

# Open Science Landscape

Context & Opportunities for Nonprofit Funders

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# About Me...

- Executive Director, Open Research Community Accelerator (ORCA)
- Founding and senior leadership roles with:
  - Open Research Funders Group (ORFG)
  - National Academies of Sciences, Engineering, and Medicine's Roundtable on Aligning Incentives for Open Scholarship
  - Higher Education Leadership Initiative for Open Scholarship (HELIOS)
  - Alliance for Open Scholarship (All4OS)
  - bepress
- Swim in bay area waters
- More at [orcaopen.org](http://orcaopen.org)



# Agenda

01

OSTP/Federal Activities

02

Ramifications for NFP Funders

03

Getting Started in the Open Space

04

Moving Across the Open Science Continuum

# Federal Policy Landscape

- What's in the "Nelson Memo"?
- Why has the White House taken these steps?
- What is the implementation timeline?



# What's in the Nelson Memo

- Articles resulting from federally funded research must be made immediately available at the time of publication
  - “Green” OA required, via “agency designated repositories”
  - Paying an APC is not by itself sufficient to comply
- Data must also be shared no later than the time of publication
  - Data not associated with articles is supposed to be made available, but specifics are lacking
- Sharing of other types of outputs (e.g., conference proceedings, books) up to the discretion of individual agencies
- Explicit inclusion of PIDs, FAIR principles, machine readability, and liberal licensing
- Applies to all federal agencies and departments

## Equitable Access to Federally Funded Research Results

All agency plans must address:

- “How to maximize equitable reach of public access to peer-reviewed scholarly publications”
- “Measures to reduce inequities in publishing of, and access to, federally funded research and data, especially among individuals from underserved backgrounds and those who are early in their careers”

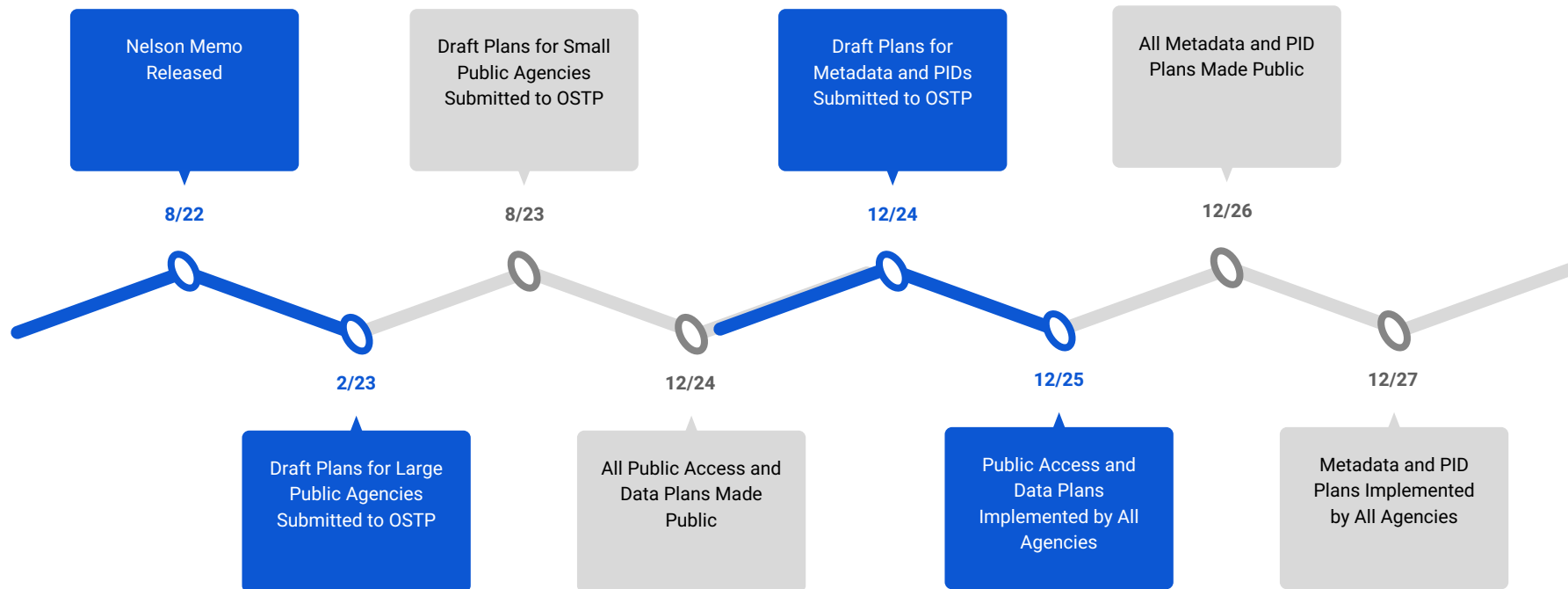


# Why Has the White House Taken These Steps?

- Continues slow but inexorable policy march
  - NIH public access policy (2005) → Holdren memo (2013) → NIH data sharing policy (2020) → Nelson memo (2022)
- Consistent with Biden administration's centering of equity
  - 10/22: "Blueprint for an AI Bill of Rights: A Vision for Protecting Our Civil Rights in the Algorithmic Age"
  - 8/22 RFI: "Federal Evidence Agenda on LGBTQI+ Equity"
  - 4/22: "A Vision for Equitable Data: Recommendations from the Equitable Data Working Group"
  - 10/21: "The Time is Now: Advancing Equity in Science & Technology Ideation Challenge"
- Lessons learned from COVID resource sharing
  - "“Immediate public access to COVID-19 research is a powerful case study on the benefits of delivering research results and data rapidly to the people. The insights of new and cutting-edge research stemming from the support of federal agencies should be immediately available—not just in moments of crisis, but in every moment. Not only to fight a pandemic, but to advance all areas of study, including urgent issues such as cancer, clean energy, economic disparities, and climate change. American investment in such research is essential to the health, economic prosperity, and well-being of the Nation.”"

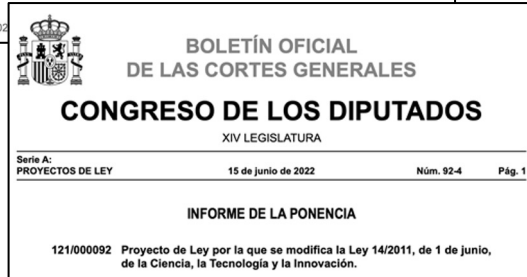


# Implementation Timeline (totally not to scale)



# Ok...But How Does This Affect Me?

- Rapidly recalibrates baseline norms and expectations for funded researchers
- Creates possible compliance challenges for host institutions
- Comports with growing policy trends across the research ecosystem





# We're Open Science Newbies... How Do We Get Started?

Step 1: Think about how open science activities map to your organizational mission

## *American Heart Association*

By funding scientific research, the American Heart Association supports those fighting cardiovascular disease. The AHA has invested more than \$5 billion in research to accelerate the pace of scientific discovery, encourage innovation, enrich education, and improve the public good.



# We're Open Science Newbies... How Do We Get Started?

The AHA has invested more than \$5 billion in research to **accelerate the pace of scientific discovery**<sup>1</sup>, **encourage innovation**<sup>2</sup>, **enrich education**<sup>3</sup>, and **improve the public good**<sup>4</sup>.

**<sup>1</sup>Preprinting encouraged by AHA to promote early sharing of research results**

**<sup>2</sup>Data sharing policy allows others to build off of promising findings**

**<sup>3</sup>Preregistration & protocol sharing are valuable tools to teach early career scientists methodological rigor and critical analysis**

**<sup>4</sup>Access to papers enables an informed and engaged patient and caregiver population**



# We're Open Science Newbies... How Do We Get Started?

Step 2: Talk to your network!

- Engage program officers, leadership, grantees, and colleagues in the philanthropic community
- Ask them what they think about open science, what their concerns are, and how they would like to see your organization engage in this space
- Map out goals, risks, and opportunities



# We're Open Science Newbies... How Do We Get Started?

## Step 3: Develop a Draft Policy

- We can help - for free!
  - Mapping goals to strategies
  - Comporting to Nelson parameters
  - Addressing articulated concerns
  - Developing a rollout strategy
- Contact [greg@orcaopen.org](mailto:greg@orcaopen.org)



# We Already Have a Policy...Now What?

- Benchmark against OSTP
- See what other funders are doing:  
<https://osf.io/7sh6k/>
- Engage with the HRA Open Science Learning Community
- Get an expert consult



Just Keep Swimming!

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**Thank You!**

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