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# The Nelson Memorandum

How two HELIOS members are responding

**O**n August 25, 2022, the White House Office of Science and Technology Policy (OSTP) issued a memorandum on Ensuring Free, Immediate, and Equitable Access to Federally Funded Research,<sup>1</sup> also known as the Nelson Memorandum, that significantly alters the open scholarship landscape. The new policy guidance advances previous federal policy<sup>2</sup> in a number of impactful ways. The directive applies to all federal agencies, removes the previous 12-month embargo period on article sharing, directs federal agencies to update their policies on data sharing to enable immediate access to the data underlying published studies, expands the definition of publications, calls for agencies to share publication metadata and to require the use of persistent identifiers (PIDs), and more.<sup>3</sup>

The Higher Education Leadership Initiative for Open Scholarship (HELIOS) responded right away, convening members for a virtual briefing by Alondra Nelson, who at the time served as deputy assistant to the president and deputy director for science and society of the White House OSTP, and Christopher Marcum, then-assistant director for open science and data policy at the OSTP. Both contextualized the public access guidance within the Biden Administration's larger priorities and described how climate change, social inequity, and COVID-19 are compelling, real-world examples of the critical and urgent need for release of data. Additionally, the policy is an important part of upholding and supporting research integrity to protect and restore public trust in scholarship, to help keep track of investments, and maintain accountability through a public record. The Nelson Memorandum offers higher education the opportunity to promote equity and transparency in research through public access compliance. However, colleges and universities are responsible for implementing changes (to infrastructure, policies, training, and more) to comply with new and changing requirements.

## HELIOS background

HELIOS has a robust network of 96 colleges and universities committed to collective action to advance open scholarship within and across their campuses. Open scholarship is closely aligned with the goals of ensuring public access to research: transparency, collaboration, equity, and more. As part of joining HELIOS, an institution's leadership agrees to elevate open scholarship as a strategic priority at the institution and designates a senior representative to join HELIOS' community of practice focused on complementary aspects of the open scholarship landscape. Collectively, HELIOS representatives are working to make

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open scholarship easier for individual researchers and the institutions that support them; to align incentive structures like hiring and reappointment, promotion, and tenure (RPT) to properly reward open activities such as data sharing and open access; to stimulate durable, scalable infrastructure that supports open scholarship; and to coordinate with like-minded activities in the governmental, philanthropic, and professional society sectors, including federal agencies updating or establishing new public access policies.

The Nelson Memorandum inspired and catalyzed HELIOS' workstreams in the following ways.

1. It spurred cross-sector conversations with agencies at a winter 2022 working session about alignment with federal priorities in the categories of incentives, infrastructure, research output tracking, and more.<sup>4</sup>

2. HELIOS is collaborating with NASA by celebrating 2023 as the Year of Open Science, an effort that supports the Nelson Memorandum and the shift to open science as the norm.<sup>5</sup>

3. HELIOS open source experts collaborated with leaders of the Open Research Funders Group (ORFG) to share research software policy guidance.<sup>6</sup> The piece, published in *PLOS Biology*, was spurred by cross-sector sharing with members of the White House Subcommittee on the Year of Open Science.

4. HELIOS is collaborating with Florida International University, who was awarded a NASA grant to host a January 2024 workshop for presidents and provosts in recognition of the anniversary of the federal Year of Open Science. This convening will focus on developing a collective action strategy for embedding open scholarship within higher education incentive structures.

The communication channels are open and collaborative, but it is becoming clear that individual institutions are still testing approaches to implementing policy compliance considerations and learning how to marry their institutional values to emerging public access goals.

The Nelson Memorandum has sparked cross-campus work to update compliance training and guidance, complemented cross-campus collaborations between research integrity officers and libraries, and stimulated rich programming on campus. Two institutions reflect on how their campuses are preparing for and responding to the new directive.

## **Supporting open scholarship at The University of Texas at Austin**

The University of Texas at Austin (UT) has a long history of supporting open scholarship to improve understanding and adoption of open scholarship activities and incentives including open access (OA) publishing, open educational resources, open data management, and investment in a scholarly publishing system that provides maximum access to high-quality information to the greatest number of users in a sustainable way.

This commitment is manifested through multiple UT Libraries initiatives, including varied OA open data infrastructure and training<sup>7</sup> with direct author benefits. UT Libraries highlight and advance good practices of sustainable scholarship by noting examples of disciplinary and institutional repositories for authors interested in self-archiving to make their work openly available. The Research Data Services unit builds, maintains, and enhances the data services deployed by UT Libraries and provides high-quality training in data management practices across disciplines through consultation sessions, LibGuide

content, and workshops that provide open learning opportunities. Through membership in the Texas Digital Library, UT Libraries also provides infrastructure to support the open access repository, Texas ScholarWorks, and data repository, Texas Data Repository, as a free service to the entire UT community. The Texas Digital Library hosts Open Access journals through the Open Journal Systems platform as well as UT's electronic theses and dissertation submission system, Vireo.

Garnering support for the benefit of public access includes campus-wide engagement and institutional commitment to open scholarship. At UT, previous campus-wide discussions about Sustainable Open Scholarship (SOS), initiated by the Provost's Office in fall 2020, set precedent to build on previous open scholarship support after the Nelson Memorandum's release. The SOS report<sup>8</sup> noted key outcomes that acknowledged UT's strong support for the principle of open access—that knowledge should be disseminated without restrictions—and that UT will enhance its global impact as a leading public R1 university by taking a leadership role in open scholarship. UT joined HELIOS in 2022 to further confirm institutional support for open scholarship.

While cross-campus discussions with various groups can raise awareness about the benefits of open scholarship, UT also recognizes the need for cross-campus, institutionalized units that support researchers' open scholarship and public access compliance needs. In summer 2023, UT was awarded a Sloan Foundation grant to create the university's Open Source Program Office (OSPO), which will bring together and enhance existing activities from several units and schools as a single, branded, and coordinated effort across the university with staff from the Texas Advanced Computing Center (TACC); the Office of the Vice President for Research, Scholarship, and Creative Endeavors (OVPRSCE); the UT Libraries; the Information Technology Transformation Office (ITT); and expert open source researchers in the UT community. Institutionalized support for open source projects with campus-wide collaboration will benefit future efforts to make compliance with funder policies easier and more rewarding for the researchers that UT supports.

The fall 2023 Texas Open Science Summit (TOSS)<sup>9</sup> raised awareness about the importance of the Nelson Memorandum and continued UT's discussions about open scholarship and public access compliance, incentives, and good practices. This forum offered a publicly visible opportunity for scholars and open access advocates in the region and state of Texas to learn more about the federal Year of Open Science and support structures at UT. Specifically, the TOSS event offered an opportunity to celebrate the federal Year of Open Science by

- raising awareness of the 2022 Nelson memo;
- engaging individuals from across the UT campus and beyond in a discussion of progress to date and growing opportunities;
- creating some excitement and elevated interest from the campus research community;
- strengthening engagement with the Office of the Vice President for Research, Scholarship, and Creative Endeavors (OVPRSCE) to coordinate and facilitate our work in the national and federal context and showcase UT's leadership in advocating for open scholarship;
- raising greater awareness of the work that HELIOS is doing to take collective action to advance open scholarship; and
- elevating the creation of an OSPO to support open source and open science at UT.

With these new developments, TOSS provided space to celebrate UT's progress and commitment to advancing open scholarship and was an opportunity to inspire the research community to move beyond viewing public access through a lens of compliance and toward a view of collaborative opportunities.

## **Supporting open scholarship and research integrity at Colorado State University**

Like many institutions, Colorado State University (CSU) is continuously balancing the needs of the research community. This includes training and support for participants with research awards that come with regulations and mandates from state and federal funding bodies.

Prior to the release of the Nelson Memorandum, professionals from Data Management and Open Access units in the libraries, Research Computing and Cyberinfrastructure from the Division of IT, and Research Integrity from the Office of the Vice President for Research (OVPR) created a working group with the goal of improving communication, resources, training, and infrastructure to support research integrity. The Nelson Memorandum, along with other initiatives like the National Institutes of Health (NIH) implementation of the Data Management and Sharing Plan (DMSP) validated campus efforts and provided support for expanding work. Building on a long history of open access support, the CSU Libraries has since created the Advanced Research and Scholarship Support group,<sup>10</sup> providing resources for data management planning and openly sharing research outputs. The working group hosted the Opentober Event, highlighting initiatives and support services for furthering open scholarship and public access compliance at CSU.

CSU is recognizing the federal Year of Open Science through its participation in HELIOS, which CSU joined in 2022. Kevin Worthington, the geospatial data manager for the CSU Geospatial Centroid partnered with HELIOS' Good Practices in Open Scholarship Working Group to create an interactive map<sup>11</sup> highlighting open scholarship initiatives ongoing at HELIOS institutions across the country. The map can be used to locate events, resources, and collaborators to further open scholarship and public access priorities.

In considering implementation of the Nelson Memorandum priorities, and what the research community needs to comply with emerging policies, it is increasingly important to embed open scholarship guidance in the curriculum, required training, and regular practices of the research community. The Responsible Conduct of Research (RCR) program at CSU has been embedding open scholarship principles in RCR education for several years in the form of data management plans (now data management and sharing plan and regular, targeted rigor, reproducibility, and transparency training. These efforts have inspired CSU to create a position that combines RCR and open scholarship strategy under the OVPR. This alignment and positioning on campus provides formal structure to integrate open scholarship principles and standards, as they evolve, into RCR training in real time. Given the expanded requirements for RCR training to principal investigators and key personnel, CSU has the opportunity to reach senior investigators who can embed the concepts into their research and scholarly practices alongside their compliance efforts. The program has created a community of practice composed of instructors of more than 20 approved face-to-face RCR courses across campus. The community will employ, co-develop, and share evolving open materials and resources that embed open scholarship into research, methods,

and RCR courses at every level.

Through connections made during CSU's co-leadership of the HELIOS Cross-Sector Alignment Working Group and in support of public access compliance, CSU is also collaborating with Cornell University to develop a pitch deck for compliance units to identify and request resources for the necessary integration of open scholarship into existing research compliance frameworks. While each institution is unique in structure and approach, there are some common needs and gaps identified. Alignment of training, support, and compliance will allow institutions to invest fully in open scholarship beyond a compliance effort.

## Conclusion

To prepare for emerging public access policies, colleges and universities are building upon their previous awareness raising efforts, promoting new programs and resources, updating their training, and expanding institutionalized structures to comply with funder policies. Simultaneously, schools are also collaborating to ensure that open scholarship practices are easier and more rewarding for both researchers and the institutions that support them.

## Notes

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3. Higher Education Leadership Initiative for Open Scholarship, "HELIOS Analysis of New OSTP Guidance," August 30, 2022, <https://www.heliosopen.org/news/updates-white-house-ostp-guidance>.

4. HELIOS Cross-Sector Alignment Working Group "Asks and Offers," infographic, last updated December 1, 2022, <https://static1.squarespace.com/static/61b3819ed113b0380812d182/t/638908d3fbe002564e4f80d1/1669925077772/Cross-Sector+Alignment+Asks+and+Offers.pdf>.

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6. Erin C. McKiernan, Lorena Barba, Philip E. Bourne, Caitlin Carter, Zach Chandler, Sayeed Choudhury, Stephen Jacobs, Daniel S. Katz, Stefanie Lieggi, Beth Plale, and Greg Tananbaum, "Policy recommendations to ensure that research software is openly accessible and reusable," *PLoS Biology* 21, no. 7 (2023): e3002204. <https://doi.org/10.1371/journal.pbio.3002204>.

7. The University of Texas at Austin Libraries, "Open Access Initiative Support," The University of Texas at Austin Libraries, last updated October 21, 2023, <https://guides.lib.utexas.edu/oa/currentOAINitiatives>.

8. “Sustainable Open Scholarship Working Group,” The University of Texas at Austin Office of the Executive Vice President and Provost, 2023, <https://provost.utexas.edu/initiatives/sustainable-open-scholarship-working-group/>.
9. “Join Us for the Texas Open Science Summit,” The University of Texas at Austin Libraries, 2023, <https://www.lib.utexas.edu/about/news/join-us-texas-open-science-summit>.
10. “Advanced Research and Scholarship Support,” Colorado State University Libraries, accessed November 10, 2023, <https://lib.colostate.edu/services/research-scholarship-support-services/>.
11. “Open Scholarship Map (beta),” Higher Education Leadership Initiative for Open Scholarship, accessed November 10, 2023, <https://www.heliosopen.org/open-scholarship-map-beta>.