Form Approved O.M.B. No. 2700-XXXX Expires: XX/XX/XXXX
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