

Persistent Identifiers (PIDs) for FAIRness

Across the Research Ecosystem

BRICC 2025



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Lyrasis

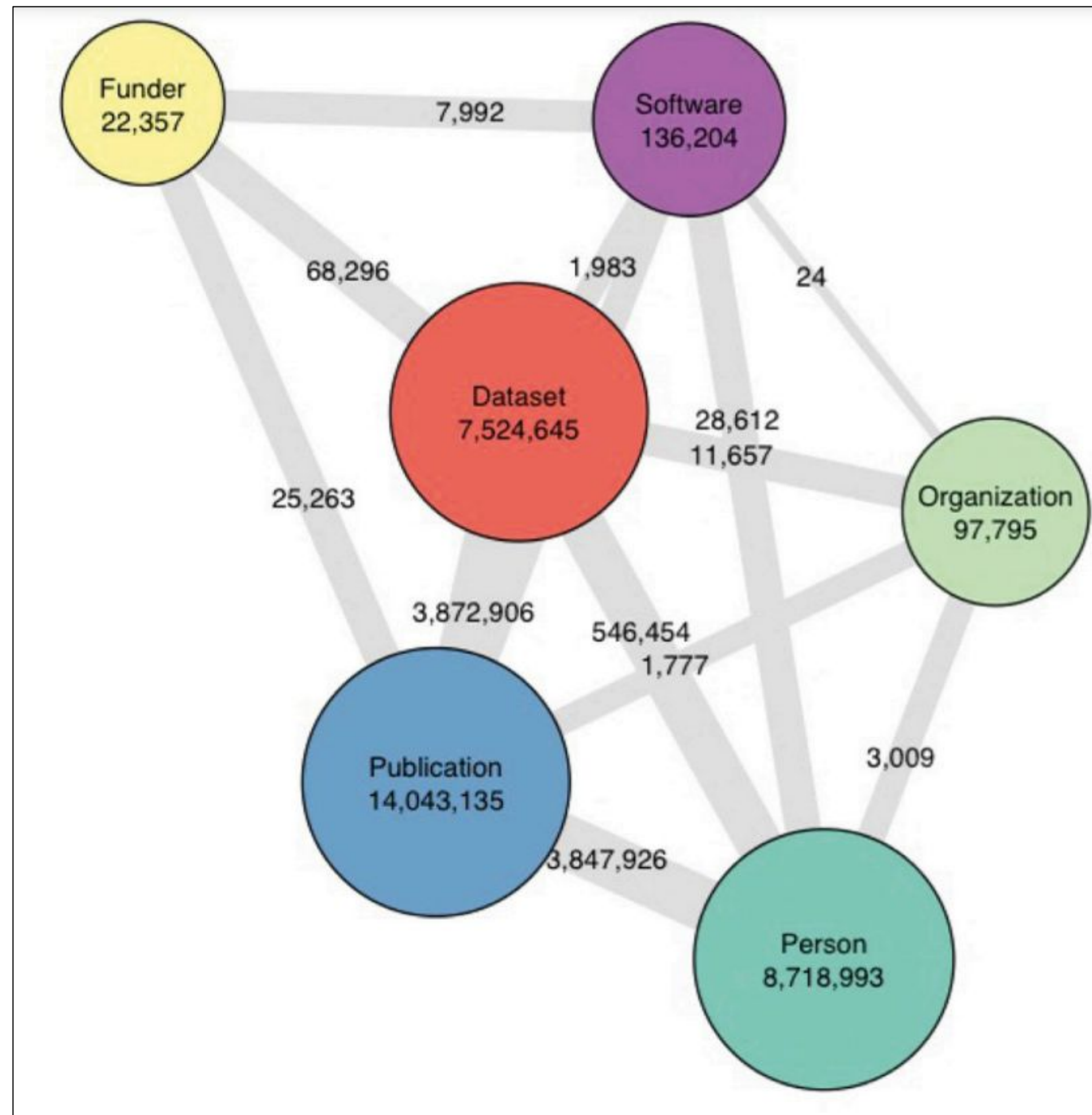
Open Research Infrastructure

- ❖ Technical Components that support & facilitate open research
- ❖ Supports **FAIR** Principles:
 - Findable
 - Accessible
 - Interoperable
 - Reusable



Image from: <https://dcist.com/story/22/09/23/new-metro-map-first-look/>

Persistent Identifiers (PIDs)



<https://doi.org/10.1016/j.patter.2020.100180>

“A PID is a digital identifier that is:

- globally unique
- persistent
- machine resolvable
- has an associated metadata schema
- identifies an entity, and
- is frequently used to disambiguate between entities.”

(<https://www.osti.gov/pids/>)

Persistent Identifiers (PIDs)

- ❖ Enable disambiguation for people, organizations, and resources within the context of metadata about research
- ❖ Provide unique, long-lasting identification of entities & relationships between entities within the research & scholarly communication ecosystem

Persistent Identifiers (PIDs) & FAIR

❖ Findable

- F1. (Meta)data are assigned a globally unique and persistent identifier
- F3. Metadata clearly and explicitly include the identifier of the data they describe

❖ Accessible

- A1. (Meta)data are retrievable by their identifier using a standardised communications protocol

❖ Interoperable

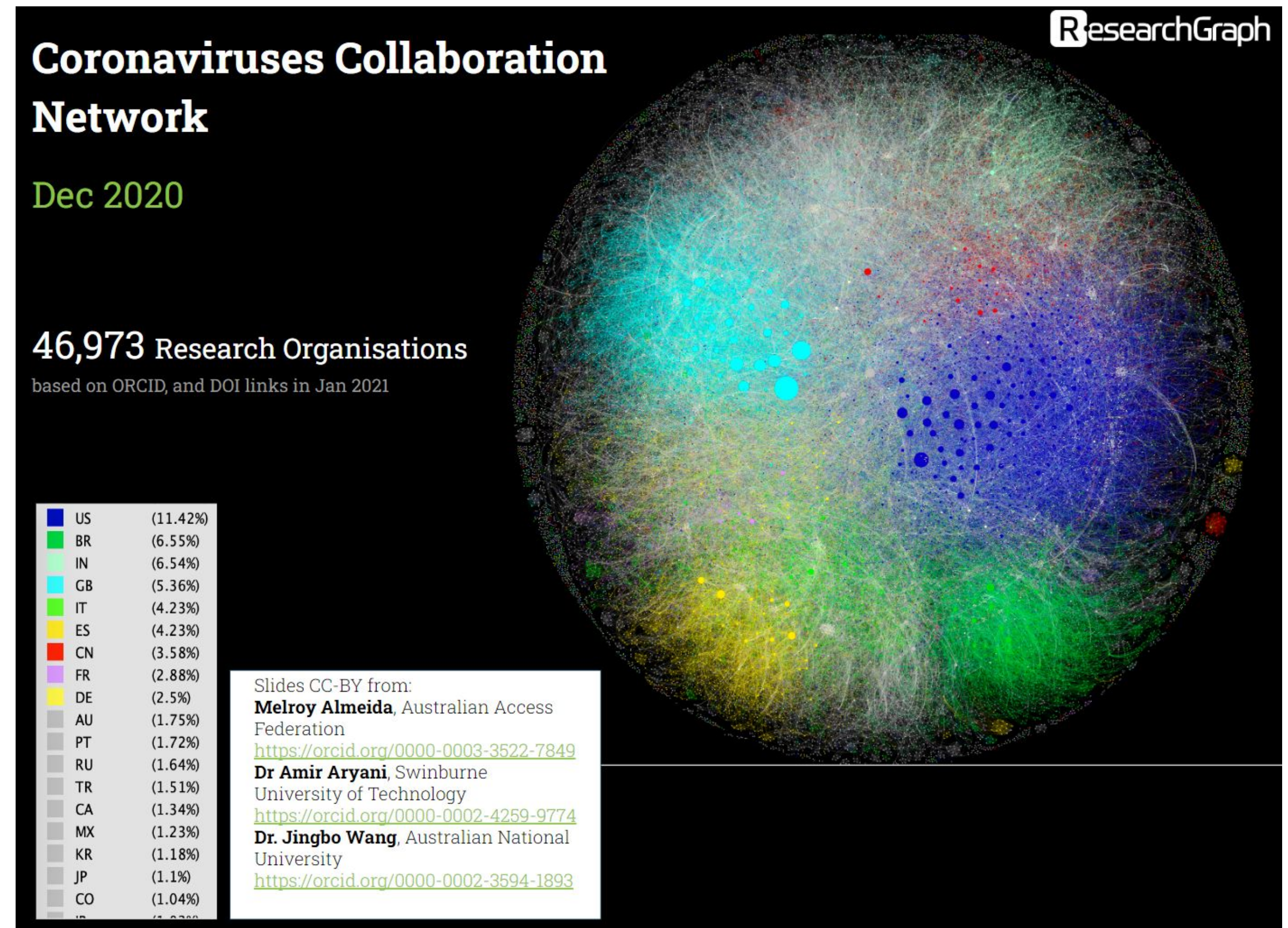
- *Open PIDs are interoperable & can reference each other*

❖ Reusable

- *Open PID metadata schemas help “optimize the reuse of data”*

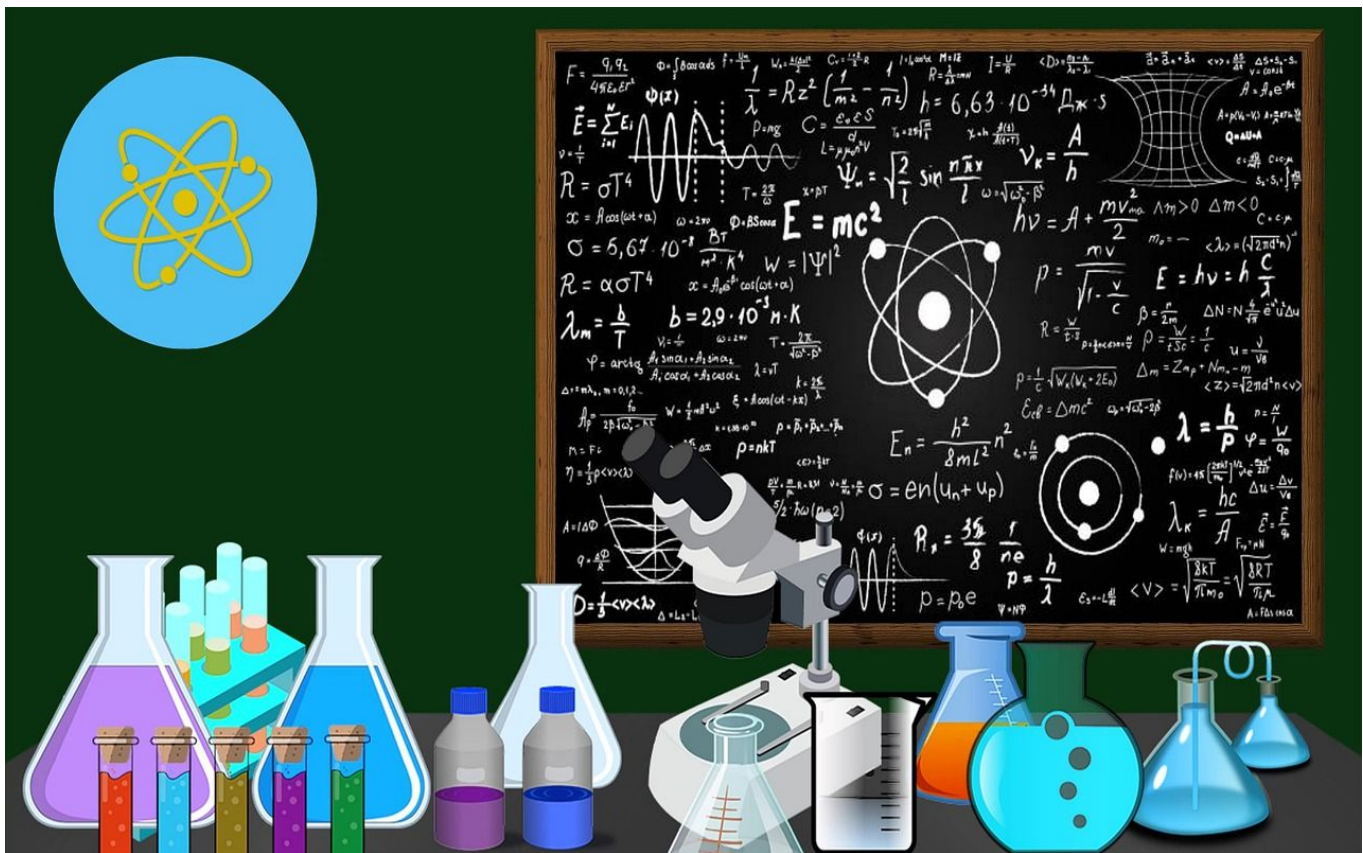
Connected PIDs

- Connected PIDs make research data more FAIR
- Connected PIDs enable a better understanding of research activity associated with a country, state, organization, department, project, or globally



Open PID Examples: DOIs for Research Data

What research data were created or cited?



<https://doi.org/10.48813/k59g-vk23>



Publication: Exploring Research Collaboration Through Connected PIDs: ORCID & Crossref Data Visualization Using R and Tableau

Simple item page

dc.contributor.author	Rabun, Sheila
dc.contributor.author	Gujilde, Paolo P.
dc.date.accessioned	2024-06-28T10:33:14Z
dc.date.available	2024-06-28T10:33:14Z
dc.date.issued	2024
dc.description.abstract	The ORCID US Community partnered with the Drexel University LEADING program to create a set of resources for visualizing publication collaboration activity based on public data from researchers' ORCID records and Crossref DOI publication metadata. The resources include an R script that can be used to retrieve information about publishing collaborations between researchers at a home organization and other organizations across the globe. The resulting dataset can be imported into a Tableau Public dashboard template. to create a data

Open PID Examples: ORCID for Individuals

Who contributed?






 <https://orcid.org/0000-0002-1196-6279>



Sheila Rabun

S.J. Rabun


 <https://orcid.org/0000-0002-1196-6279>  

Hide record summary

Record summary


[Find out more about record summaries](#)

AFFILIATIONS

 Lyrasis


2023-07-01 to present

Senior Strategist, Research Infrastructure Programs employment

 Lyrasis

2021-01-01 to 2023-06-30

Program Leader, Persistent Identifier Communities employment

 Lyrasis


2018-05-01 to 2020-12-31


ORCID US Community Specialist employment

+ 6 more Affiliations


EMAIL DOMAINS

WORKS


 25 Validated works

 26 Self-asserted works


PEER REVIEWS

 2 reviews for 1 publication/grant

FUNDING


 1 Self-asserted funding

PROFESSIONAL ACTIVITIES

 NISO


2024 to present

Member service

 [Public Knowledge Project](#)

2020 to present

service


 DataCite

2022-01 to present

service

+ 12 more Professional activities

EDUCATION AND QUALIFICATIONS

 University of Washington

Images from <https://pixabay.com/>

Open PID Examples: ROR IDs for organizations

Which organizations were involved?



<https://ror.org/02v80fc35>



 <https://ror.org/02v80fc35>

Auburn University

ORGANIZATION TYPES

Education, Funder

OTHER NAMES

Acronyms

AU

Labels

Universidad de Auburn (es)

RELATIONSHIPS

Parent Organizations

[Auburn University System](#)

Related Organizations

[Mississippi Alabama Sea Grant Consortium](#)

LOCATIONS

Auburn (GeoNames ID [4830796](#)), United States

WEBSITE

<https://auburn.edu>

OTHER IDENTIFIERS

GRID [grid.252546.2](#)

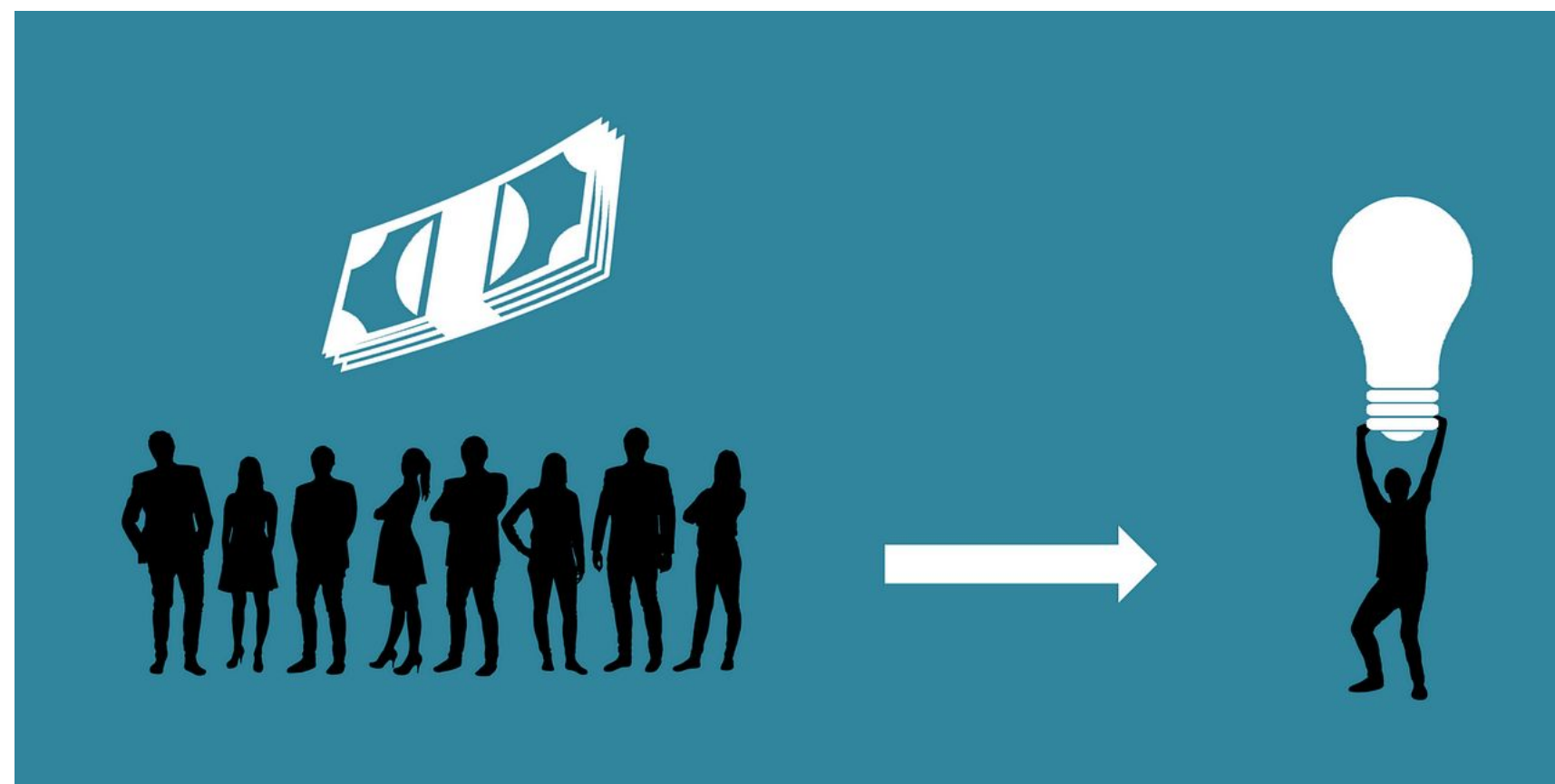
ISNI [0000 0001 2297 8753](#)

Crossref Funder ID [100007579](#)

Wikidata [Q540672](#)

Open PID Examples: Grant/Award DOIs

What grant funded the research? (If any?)



<https://doi.org/10.54514/f7n3d>

Advancing 3D Digitization for Libraries, Museums, and Archives

Created by Sheila Rabun, last modified by Sam Mitchell on Jun 13, 2022

Grant DOI: <https://doi.org/10.54514/f7n3d>

Grantee: Indiana University - Purdue University Indianapolis (IUPUI)

Lead Investigator: Jennifer Johnson (<https://orcid.org/0000-0003-3994-4538>)

Investigators: Derek Miller, Kristi Palmer (<https://orcid.org/0000-0002-6873-1630>)

Keywords: University library, 3D digitization, 3D metadata, Three-dimensional display systems, Three-dimensional imaging, Library materials--Digitization, Archival materials--Digitization, Library metadata

Year Awarded: 2017

Amount: \$29,500

Related Items:

- Final Report: <https://doi.org/10.48609/zbjs-mj78>
- Presentation Slides: <https://doi.org/10.48609/mkva-z715>

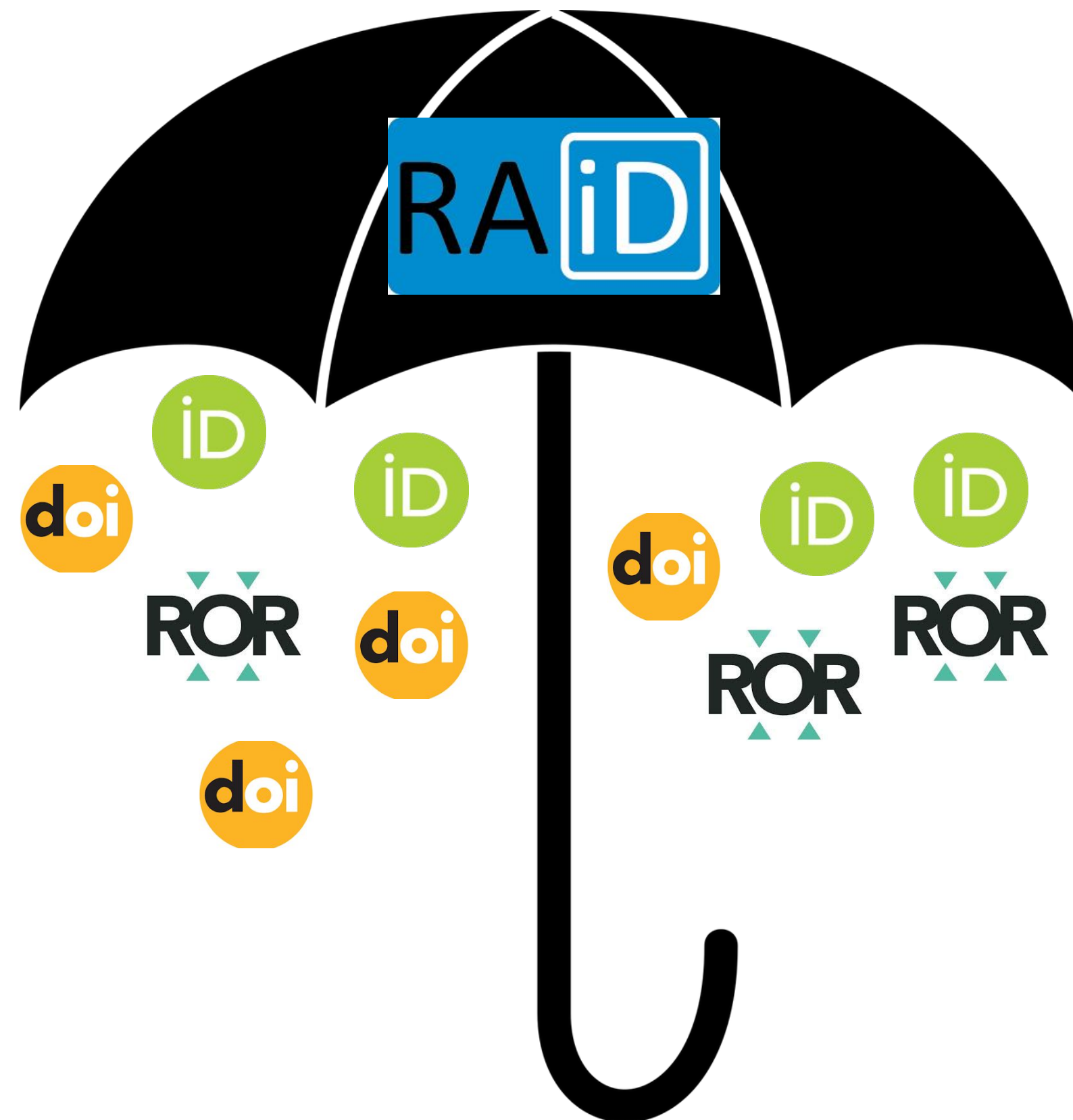
Open PID Examples: RAiD for Research Projects

Which grants has a research project received over time? Which individuals and organizations have been involved with a research project over time?

US RAiD Pilot

<https://lyrasis.org/us-raid-pilot/>

- 2025-2026
- SDSC, GoFAIR US, & Lyrasis
- Funded by NSF



<https://raid.org/10.82841/054fded3>

RAiD

Home

Prefixes

RAiDs

🏠

RAiDs

10.82841

054fded3

RAiD 10.82841/054fded3

Tundzha Regional Archaeology Project | TRAP

Dates

Start Date

01-Jan-2008

End Date

Titles

Title

Tundzha Regional Archaeology Project

PIDs in the US

- ❖ NISO is leading a US National PID Strategy Working Group to build consensus toward a national framework for PIDs as a best practice (as are many other countries)
<https://niso.org/standards-committees/uspids>
- ❖ Scholarly journal publishers have been requiring ORCID iDs and assigning DOIs to publications for many years now
- ❖ Universities, research institutions, health organizations, researcher associations, societies, non-profit funders, etc. are adopting ORCID and other relevant PIDs in their workflows
- ❖ Many federal funding agencies are starting to require ORCID iDs and use Grant DOIs & other PIDs in their workflows

National Security Presidential Memo 33 (NSPM-33)

Federal agencies must have policies related to federal funding recipients having an ORCID iD, and other stipulations in the interest of **research security** and **research integrity**

PRESIDENTIAL MEMORANDA

Presidential Memorandum on United States Government- Supported Research and Development National Security Policy

— NATIONAL SECURITY & DEFENSE | Issued on: January 14, 2021

White House OSTP Public Access Memo


Any research that is federally funded must adhere to certain requirements as a means of **ensuring scientific and research integrity** (to enable a better understanding of federally funded research activity & outputs)



EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF SCIENCE AND TECHNOLOGY POLICY
WASHINGTON, D.C. 20502

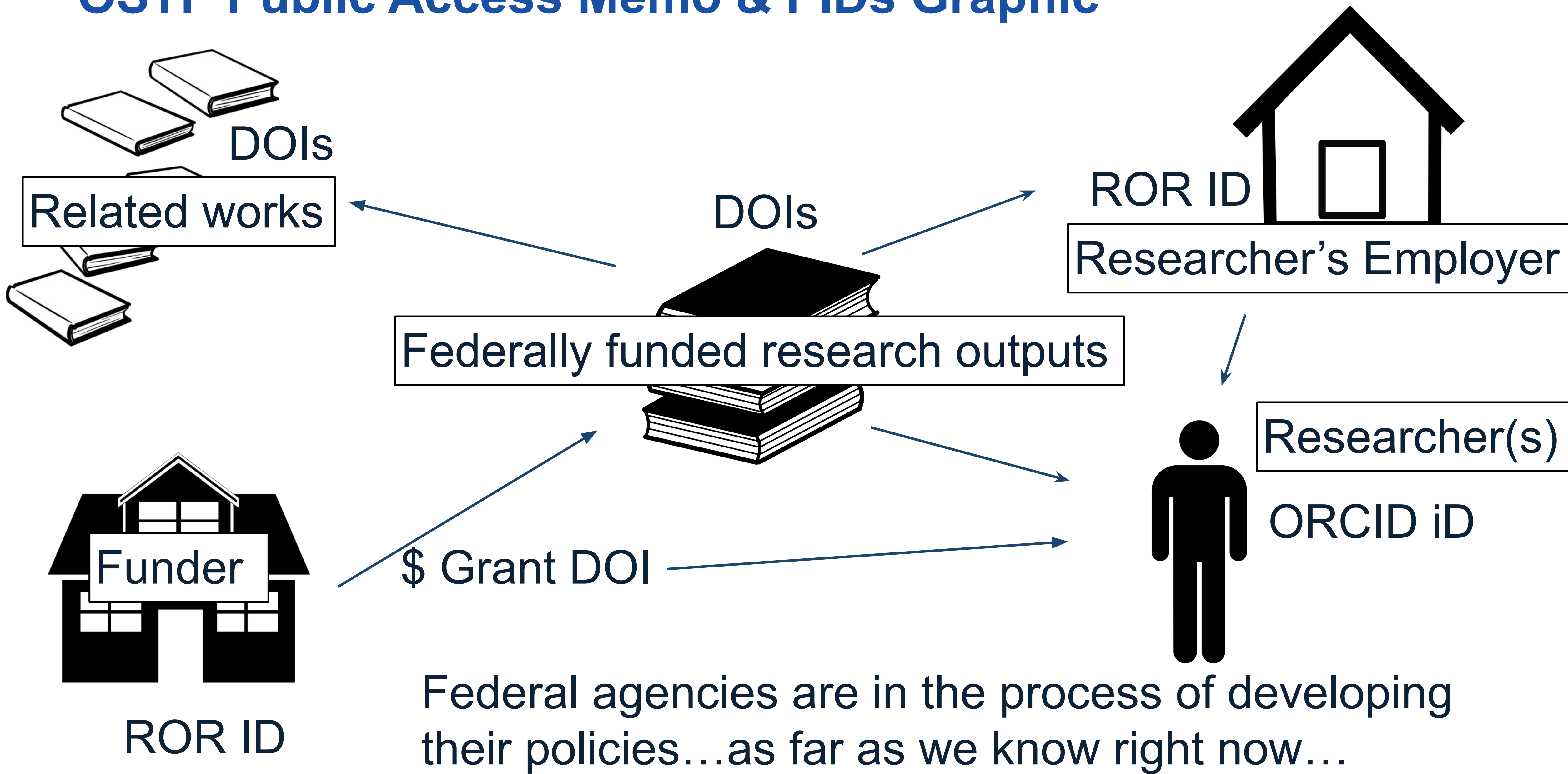
August 25, 2022

MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM: Dr. Alondra Nelson 
Deputy Assistant to the President and Deputy Director for Science and Society
Performing the Duties of Director
Office of Science and Technology Policy (OSTP)

SUBJECT: Ensuring Free, Immediate, and Equitable Access to Federally Funded Research

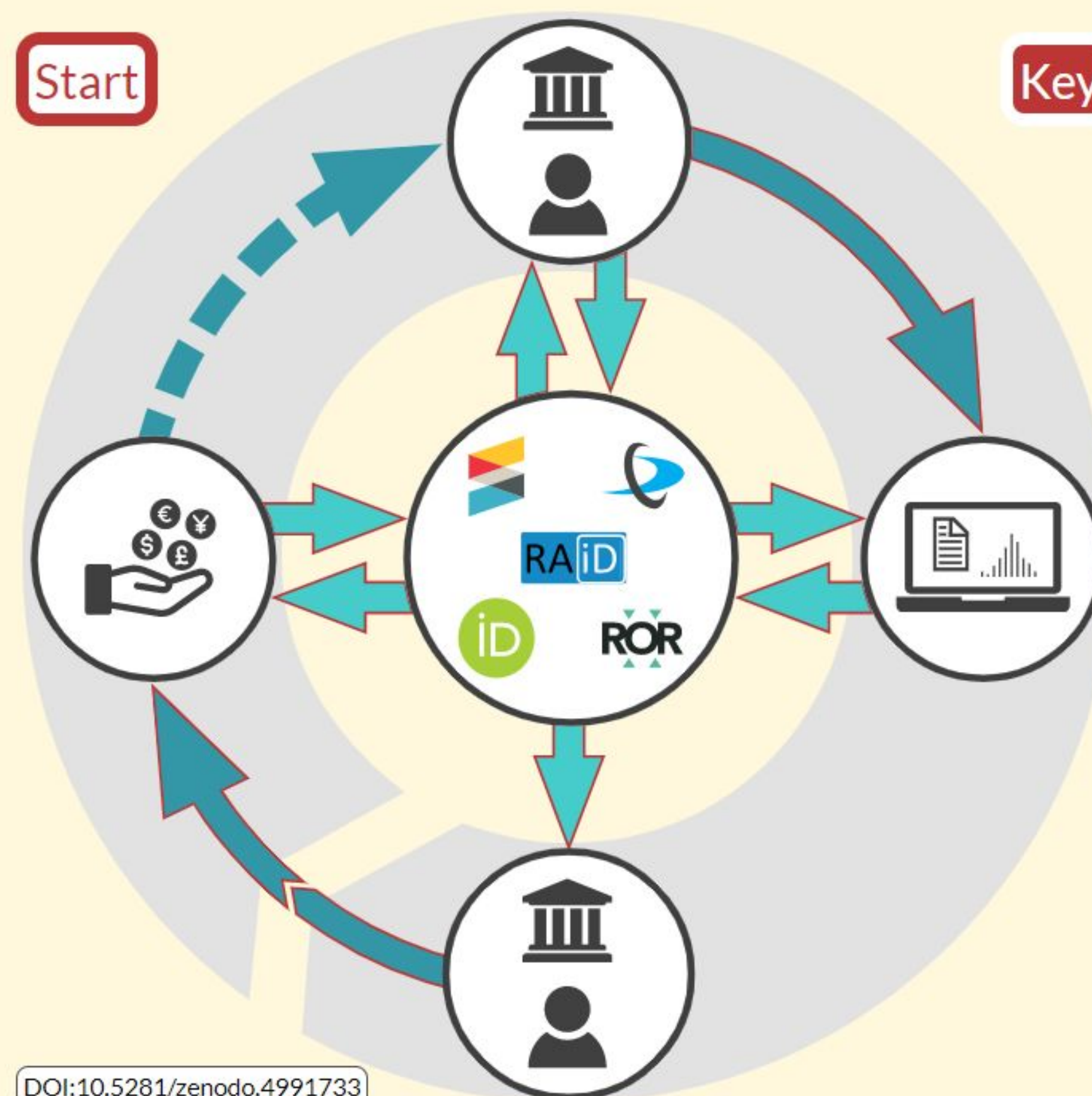
OSTP Public Access Memo & PIDs Graphic



PIDs in the Research Lifecycle

MOREBRAIN

The PID-optimised research cycle



Actors and entities

- = Funding organisations
- = Research-performing organisations
- = Research contributors
- = Research output platforms/publishers (articles, data, algorithms, etc)

Priority PIDs and registries

- = Crossref
- = Datacite
- = ORCID
- = Digital Object Identifier (DOI)
- = Research Activity Identifier (RAiD)
- = Research Organisation Registry (ROR)

DOI:10.5281/zenodo.4991733

Thank you!

Sheila.Rabun@Lyrasis.org

What can you do to support PIDs and FAIR?

- ❖ Be aware of PIDs
- ❖ Consider the role of your organization in the ecosystem
- ❖ Join some communication channels to stay in the loop:
 - PID Forum: <https://pidforum.org/>
 - ORCID US Community listserv: <https://forms.gle/LZWd8S5Uemmn93wi9>
 - ROR Community forum:
<https://groups.google.com/a/ror.org/g/ror-community>
 - DataCite newsletter: <https://datacite.org/datacite-newsletter/>
 - Crossref forum: <https://community.crossref.org/>
 - US RAiD listserv: <https://forms.gle/yQNNPiMdav3G5L2D8>
- ❖ If you're interested in learning more:
 - Resource Library (PIDs): <https://orcidus.lyrasis.org/tag/pids/>
 - Contact me: Sheila.Rabun@Lyrasis.org