

The Power of Open Science

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The federal government [defines](#) open science as “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.” [UNESCO](#) has been an incredible champion for openness, reinforcing [open science pillars](#) of knowledge (e.g., publications, software, data, educational resources), infrastructures, engagement and exchange with other knowledge systems. The White House Office of Science and Technology Policy (OSTP) issued guidance in August 2022 on [Ensuring Free, Immediate and Equitable Access to Federally Funded Research](#), asking agencies to accelerate access to data and publications. The OSTP declared 2023 as the [Year of Open Science](#) to advance national open science policies across the federal government. This strategic priority area has been [reinforced](#) by actions across the federal government to advance national open science policy, provide access to publicly-supported research, accelerate discovery and innovation and achieve equitable outcomes.

The NIH has long been a leader in openness through the [NIH Public Access Policy](#), established in 2009, and most recently through the [NIH Policy for Data Management and Sharing \(DMS Policy\)](#), which became effective earlier this year to promote the management and sharing of scientific data generated from NIH-funded research. The DMS

Policy establishes requirements of Data Management and Sharing Plans, emphasizes the importance of good data management practices, and communicates the expectation for prioritizing the appropriate sharing of data. NIH has developed several resources to support consistent processes and compliance, while minimizing researcher burden including elements of an [NIH data management and sharing plan](#), [allowable costs for data management and sharing](#) and [desirable characteristics of repositories for managing and sharing data resulting from federally funded research](#).

The [NIH Scientific Data Sharing](#) website is also a great resource. We've worked to support this area of need at Galter with resources, training, and services to support the Feinberg community. Highlights include the [Prism Repository](#), [classes on data management](#), and Galter Guides on the [NIH Public Access Policy](#) and [NIH Data Management Plans](#).

Several benefits of open science have been identified, including:

- **Accelerated Knowledge Dissemination** when investigators share their findings, data, and methodologies openly with the global scientific community. This rapid dissemination of knowledge accelerates innovation and discovery.
- **Enhanced Collaboration and Innovation** fostered across disciplines, institutions, geographies, and roles. By sharing resources and expertise, scientists can address complex challenges more effectively and develop innovative solutions that might not have been possible within isolated research silos.
- **Increased Reproducibility and Transparency** in research methods, data collection and analysis enhance reproducibility and reliability of research, critical for building trust and credibility.
- **Greater Public Engagement and Accessibility** as research products are accessible to a wider audience, including policymakers, educators, journalists and the public, supporting public engagement, accountability, informed decision-making and benefit from scientific advancements.
- **A scaffold for problem-solving** to leverage diverse perspectives and knowledge, inspiring bold strategies to address some of most complicated global challenges including climate change, healthcare disparities and innovation.

Open science holds the potential to drive advancements that benefit individuals and communities alike. As open science continues to bridge the gap between investigators, clinicians and the public, its role in shaping a healthier and more informed society becomes increasingly significant. We are excited about supporting open science at Galter. Please [contact us](#) for support, training or resource needs, or with questions.

Learn more about open science

- [Open Science at UNESCO](#), including the [UNESCO Recommendation on Open Science](#)
- [Federal open science programs and initiatives](#)
- NASA's [Open-Source Science Initiative](#)
- [FAIR Principles](#)
- GalterGuides on [Open Access Health Resources](#), [Open Access Publishing](#), and [Prism](#)

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