



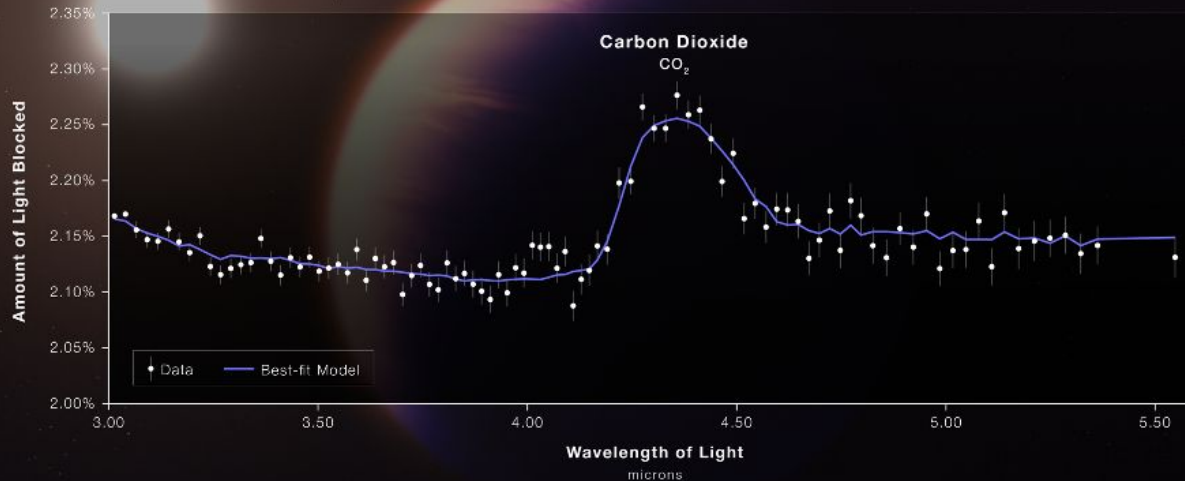
2023

Astronomers see CO₂ on exoplanet for first time



HOT GAS GIANT EXOPLANET WASP-39 b
ATMOSPHERE COMPOSITION

NIRSpec | Bright Object Time-Series Spectroscopy

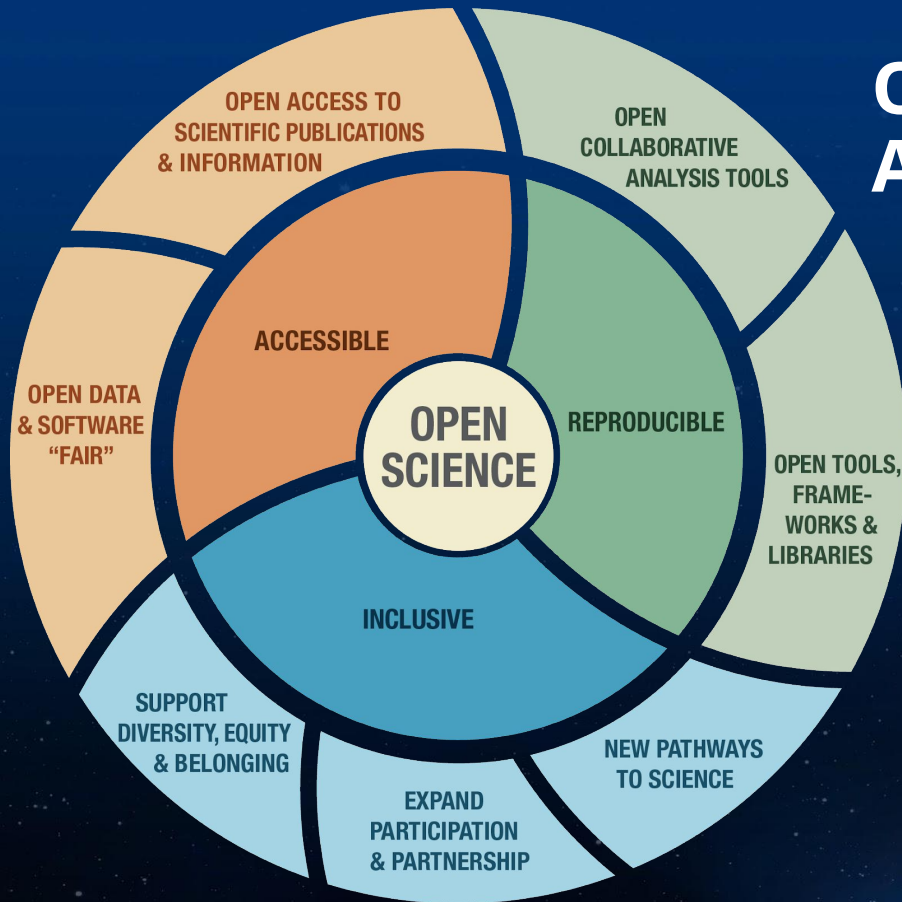


WEBB
SPACE TELESCOPE

"NASA's open science guiding principles are centered in our Early Release Science work, supporting an inclusive, transparent, and collaborative scientific process."

- co-author
Dr. Natasha Batalha

Open Science Accelerates Discoveries



We need **more** people - more hands, more eyes, more brains - with diverse experiences to participate so that we ask the best questions and find the best solutions





The United States White House announces **2023: A Year of Open Science**

A multi-agency initiative across the US Federal Government to spark change and inspire open science engagement through events and activities that will advance adoption of open science.

- ◆ **Centers for Disease Control and Prevention**
- ◆ **Department of Agriculture**
- ◆ **Department of Commerce**
- ◆ **Department of Energy**
- ◆ **National Aeronautics and Space Administration**
- ◆ **National Endowment for the Humanities**
- ◆ **National Institutes of Health**
- ◆ **National Institute of Standards and Technology**
- ◆ **National Oceanic and Atmospheric Administration**
- ◆ **National Science Foundation**
- ◆ **Smithsonian Institution**
- ◆ **U.S. Geological Survey**
- ◆ **U.S. General Services Administration**



A Common Definition

Open science is 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.



2023 Year of Open Science: Goals

1. Develop a strategic plan for open science
2. Improve the transparency and equity of reviews
3. Account for open science activities in evaluations
4. Engage underrepresented communities in the advancement of open science



2023 Year of Open Science



NASA is supporting scientists to integrate open science principles into the entire research workflow

Infrastructure

Policy

NASA's
Open-Source
Science
Initiative

Funding

Community



NASA's Transform to Open Science (TOPS)

a \$40 million 5-year mission to accelerate adoption of open science

TOPS' Strategic Goals:

- Support 20K researchers to earn NASA's open science certification
- Double the participation of historically excluded groups across NASA Science
- Enable five major scientific discoveries through open science principles



Engagement



Capacity Sharing



Incentives



Coordination



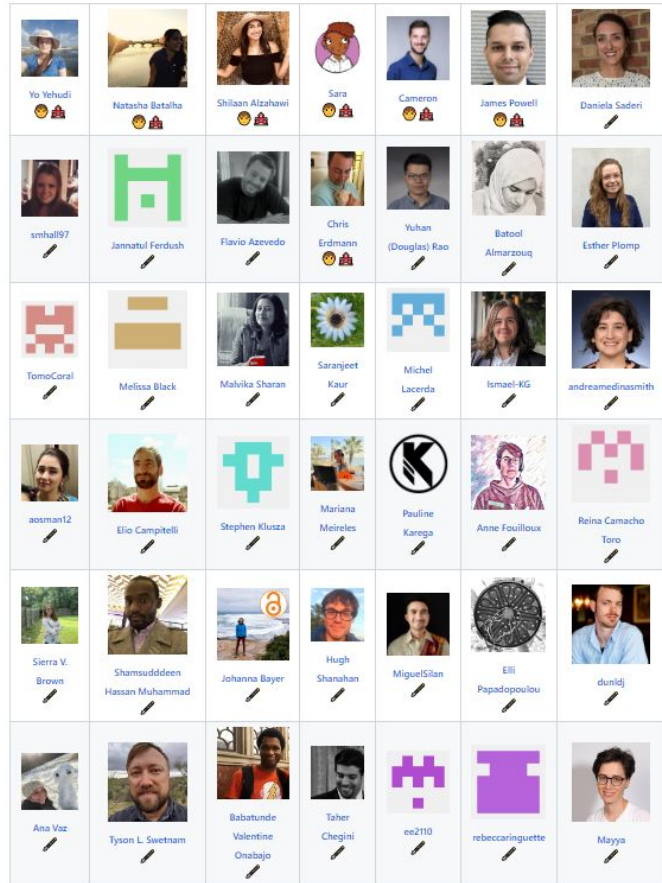
The NASA Open Science Certificate identifies researchers who use key open science skills

- Able to use digital tools to perform open science (e.g., ORCID, Zenodo, Github accounts)
- Familiar with data management and software management plan best practices and resources
- Grow connections across a community of open science practitioners

Open Science 101: A community-developed introduction to open science with inclusivity, accessibility, and diversity at the forefront.

“Somewhere,
something incredible
is waiting to be known.”
-Carl Sagan





This project follows the all-contributors specification. Contributions of any kind welcome!

Many thanks to the global community of open science experts who shared their knowledge and experiences with us!



A YEAR OF OPEN SCIENCE: NIH DATA MANAGEMENT & SHARING POLICY

Susan Gregurick, PhD
Associate Director for Data Science

PDRx – Parkinson's Disease Research Exchange
April 5th, 2023

OPEN ACCESS

"The White House announcement today is an astronomical win for innovation and scientific progress."

-Ron Wyden, U.S. Senator from Oregon

"We are enthusiastic to move forward on these important efforts to make research results more accessible.."

- Lawrence Tabak, Performing the Duties of the NIH Director

"AAAS, the nonprofit publisher of the Science family of journals, supports the objectives of the White House OSTP and has a long history of advocating for equitable access to scientific research and data..."

- Sudip Parikh, Chief Executive Officer, AAAS

The New York Times

White House Pushes Journals to Drop Paywalls on Publicly Funded Research

The po
fully in
availab

nature

Explore content ▾ About the journal ▾ Publish with us ▾ Subscribe

NEWS | 26 August 2022 | Correction [30 August 2022](#)

US government reveals big changes to open-access policy

POLITICS

White House directs health, science agencies to make federally funded studies free to access

STAT+ federally

THE HILL

News Policy Opinion Events Jobs Newsletters

Reprints

White House moves to make all federally funded research available to public for free by 2026



NIH POLICY FOR DATA MANAGEMENT & SHARING

- TWO BASIC REQUIREMENTS
 - Submission of a Data Management & Sharing “Plan” for all NIH-funded research
 - Compliance with the ICO-approved Plan
- Effective January 25, 2023 (*replaces 2003 Data Sharing Policy*)

The DMS Policy applies to all research that generates scientific data, including:

- Research Projects
- Some Career Development Awards (Ks)
- Small Business SBIR/STTR
- Research Centers



The DMS Policy does not apply to research and other activities that *do not* generate scientific data, including:

- Training (T)
- Fellowships (Fs)
- Construction (C06)
- Conference Grants (R13)
- Resource (Gs)
- Research-Related Infrastructure Programs (e.g., S06)

FLEXIBLE POLICY – KEY PARAMETERS

- **All data should be managed but not all data needs to be shared**
 - **What's in:** All NIH-supported research generating *scientific data* “Recorded factual material... of sufficient quality to validate and replicate research findings”
 - **What's out:** lab notebooks, preliminary analyses, case report forms, physical objects
- **Data should be accessible as soon as possible**
 - No later than publication or end of award
 - Considerations regarding how long data should be shared (e.g., journal policies, repository policies)



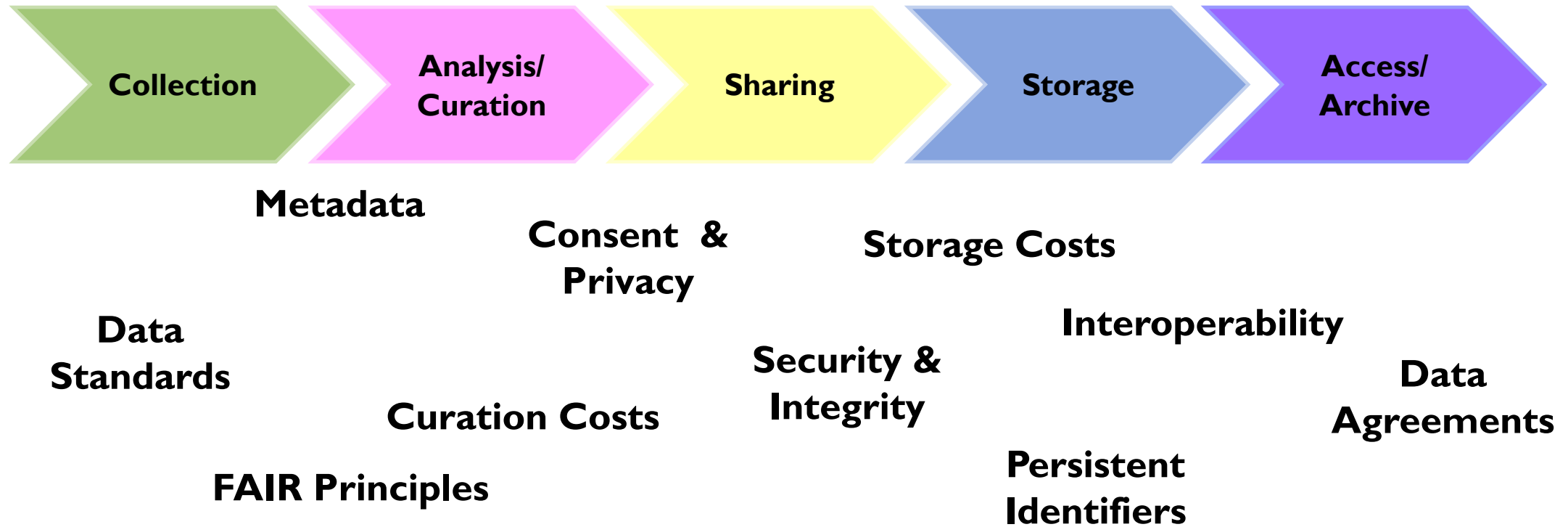
'Which brings us to my next point.'

WHAT'S A GOOD PLAN?

- **Recommended elements of a Plan:**
 - **Data type** - Data to be preserved and shared
 - **Related tools, software, code** - Tools and software needed to access/manipulate data
 - **Standards** - Standards to be applied to scientific data/metadata
 - **Data preservation, access, timelines** - Repository to be used, persistent unique identifier, and when/how long data will be available
 - **Access, distribution, reuse considerations** - Factors for data access, distribution, or reuse
 - **Oversight of data management** - How Plan compliance will be monitored/ managed and by whom

NIH VISION

A DEEPER DIVE INTO FAIR DATA MANAGEMENT AND SHARING



NIH DATA SHARING INFRASTRUCTURE

NIH strongly encourages
open access Data Sharing Repositories
as a first choice.

https://www.nlm.nih.gov/NIHbmic/nih_data_sharing_repositories.html

Datasets up to **2 gigabytes**

PubMed Central

Stores publication-related supplemental materials and datasets directly associated publications.



Datasets up to **20 gigabytes**

Generalist Repositories

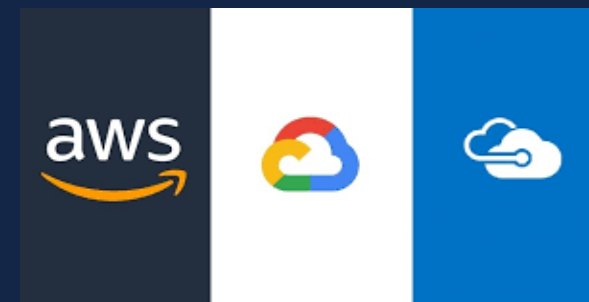
Datasets associated with publications or otherwise and links to PubMed.



High priority datasets **petabytes**

Cloud Partners (STRIDES Program)

Store and manage large scale, high priority NIH datasets.



ACCELERATING MEDICINES PARTNERSHIP® (AMP®) PROGRAM

Accelerating Medicine Partnership in Parkinson's Disease

AMP is a public-private partnership between NIH, biopharmaceutical and life sciences companies, and non-profit organizations

AMP-PD: Neurological Disorders and Stroke (NINDS), National Institute on Aging (NIA), the Food and Drug Administration (FDA), GSK, Pfizer, Sanofi, Bristol-Myers Squibb, Verily and the **Michael J. Fox Foundation for Parkinson's Research (MJFF)**

The goals of AMP PD are:

- To standardize data collection for biomarkers in multiple cohorts
- Standardized assays, incorporating existing clinical, imaging, genetic data
- To pursue large-scale biomarker discovery with transcriptomics, epigenomics, whole genome sequencing, metabolomics, and proteomics
- To dissect new targets and disease subtypes; track and predict disease progression; identify biomarkers of Parkinson's progression and assess their potential as targets for therapies**



AMP-PD Knowledge Portal

Methods for Data Analysis

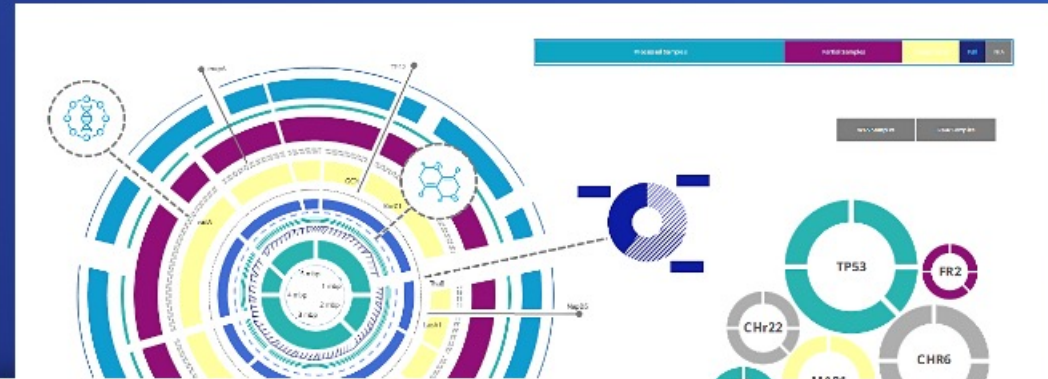
AMP® PD gives researchers access to a large, harmonized dataset with:

- common clinical and genomic data
- select clinical- and genetic- population information

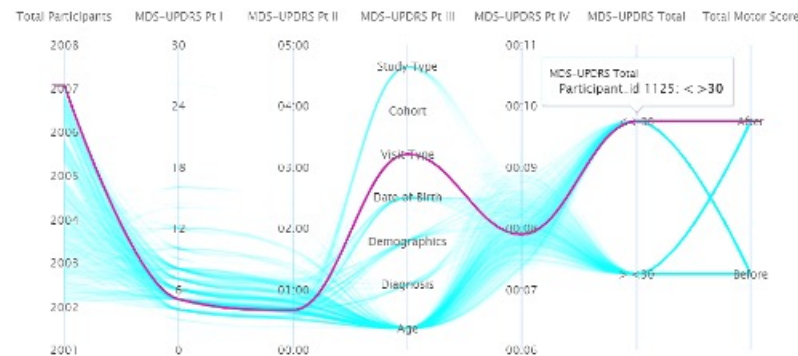
plus proprietary, research-developed applications for visualizing and harmonizing data

[Explore the AMP PD datasets](#)

[Explore the Researcher Tools](#)



Parkinsons Disease – MDS-UPDRS Scoring



GENERALIST REPOSITORY ECOSYSTEM INITIATIVE

Applications from Repositories Working Together to:



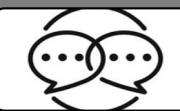
Implement consistent capabilities
(NOT-OD-21-016)



Create better access to & discovery
of NIH funded data



Conduct outreach & train on FAIR data
practices



Engage the research community

Expected Outcomes



Make data sharing easier



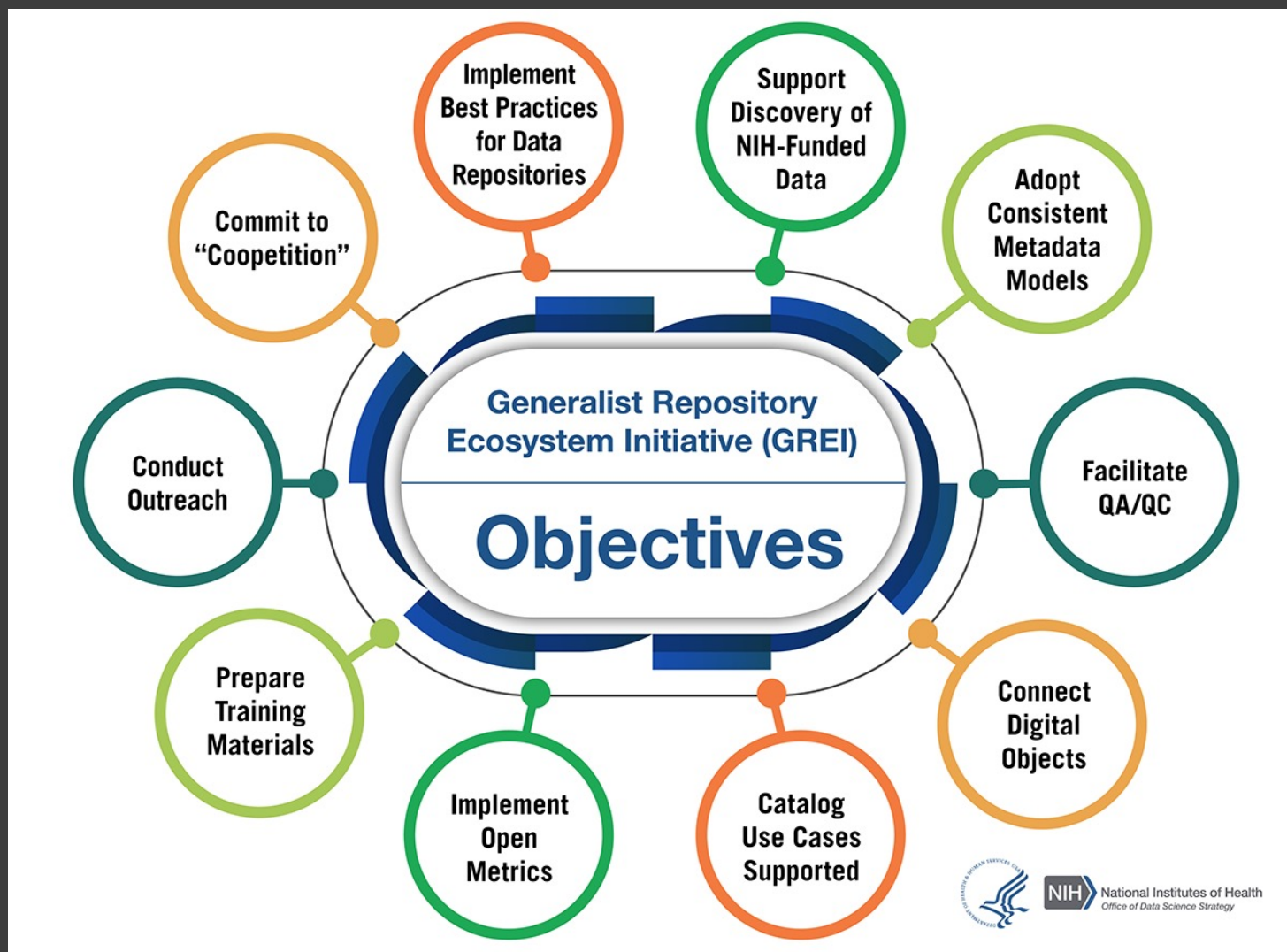
Improve discoverability



Increase reproducibility of research



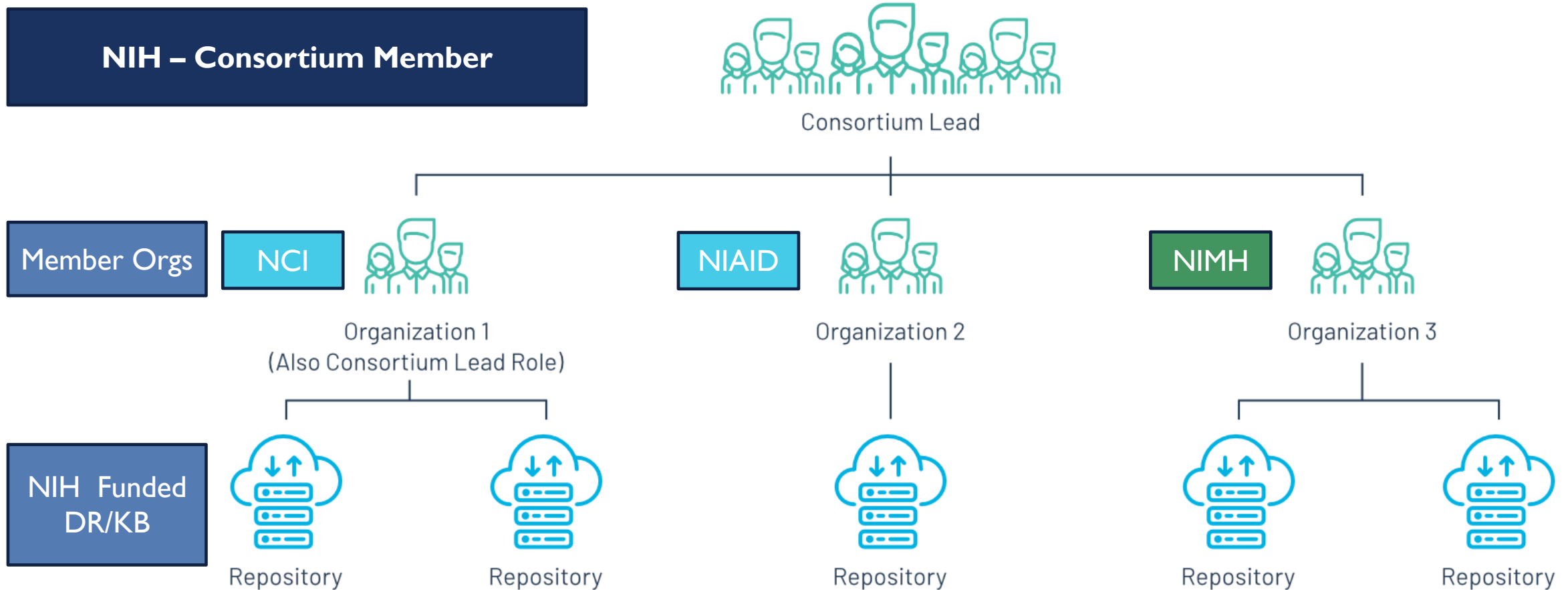
Encourage secondary use of data



GREI's mission is twofold. The **primary mission** is to establish a common set of cohesive and consistent capabilities, services, metrics, and social infrastructure across various generalist repositories.

Secondarily, GREI will raise general awareness and help researchers to adopt FAIR principles to better share and reuse data.

NIH is now a consortium member to meet a critical need to mint digital object identifiers thereby supporting the implementation of FAIR principles for data generated from NIH funded and conducted research.



COMMUNITY RESOURCES COORDINATION ACROSS NIH

<https://sharing.nih.gov>



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[DATA MANAGEMENT AND SHARING POLICY](#)

[GENOMIC DATA SHARING POLICY](#)

[OTHER SHARING POLICIES](#)

[ACCESSING DATA](#)

[ABOUT](#)

Expediting the Translation of Research Results to Improve Human Health.

LATEST NEWS & EVENTS

Gearing Up for 2023: Implementing the
NIH Data Management and Sharing
Policy

[View More](#)

NIH VISION

DATA SHARING EFFORTS



Scientific data are the catalyst for biomedical breakthroughs and treatments



Integrated policies, resources, and infrastructure are key to sharing and reuse



NIH aims to promote effective data sharing as the rule, not the exception



THANK YOU FOR YOUR TIME AND ATTENTION



Open Science


Through the Lens of the Michael J. Fox Foundation's

Open Access Policy





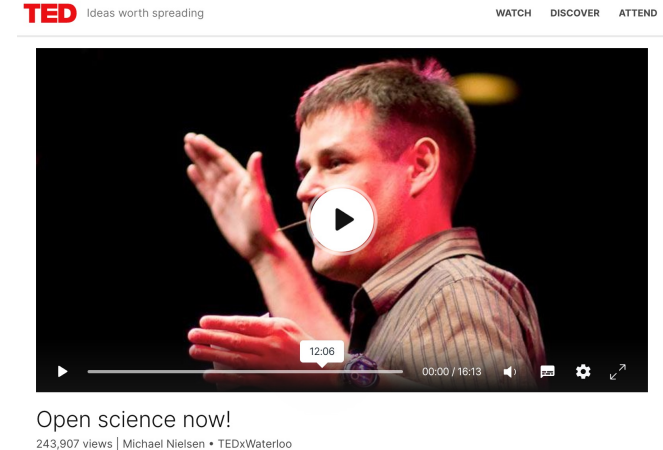
The Michael J. Fox Foundation for Parkinson's Research

Open science now! (2011)

Scientists need to share. That's the premise presented in this 2011 TED Talk: [Open Science](#) , by Michael Nielsen, a quantum physicist turned writer who sees the need for a second revolution of open science that translates to the data science world. Using the Polymath Project as an example, Nielsen describes how the online collaboration of mathematicians across the world through a blog site resulted in the resolution of a complex mathematical problem in a matter of 37 days— something that otherwise may have taken years.

Due to today's available technologies, Nielsen sees incredible potential for immediate global collaboration that could advance science at a rate never thought possible. He notes that the current scientific culture, where knowledge hoarding is so prevalent, is a barrier that needs to be overcome. Nielsen wants to propel an open science revolution by changing the values of individual scientists, so that they view the sharing of ideas as a responsibility and requirement of their roles.

A quantum physicist turned writer, Michael Nielsen sees a revolution in scientific discovery through the use of online communication and collaboration tools. This Fulbright Scholar is the co-author of [Quantum Computation and Quantum Information](#) , as well as the author of the recent [Reinventing Discovery: The New Era of Networked Science](#) .

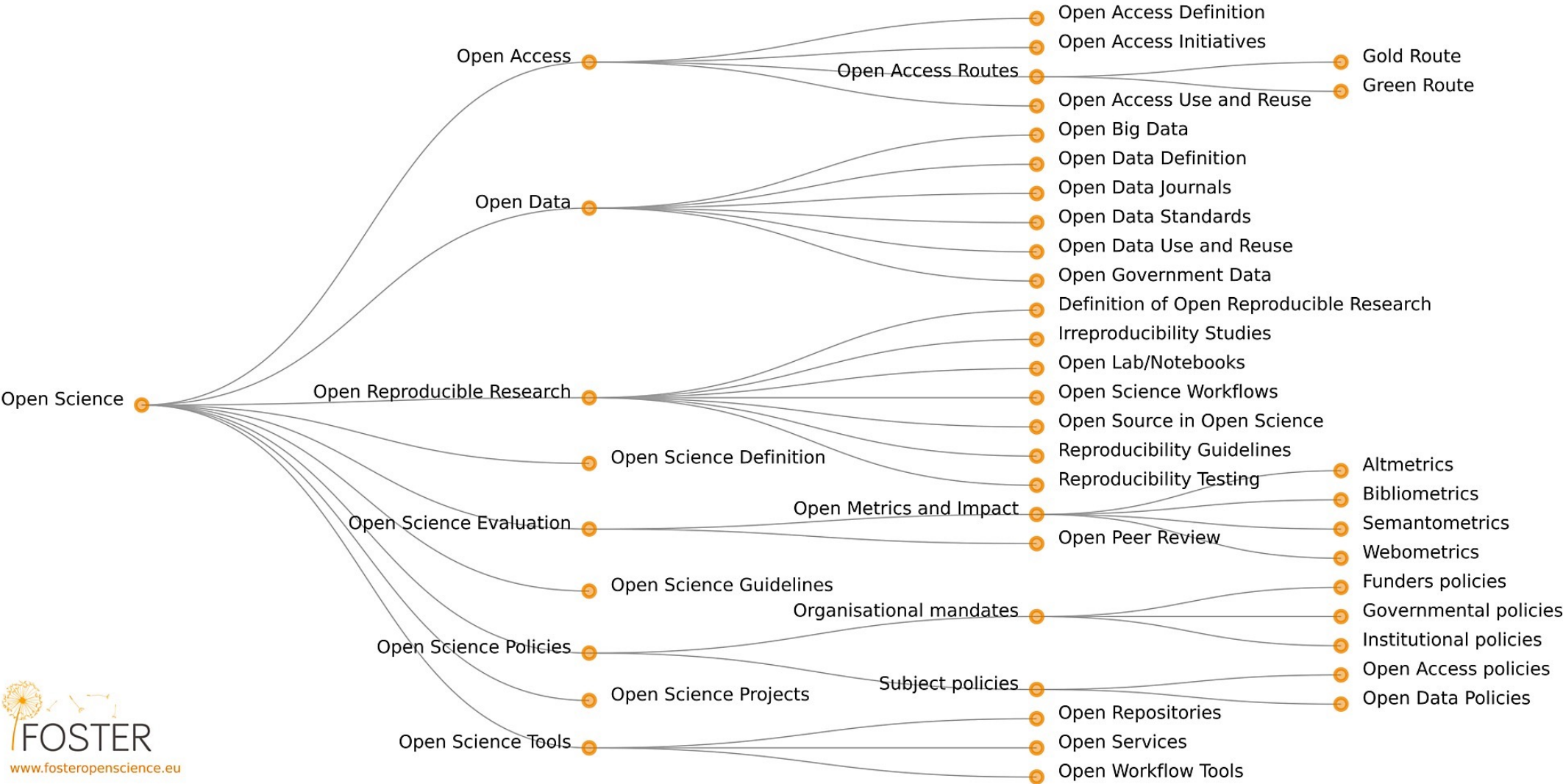


UNESCO's Definition of Open Science

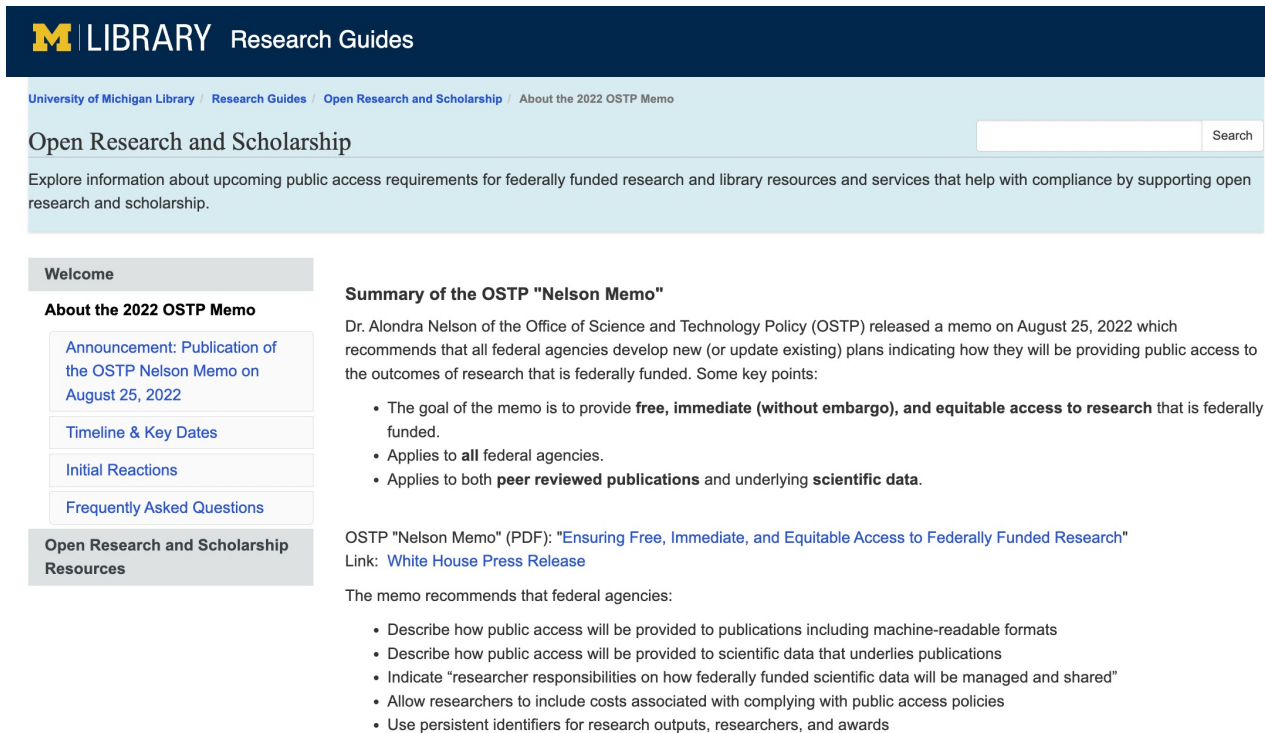
An **inclusive** construct that combines various movements and practices aiming to make multilingual scientific knowledge **openly** available, accessible and reusable for everyone, to increase scientific **collaborations** and **sharing** of information for the benefits of science and **society**, and to open the processes of scientific knowledge creation, evaluation and communication to societal actors **beyond the traditional** scientific community.



Open Science Taxonomy



White House OSTP Nelson Memo



M LIBRARY Research Guides

University of Michigan Library / Research Guides / Open Research and Scholarship / About the 2022 OSTP Memo

Open Research and Scholarship

Explore information about upcoming public access requirements for federally funded research and library resources and services that help with compliance by supporting open research and scholarship.

Welcome

About the 2022 OSTP Memo

- [Announcement: Publication of the OSTP Nelson Memo on August 25, 2022](#)
- [Timeline & Key Dates](#)
- [Initial Reactions](#)
- [Frequently Asked Questions](#)

Open Research and Scholarship Resources

Summary of the OSTP "Nelson Memo"

Dr. Alondra Nelson of the Office of Science and Technology Policy (OSTP) released a memo on August 25, 2022 which recommends that all federal agencies develop new (or update existing) plans indicating how they will be providing public access to the outcomes of research that is federally funded. Some key points:

- The goal of the memo is to provide **free, immediate (without embargo), and equitable access to research** that is federally funded.
- Applies to **all** federal agencies.
- Applies to both **peer reviewed publications** and underlying **scientific data**.

OSTP "Nelson Memo" (PDF): ["Ensuring Free, Immediate, and Equitable Access to Federally Funded Research"](#)
Link: [White House Press Release](#)

The memo recommends that federal agencies:

- Describe how public access will be provided to publications including machine-readable formats
- Describe how public access will be provided to scientific data that underlies publications
- Indicate "researcher responsibilities on how federally funded scientific data will be managed and shared"
- Allow researchers to include costs associated with complying with public access policies
- Use persistent identifiers for research outputs, researchers, and awards

- + Free, immediate (without embargo), and equitable access to research (publications, data)
- + Machine-readable formats
- + Data management/sharing responsibilities
- + Compliance associated costs
- + Use of persistent identifiers

MJFF Open Access Publication Policy



THE MICHAEL J. FOX FOUNDATION OPEN ACCESS PUBLICATION POLICY

As The Michael J. Fox Foundation (MJFF) is a public charity, research enabled by funds from MJFF must be conducted in the public interest. We believe that the results of all MJFF-funded research should be promptly published and broadly disseminated to accelerate innovation and foster collaboration toward our shared goal of new treatments and cures for Parkinson's disease. To that end, we have adopted an open access policy for all published research that is funded, in whole or in part, by the Foundation, including any underlying data sets.

Work with your grant's Foundation management team to understand the implications of this policy on your individual projects and possible exceptions or exemptions.

ARTICLE ACCESSIBILITY

All articles resulting from MJFF funding must be posted in an open access preprint repository with free, immediate readership rights and thereafter published:

- in a fully open access journal,
- as a fully open access article in a hybrid open access journal,
- or made freely available in the form of an author's accepted manuscript or equivalent posted to the author's personal website or institutional archive with free, immediate readership rights.

DATA AND CODE ACCESSIBILITY

Any data, code and software needed for independent verification of research results must be curated and made freely and publicly available in an established, open repository no later than the publication of the first paper based on the data or no later than the conclusion of the research project, whichever comes first.

- **Immediate free online access** upon publication with grantees retaining copyright via CC BY 4.0 license (or equivalent) for unrestricted reuse
- Post a preprint, archive author manuscript, and/or **publish in OA** journal article
- **Research outputs** (data, protocols, code) to be deposited in publicly accessible repositories
- **Acknowledgement to MJFF** funded work
- **Cover OA article processing charges (APCs)**

Open Science as a Principle



Open science and reproducibility accelerate progress

Programs promote collaboration, replication, sharing and open access

Accessibility of Publications



The Michael J. Fox Foundation for Parkinson's Research

Preprints



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bioRxiv

THE PREPRINT SERVER FOR BIOLOGY

[Advanced Search](#)

COVID-19 SARS-CoV-2 preprints from medRxiv and bioRxiv

Subject Areas

All Articles

| | | |
|-------------------------------|----------------------|-----------------------------|
| Animal Behavior and Cognition | Ecology | Paleontology |
| Biochemistry | Epidemiology* | Pathology |
| Bioengineering | Evolutionary Biology | Pharmacology and Toxicology |
| Bioinformatics | Genetics | Physiology |
| Biophysics | Genomics | Plant Biology |

- + Scholarly manuscripts made available before peer review
- + Help w/ rapid dissemination, visibility, and feedback
- + Open, versioned, and establish priority of discoveries
- + Option of open peer review
- + [MJFF bioRxiv channel](#)

Request for Article Processing Charge (APC) Funds

In service to our mission to accelerate progress toward more effective therapies and cures for Parkinson's disease, The Michael J. Fox Foundation (MJFF) requires that articles resulting from MJFF-funded research projects be published in a preprint repository then an open access forum with free, immediate readership rights. [Read the full policy.](#)

MJFF will pay reasonable article processing charges (APC fees) required by a publisher for open access publication if these requirements are met:

- The applicant/author must be a current or former MJFF awardee.
- The publication must arise (in whole or in part) from research conducted with MJFF funding.

- + Article Processing Charges (APCs) – Charge to authors to make article open access
- + Articles resulting from MJFF funded research projects are eligible
- + Request funding support using the [APC form](#)

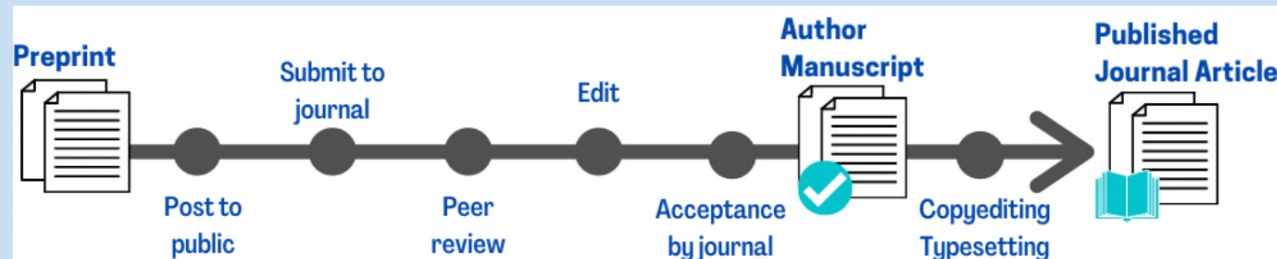
Author Accepted Manuscript

Author Manuscripts in PMC

PubMed Central (PMC) serves as the repository for the National Institutes of Health (NIH) and a number of other [public and private organizations](#) that fund scientific research. The policies of these organizations often require authors to deposit in PMC a copy of their peer-reviewed manuscript, as accepted for publication by a journal. These manuscripts are deposited to PMC through the NIH Manuscript Submission (NIHMS) system or Europe PMC Plus (part of the [PMC International](#) Network). The deposited papers must include all changes made in peer review as well as all referenced figures, tables, and supplementary materials.

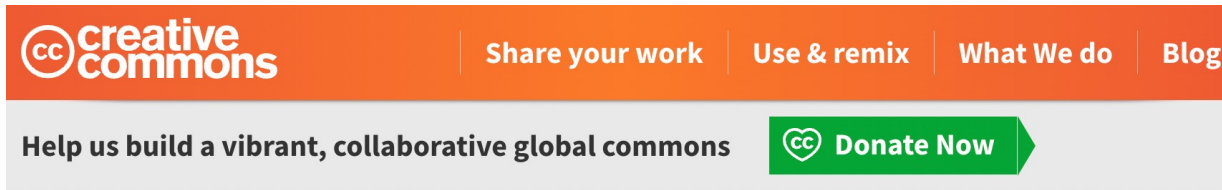
What is the Author Manuscript?

The **author manuscript** is the version of a paper that has been peer reviewed and accepted for publication by a journal. This version should include all changes made during the peer review process, though it generally does not include copyediting and stylistic edits or formatting changes.

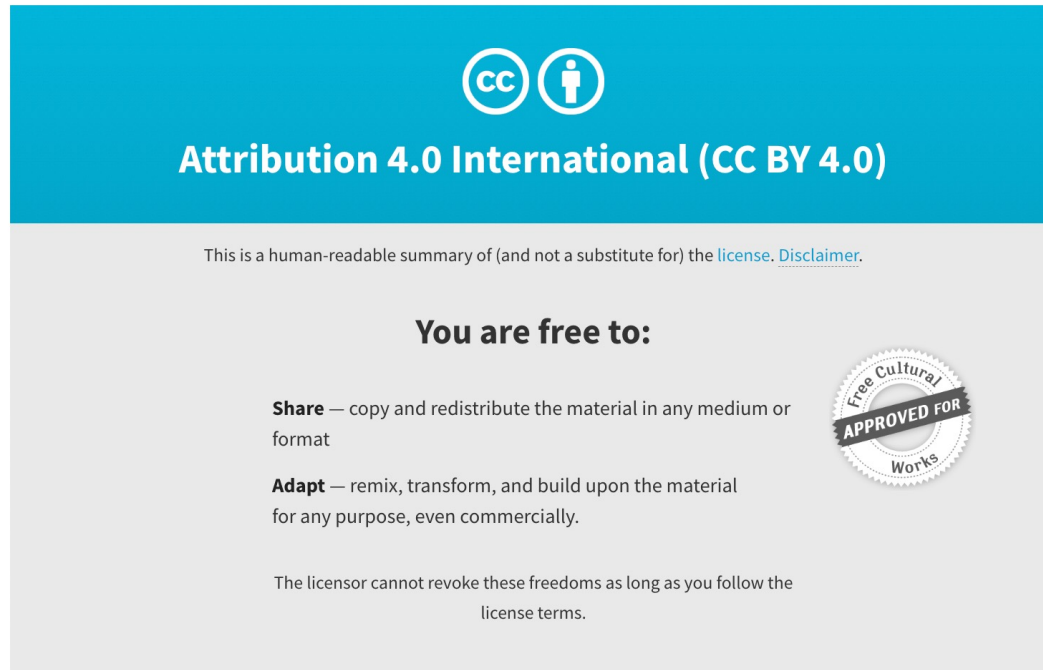


- + Author Accepted Manuscript (AAM) – Version of the manuscript that has undergone peer review and has been accepted by the publisher.
- + The AAM is a free/open access version of the manuscript that can be submitted to an institutional repository, [PubMed Central](#), [Europe PMC](#).
- + [Shareyourpaper.org](#) offers a free, easy to use service for making AAMs available as well.

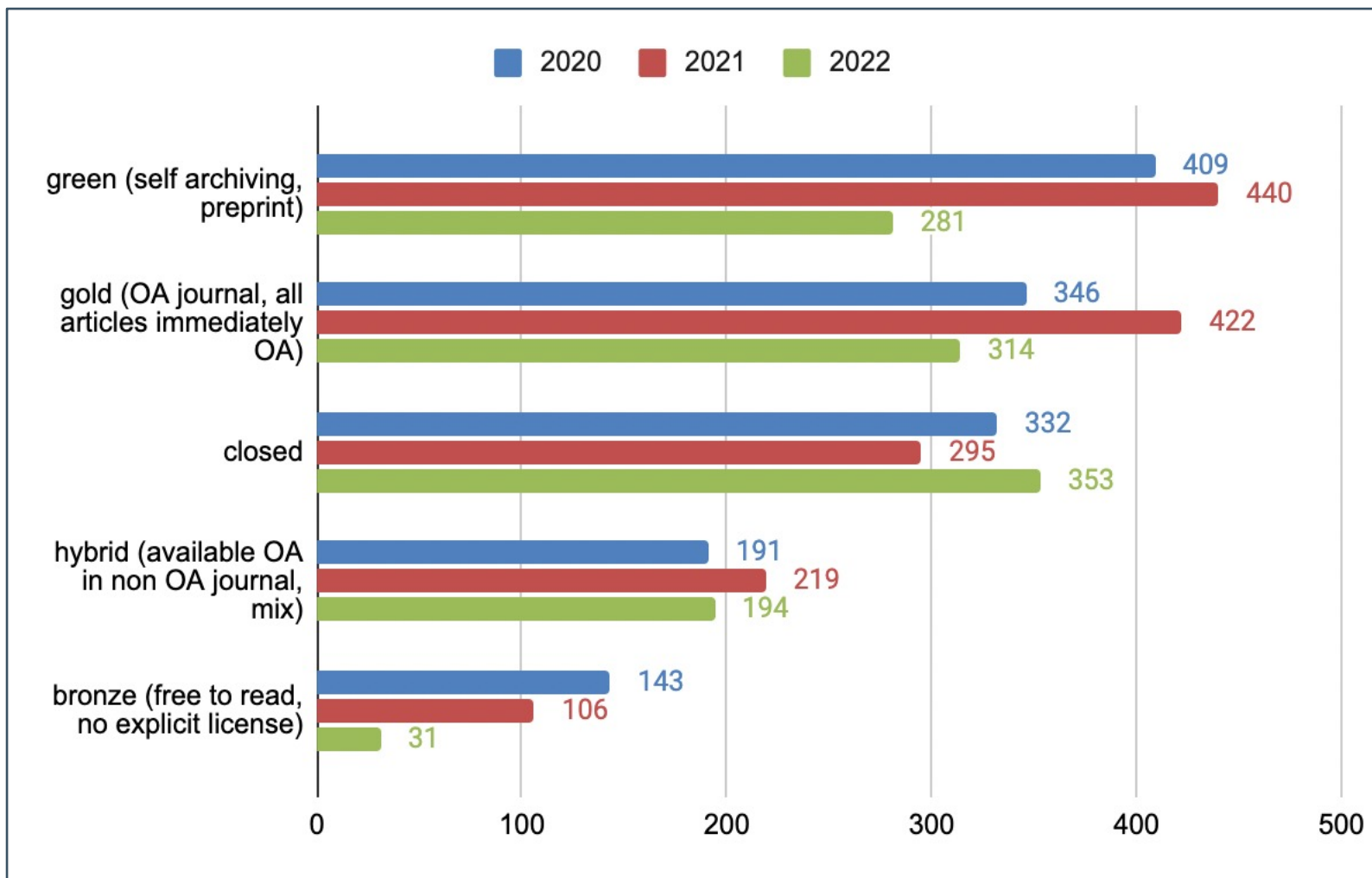
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 - + Ensure copyright and attribution/credit
- + [License chooser](#) available (in beta)
- + Include the license in the metadata and the paper itself (e.g., acknowledgement)



MJFF OA Trends

- 76% publications acknowledging MJFF from 2020-2022 are open
- 30% of MJFF publications in 2022 are closed access vs 23% in 2020
- 24% preprints, institutional repository authored manuscripts (Green) in 2022 vs 29% in 2020
- Publisher access types - Gold increased 3% in 2022 from 2020, Hybrid 4%

Improve discovery and accessibility

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Date

☐ 2023 (123)

☐ 2022 (723)

☐ 2021 (884)

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The Michael J. Fox Foundation's Strategies for Accelerating Translation of LRRK2 into Therapies for Parkinson Disease.

Padmanabhan S, Fiske BK, Baptista MAS

Cells, 9(8):E1878, 11 Aug 2020

Cited by: 2 articles | PMID: 32796584 | PMCID: PMC7466022

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Free to read & use

The Michael J. Fox Foundation for Parkinson's Research Strategy to Advance Therapeutic Development of PINK1 and Parkin.

Padmanabhan S, Polinski NK, Menalled LB, Baptista MAS, Fiske BK

Biomolecules, 9(8):E296, 24 Jul 2019

Cited by: 5 articles | PMID: 31344817 | PMCID: PMC6723155

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Free to read & use

Interview with Mark Frasier: a **Michael J Fox Foundation** perspective on precision medicine in Parkinson's.

Fraser MA

Per Med, 14(1):13-15, 30 Nov 2016

Cited by: 0 articles | PMID: 29749821

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Data and Code Accessibility



The Michael J. Fox Foundation for Parkinson's Research

Data/Software Availability

- + 52% of 2022 MJFF papers had a Data Availability Statement
 - + 21% of those papers had “data available upon request”
 - + 17% directed readers to supplemental information
 - + 17% had “http” links
- + Avoid parachuting into data/software and do more to guide them
 - + Preserve the data/software via a repository (e.g., [Zenodo](#)) and cite



DATA AVAILABLE UPON REQUEST

Data Availability Statement

Research data used in this article are available from the corresponding author on request.

DATA & SOFTWARE SHARED

Data availability

All primary data associated with each figure has been deposited in a repository; most can be found at <https://doi.org/10.5061/dryad.3tx95x6j7>. Quantitation data of the blots in Figure 3--figure supplement 4 (for the bar graphs in Figures 3C and 3D) can be found at doi (10.5281/zenodo.7057419). Analysis presented in Figure 8--figure supplement 1 can be found at <https://doi.org/10.5281/zenodo.7108943>. All code is available at https://github.com/PfefferLab/Vides_et_al_2022 (copy archived at <https://www.swh.io/rev/2b50525ee1d48790466d35222956f16615ae96e8>).

The following data sets were generated

Vides EG, Pfeffer SR (2022) **Dryad Digital Repository** Data from: A feed-forward pathway drives LRRK2 kinase membrane recruitment and activation.

<https://doi.org/10.5061/dryad.3tx95x6j7>

Limouse C, Vides EG, Adhikari A, Pfeffer SR (2022) **Zenodo**

PfefferLab/Vides_et_al_2022: v1.0.

<https://doi.org/10.5281/zenodo.7108943>

Lis P, Alessi DR (2022) **Zenodo** Figure 3--Figure Supplement 4 of the paper 'A Feed-forward Pathway Drives LRRK2 kinase Membrane Recruitment and Activation'.

<https://doi.org/10.5281/zenodo.7057419>

<https://doi.org/10.7554/eLife.79771>



THE MICHAEL J. FOX FOUNDATION
FOR PARKINSON'S RESEARCH

Availability Statement Templates

- + The [type of data] data used for [brief context, description] in the study are available at [repository, source name] via [DOI, persistent identifier link] with [license, access conditions] [in-text citation in References]
- + [Version number] of the [software name] used for [brief context, description of what the software was used for] is preserved at [DOI, persistent identifier link], available via [license type, access conditions] and developed openly at [software development platform link]. [in-text citation in References]

DOI Citation Formatter

Paste your DOI:

10.5061/dryad.3tx95x6j7

For example 10.1145/2783446.2783605

Select Formatting Style:

apa

Begin typing (e.g. Chicago or IEEE.) or use the drop down menu.

Select Language and Country:

en-US

Begin typing (e.g. en-GB for English, Great Britain) or use the drop down menu.

Format

Vides, E., & Pfeffer, S. (2022). A feed-forward pathway drives LRRK2 kinase membrane recruitment and apparent activation (Version 5) [Data set]. Dryad. <https://doi.org/10.5061/DRYAD.3TX95X6J7>

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Do you want to integrate this service? Check the [Documentation](#)

- + Include a bracketed description with your data/software citation ([Data set], [Computer software])
- + Use [DOI Citation Formatter](#)
- + The DOI and bracketed description allow the data/software to be indexed in Crossref/DataCite
- + This improves discovery and credit for the data/software

Advantage of Citing/Linking to Data

“We also find an association between articles that include statements that link to data in a repository and up to 25.36% ($\pm 1.07\%$) higher citation impact on average, using a citation prediction model.”

<https://doi.org/10.1371/journal.pone.0230416>



DataCite Commons – Data/Software Citation

DataCite Blog

[Support](#) [DataCite homepage](#)

Wellcome Trust and the Chan Zuckerberg Initiative Partner with DataCite to Build the Open Global Data Citation Corpus

 January 17, 2023  Paul Vierkant
<https://doi.org/10.5438/vjz9-kx84>

Aggregated references to data across outputs will help the community monitor impact, inform future funding, and improve the dissemination of research

Amsterdam – 17 January 2023 – DataCite is pleased to announce that The Wellcome Trust has awarded funds to build the Open Global Data Citation Corpus to dramatically transform the data citation landscape. The corpus will store asserted data citations from a diverse set of sources and can be used by any community stakeholder.

The Make Data Count (MDC) initiative was established in 2014 to develop an infrastructure for open data metrics. A key learning from the initiative is that the community needs a clear understanding of data reuse to monitor impact, inform future funding, and improve the dissemination of research. The development of a trusted central aggregate of all references to research data across articles, preprints, government documents, and other outputs will help achieve this goal.

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[IGSN ID Catalogs – Now it is Even Easier to Register IGSN IDs!](#)

[DataCite Design System is ready to be worn.](#)

[DataCite launches Global Access Program with support from CZI](#)

[Launch of the PID-network Project – Understanding Metadata Workflows](#)

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Preserving & Citing Software



The Michael J. Fox Foundation for Parkinson's Research

Release Code from GitHub, Preserve and Cite w/ Zenodo

Referencing and citing content

You can use third-party tools to cite and reference content on GitHub.

Issuing a persistent identifier for your repository with Zenodo

To make your repositories easier to reference in academic literature, you can create persistent identifiers, also known as Digital Object Identifiers (DOIs). You can use the data archiving tool [Zenodo](#) to archive a repository on GitHub.com and issue a DOI for the archive.

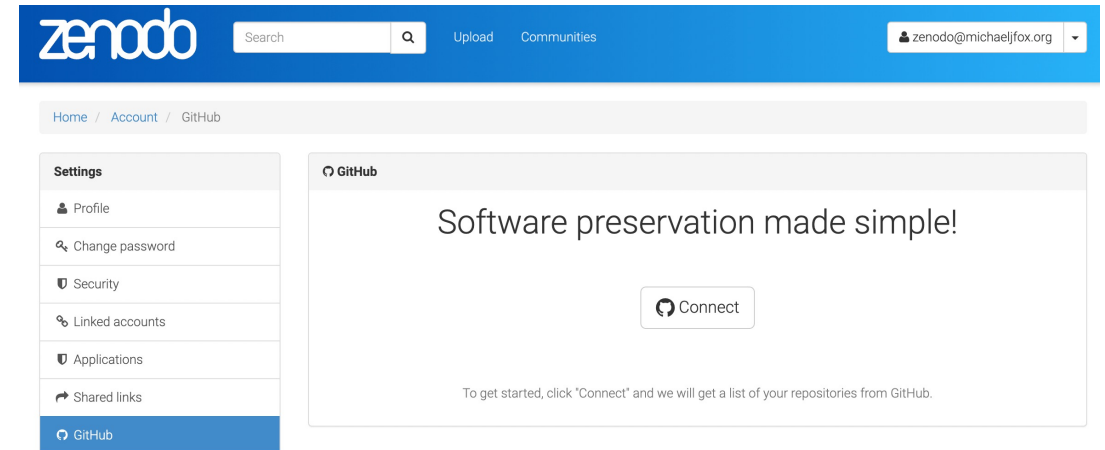
Tips:

- Zenodo can only access public repositories, so make sure the repository you want to archive is [public](#).
- If you want to archive a repository that belongs to an organization, the organization owner may need to [approve access](#) for the Zenodo application.
- Make sure to include a [license](#) in your repository so readers know how they can reuse your work.

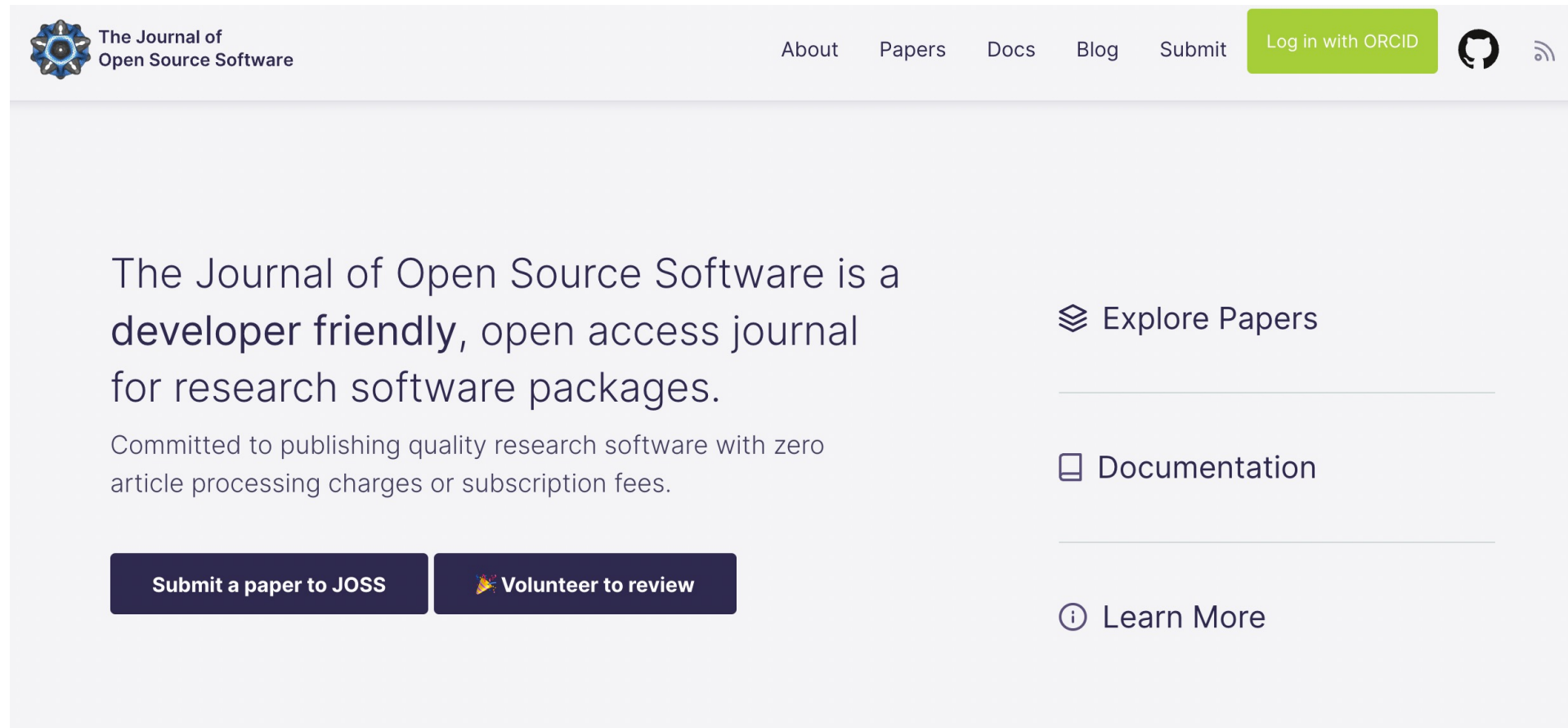
1 Navigate to the [login page](#) for Zenodo.

2 Click **Log in with GitHub**.

3 Review the information about access permissions, then click **Authorize zenodo**.



Software Journals



The screenshot shows the homepage of The Journal of Open Source Software (JOSS). The header features the JOSS logo (a blue gear with a white eye) and the text "The Journal of Open Source Software". Navigation links include "About", "Papers", "Docs", "Blog", and "Submit". A green button says "Log in with ORCID", and there are icons for GitHub and RSS. The main content area has a large heading: "The Journal of Open Source Software is a developer friendly, open access journal for research software packages." Below this is a subheading: "Committed to publishing quality research software with zero article processing charges or subscription fees." At the bottom of the main area are two dark blue buttons: "Submit a paper to JOSS" and "Volunteer to review" (with a small icon). On the right side, there are three links: "Explore Papers" (with a book icon), "Documentation" (with a document icon), and "Learn More" (with an information icon).

The Journal of Open Source Software

About Papers Docs Blog Submit Log in with ORCID

The Journal of Open Source Software is a developer friendly, open access journal for research software packages.

Committed to publishing quality research software with zero article processing charges or subscription fees.


Submit a paper to JOSS Volunteer to review

Explore Papers

Documentation

Learn More

Citing Software in GitHub (Citation Files)

 **GitHub Docs** | Version: Free, Pro, & Team ▾

[Repositories](#) / [Manage repository settings](#) / [Customize your repository](#) / [About CITATION files](#)

About CITATION files

You can add a CITATION file to your repository to help users correctly cite your software.

About CITATION files

You can add a `CITATION.cff` file to the root of a repository to let others know how you would like them to cite your work. The citation file format is plain text with human- and machine-readable citation information.

Example `CITATION.cff` file:

```
cff-version: 1.2.0
message: "If you use this software, please cite it as below."
authors:
- family-names: "Lisa"
  given-names: "Mona"
  orcid: "https://orcid.org/0000-0000-0000-0000"
- family-names: "Bot"
  given-names: "Hew"
  orcid: "https://orcid.org/0000-0000-0000-0000"
title: "My Research Software"
version: 2.0.4
```

Resources & Protocols



The Michael J. Fox Foundation for Parkinson's Research

Research Resource Identification

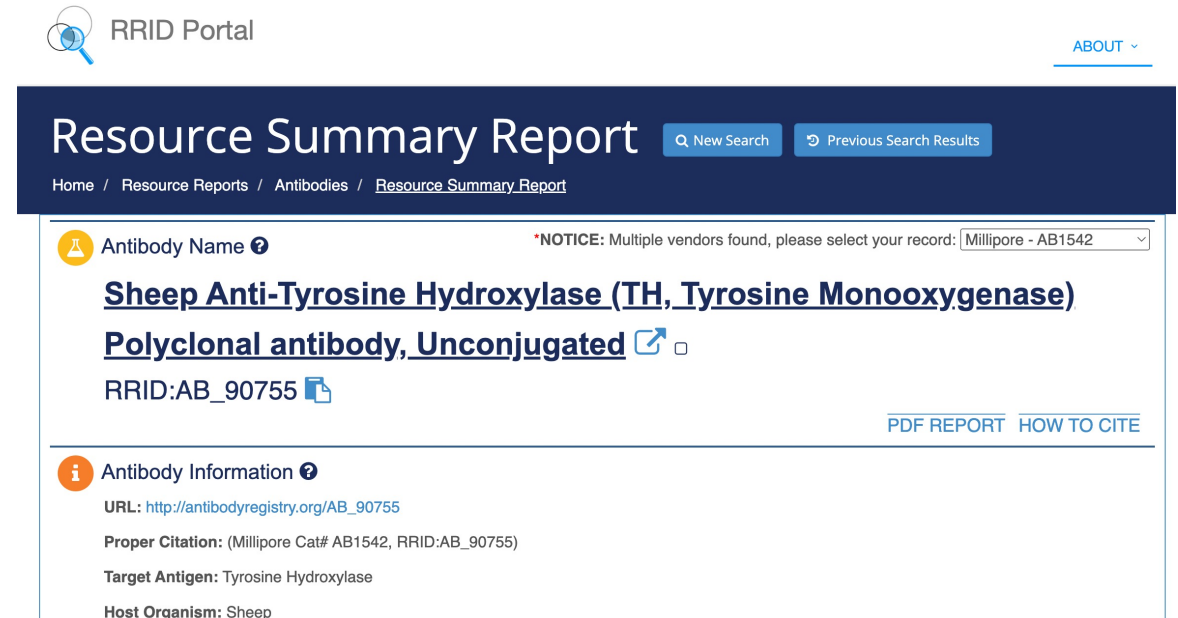
Research Resource Identifiers (RRIDs) – Resources (e.g., cell lines, transgenic models, plasmids/clones, antibodies, and other reagents) identification, discovery, and reuse.

Example Identifier: Antibody: [RRID:AB_9075](#)

Materials & Methods > Recommended Citation:

(Millipore Cat# AB1542, RRID:AB_90755)

Find RRIDs: [SciCrunch RRID Portal](#) ([Add a Resource](#)) – Registry/database for tracking/credit



The screenshot shows the 'RRID Portal' interface. At the top, there's a search bar and a navigation menu with 'Home / Resource Reports / Antibodies / Resource Summary Report'. The main heading is 'Resource Summary Report' with buttons for 'New Search' and 'Previous Search Results'. Below this, the 'Antibody Name' section displays the title 'Sheep Anti-Tyrosine Hydroxylase (TH, Tyrosine Monooxygenase) Polyclonal antibody, Unconjugated' and the RRID 'RRID:AB_90755'. A notice states: '*NOTICE: Multiple vendors found, please select your record: Millipore - AB1542'. The 'Antibody Information' section provides the URL 'http://antibodyregistry.org/AB_90755', proper citation '(Millipore Cat# AB1542, RRID:AB_90755)', target antigen 'Tyrosine Hydroxylase', and host organism 'Sheep'. Links for 'PDF REPORT' and 'HOW TO CITE' are also present.

RRID Example: PPMI

[ABOUT](#)

Resource Summary Report

[New Search](#)[Previous Search Results](#)[Home](#) / [Resource Reports](#) / [Tools](#) / [Resource Summary Report](#)

Resource Name ?

Parkinson's Progression Markers Initiative

RRID:SCR_006431 [Login to claim ownership](#)

[PDF REPORT](#) [HOW TO CITE](#)

Resource Information ?

URL: <http://www.ppmi-info.org/>

Proper Citation: Parkinson's Progression Markers Initiative (RRID:SCR_006431)

Description: An observational longitudinal clinical study partnership to identify and validate biomarkers of Parkinson disease (PD) progression and provide easy and open web-based access to the comprehensive set of correlated clinical data and biospecimens, information, and biosamples acquired from PD a ...[\[more\]](#)

Abbreviations: PPMI

Synonyms: Parkinson's Progression Markers Initiative

Resource Type: data or information resource, biomaterial supply resource, portal, database, material resource, organization portal, consortium, clinical trial

Keywords: analyze, atlas data, clinical neuroinformatics, computational neuroscience,

This resource

| | |
|-------------------------|--|
| is used by | Biomarkers Across Neurodegenerative Diseases |
| is listed by | Consortia-pedia |
| is listed by | One Mind Biospecimen Bank Listing |
| is listed by | NeuroImaging Tools and Resources Collaboratory (NITRC) |
| is listed by | NIH Data Sharing Repositories |
| is related to | NIH Data Sharing Repositories |
| has parent organization | Laboratory of Neuro Imaging |

Protocols

- + Repository for step-by-step detailed protocols that are indexed (i.e. searchable on the web)
- + A platform to organize, exchange, and keep method details up to date
 - + Allows for versioning tracks who is viewing, exporting, bookmarking these protocols
- + Can use this platform to register protocols and cite in methods section of your paper
- + Introduction to protocols.io ([video](#))



The screenshot shows the protocols.io website. At the top is a navigation bar with a hamburger menu icon, the protocols.io logo (a cat face), and links for FEATURES, PLANS, BLOG, and CASE STUDY. The main heading is "Bring structure to your research". Below this is a subtitle: "A secure platform for developing and sharing reproducible methods." There is a search bar with a magnifying glass icon, the word "SEARCH", and a right arrow. Below the search bar are three categories: "computational workflows", "clinical trials", and "operational procedures". At the bottom right is the logo for "THE MICHAEL J. FOX FOUNDATION FOR PARKINSON'S RESEARCH".

protocols.io FEATURES PLANS BLOG CASE STUDY

Bring structure to your research

A secure platform for developing and sharing reproducible methods.

Q SEARCH →

computational workflows clinical trials operational procedures

 THE MICHAEL J. FOX FOUNDATION
FOR PARKINSON'S RESEARCH

Where to Get Help

- + At your institution, you can turn to your library, research computing, data science services, or even local/departmental open science groups
- + Also feel free to reach out to the MJFF Open Access Policy Team
openaccess@michaeljfox.org / Chris Erdmann cerdmann@michaeljfox.org

Appendix: General Tips



The Michael J. Fox Foundation for Parkinson's Research

General Tips

- + Create an ORCID and set up auto update with [Crossref](#) and [DataCite](#)
- + Develop a [Record of Contributors](#) to manage [CRediT](#) roles/work throughout a project
- + Understand where you will manage, preserve, and share your data/software early in the research process (e.g., [NIH GREI](#), [NIH Supported](#), MJFF resources/PPMI)
 - + [Data](#) and [software](#) management plans are helpful tools in this process
- + Describing and documenting your data/software is key to discoverability, accessibility, replicability (e.g., [Cornell Research Data Management – Readme](#))
- + Subset and preserve data over 1 TB while linking to file hosting/storage service
- + Sensitive data – Describe/document, indicate agreements/conditions, avoid parachuting!

Links/Resources

- + <https://ischoolonline.berkeley.edu/blog/michael-nielsen-open-science-now/>
- + <https://www.youtube.com/watch?v=DnWocYKqvhw>
- + <https://unesdoc.unesco.org/ark:/48223/pf0000379949#>
- + [https://figshare.com/articles/figure/Open Science Taxonomy/1508606](https://figshare.com/articles/figure/Open_Science_Taxonomy/1508606)
- + <https://guides.lib.umich.edu/open-research-and-scholarship/OSTP-memo>
- + https://www.michaeljfox.org/sites/default/files/media/document/MJFF%20Open%20Access%20Publication%20Policy_0.pdf
- + <http://connect.biorxiv.org/relate/content/207>
- + <https://www.michaeljfox.org/form/request-article-processing-charge-apc-funds>

Links/Resources

- + <https://www.ncbi.nlm.nih.gov/pmc/about/authorms/>
- + <https://plus.europepmc.org/home>
- + <https://shareyourpaper.org/>
- + <https://creativecommons.org/licenses/by/4.0/>
- + <https://chooser-beta.creativecommons.org/>
- + <https://europepmc.org/search?query=michael%20j.%20%22fox%20foundation%22>
- + <https://zenodo.org/>
- + <https://doi.org/10.7554/eLife.79771>

Links/Resources

- + <https://citation.crosscite.org/>
- + <https://www.authorea.com/users/536571/articles/616035-journal-production-guidance-for-software-and-data-citations>
- + <https://doi.org/10.1371/journal.pone.0230416>
- + <https://blog.datacite.org/data-citation-corpus-announcement-2023/>
- + <https://commons.datacite.org/>
- + <https://docs.github.com/en/repositories/archiving-a-github-repository/referencing-and-citing-content>
- + <https://zenodo.org/account/settings/github/>
- + <https://joss.theoj.org/>

Links/Resources

- + <https://docs.github.com/en/repositories/managing-your-repositorys-settings-and-features/customizing-your-repository/about-citation-files>
- + https://scicrunch.org/resources/data/record/nif-0000-07730-1/AB_90755/resolver?q=AB_90755&l=AB_90755&i=71127
- + <https://scicrunch.org/resources>
- + <https://scicrunch.org/resources/about/resource>
- + https://scicrunch.org/resources/data/record/nlx_144509-1/SCR_006431/resolver?q=PPMI%2A&l=PPMI%2A&i=rrid:scr_006431
- + <https://www.protocols.io/>
- + <https://www.youtube.com/watch?v=ugVKjD45yEg>