

# We're in this Together:

## Research Data, Government Information, and the Future of Open Science

Federal Depository Library Conference  
October 17, 2023

Presenting: Deborah Yun Caldwell, James R. Jacobs, Lynda Kellam & Shari Laster



# Mission statement

---

## OUR VISION

We imagine a world where government information is preserved and accessible for an engaged public and equitable democracy.

## OUR MISSION

The PEGI Project advocates on behalf of current and future users of public information. Developing a community of practice to preserve and provide access to electronic government information is a large endeavor that will take many hands. Together, we seek to build capacity for libraries to preserve historically significant born-digital government information.





## Who we are...

---

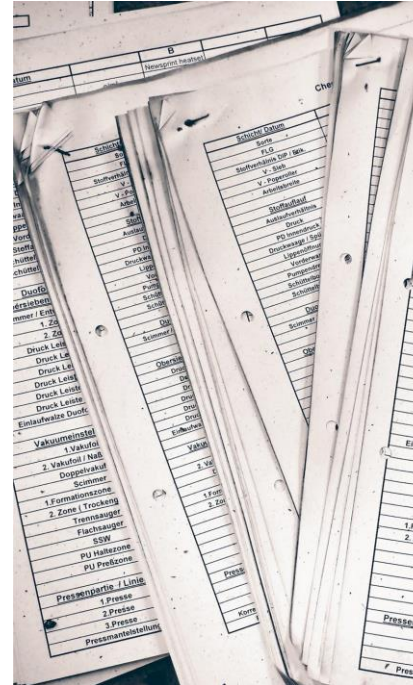
- Deborah Yun Caldwell (UNT)
- James R. Jacobs (Stanford)
- Lynda Kellam (UPenn)
- Shari Laster (ASU)





# Goals for today

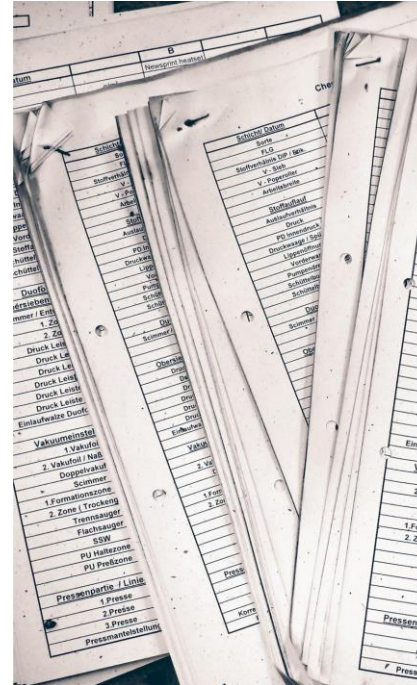
- Review primary Federal government initiatives around open science and research data.
- Consider impacts of those initiatives on academic libraries.
- Consider implications for government information librarians.





# Session outline

- 01 | The Year of Open Science
- 02 | Data Management Guidelines
- 03 | The Nelson Memo and Its Implications
- 04 | Academic Library Response
- 05 | Implications for Government Information
- 06 | Where do we go from here?





# Year of open science

“The principle and practice of making research products and processes available to all, while respecting diverse cultures, maintaining security and privacy, and fostering collaborations, reproducibility, and equity.”



[Administration](#) [Priorities](#)

JANUARY 11, 2023

## FACT SHEET: Biden-Harris Administration Announces New Actions to Advance Open and Equitable Research



› [OSTP](#) › [NEWS & UPDATES](#) › [PRESS RELEASES](#)



<https://bit.ly/Biden-open-science>

<https://bit.ly/PEGI-nelson-memo>

Considering Government Information in the Age of the Nelson Memo



# Data management mandates and standards



# FAIR Principles

---

## Findable

All data are persistently identified, with the identifier in the metadata.

Rich descriptive metadata are available in a searchable source.

## Accessible

All data are retrievable using a standard open protocol.

Metadata are accessible even when the data are not available.

## Interoperable

All data use a broadly applicable language to represent contents.

Vocabularies and references also follow FAIR principles.

## Reusable

All data are richly described with accurate attributes.

All data are released with an accessible usage license and provenance.





# CARE Principles for Indigenous Data Governance

---

## Collective Benefit

Data systems should be designed so Indigenous Peoples can derive benefit from their data, including its use for innovation, governance, and seeking equitable outcomes.

## Authority Control

Indigenous Peoples have rights and interests in their data, including use for self-determination and governance, and stewardship including cultural governance protocols.

## Responsibility

Responsible use of Indigenous data builds positive relationships, supports capability expansion, and is fundamentally grounded in Indigenous languages and worldviews.

## Ethics

All use of Indigenous data should minimize harm and maximize benefit, include relevant community representation, and take into account potential future use and harm.



# NIH Data Management & Sharing Policy

---

- The National Institutes of Health (NIH) released an updated Data Management and Sharing Policy (DMSP) that requires researchers to:
  - Plan for managing their data
  - Share their data in a named repository if possible
  - Comply with their approved plan
- In May 2022, the National Science and Technology Council (NSTC) released “Desirable Characteristics of Data Repositories for Federally Funded Research” to improve guidance from agencies to researchers about selecting repositories for data resulting from Federally funded research.



# The Nelson Memo

---

“Ensuring Free, Immediate, and Equitable Access to Federally Funded Research”

- Issued by the Office of Science and Technology Policy (OSTP) on August 25, 2022.
- The results of taxpayer-supported research must be available to the public without an embargo or cost.
- Agencies must update their policies to reflect this mandate and fully implement those policies no later than December 31, 2025.
- The memo also calls on Federal agencies to **“develop approaches and timelines for sharing other federally funded scientific data that are not associated with peer-reviewed scholarly publications.”**



## Returning to open science ...

---

“The principle and practice of making research products and processes available to all, while respecting diverse cultures, maintaining security and privacy, and fostering collaborations, reproducibility, and equity.”



# Implications for academic libraries



# Supporting research activity

---

Typical services that help to meet these mandates:

- Open Access publishing services
- Data Management Plan writing support
- Assistance with selecting repositories

Challenges that libraries experience in providing these services:

- Communicating with faculty about the new requirements
- Finding appropriate repositories especially for large data files or multi-file datasets
- “Unfunded mandates”



# SPARC

## Research Data Sharing Policy Initiative

- Tracking and understanding agency requirements

## US Repository Network

- Strategic vision for U.S. repositories



# Government produced data and resources





# Role of public funding

---

The Year of Open Science includes four goals for Federal agencies:

- develop a strategic plan for open science;
- improve the transparency and equity of reviews;
- account for open-science activities in evaluations; and
- engage underrepresented communities in the advancement of open science.

Visit [open.science.gov](https://open.science.gov) to see announcements and updates from nearly three dozen Federal agencies about open science initiatives.

For an example, check out NASA's Transform to Open Science (TOPS) Mission:

<https://nasa.github.io/Transform-to-Open-Science-Book/>.



## A few other similarities

---

1

FAIR principles are increasingly applied to government data sources.

3

Many shared challenges include curation, metadata, persistent identifiers, interoperability, etc.

2

The “Desirable Characteristics” applies to Federal agency repositories as well as academic and other not-for-profit data repositories.

4

Government-produced products can be part of the research process for government-funded (external) research.



# Where to go from here?

---

- We see the possibility for shared and aligned interests among stakeholders and practitioners working in open science, research data management, and government information.
- What questions does this raise for you? What would you like to share about this topic? What would you like to know?





# Thank you.

Questions or Ideas?  
Contact us:



[www.pegiproject.org](http://www.pegiproject.org)



[info@pegiproject.org](mailto:info@pegiproject.org)



[@PEGIPProject](https://twitter.com/PEGIPProject)