

DataCite



An introduction to PIDs & DataCite DOIs for the Middle East consortium



دانشگاه کردستان
University of Kurdistan
زانکۆی کوردستان

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About DataCite

Global non-profit membership organization working with 2200+ repositories around the world to provide DOIs for data and other research outputs.

<https://datacite.org/>

Connecting research, identifying knowledge

An introduction to PIDs

Why are we talking about this?



DOIs (digital object identifiers) and other **PIDs** are an important part of the digital scholarly infrastructure that includes ***all types of resources/outputs*** and ***all disciplines.***

Why are we talking about this?

PIDs like DOIs, ORCID iDs and ROR IDs increase **discovery, access, citation, reuse, and recognition** of resources

VALUE

PIDs

What is a persistent identifier (PID)?

<https://doi.org/10.5061/dryad.708gr>



<https://datadryad.org/stash/dataset/doi:10.5061/dryad.708gr>

Special URL that's registered in a known system, like DOI, ORCID or ROR

Always points to the same resource (or a metadata representation)

DOIs for scholarly outputs
<https://doi.org/10.5281/zenodo.3630248>



doi

ORCID iDs for people
<https://orcid.org/0000-0001-6622-4910>



iD

ROR IDs for research organizations
<https://ror.org/01y2jtd41>



ROR

PIDs are for everything!

All disciplines, all resource types

PIDs for places, people, and things

PIDs for people (researchers)
include ISNIs and ORCID iDs



PIDs for places (research organizations)
including ROR





PIDs for things (research outputs) include DOIs,
handles, IGSNs, ARKs, and more





PIDs disambiguate

Robin Dasler

ORCID iD
<https://orcid.org/0000-0002-4695-7874>

 [Print view](#) 


Also known as 
RH Dasler, RL Dasler, RL Howard,
Robin Howard

Other IDs 
[ResearcherID: N-9035-2013](#)

References

[Abd Ellah and Abouelmagd, 2016](#) N.H. Abd Ellah, S.A. Abouelmagd
Surface functionalization of polymeric nanoparticles for tumor drug delivery: approaches and challenges
Expert Opin. Drug Deliv., 1–14 (2016),
[10.1080/17425247.2016.1213238](https://doi.org/10.1080/17425247.2016.1213238)
[Google Scholar](#)

[Abouelmagd et al., 2016](#) S.A. Abouelmagd, F. Meng, B.-K. Kim, H. Hyun, Y. Yeo
Tannic acid-mediated surface functionalization of polymeric nanoparticles
ACS Biomater. Sci. Eng. (2016), p. 6b00497,
[10.1021/acsbiomaterials.6b004](https://doi.org/10.1021/acsbiomaterials.6b004)
[Google Scholar](#)

[Ahmed et al., 2016](#) S. Ahmed, S. Annu, S.S. Yudha
Biosynthesis of gold nanoparticles: a green approach
J. Photochem. Photobiol. B: Biol., 161 (2016), pp. 141-153,
[10.1016/j.jphotobiol.2016.04.034](https://doi.org/10.1016/j.jphotobiol.2016.04.034)
[Article](#)  [Download PDF](#) [View Record in Scopus](#)
[Google Scholar](#)

[Akhavan et al., 2011](#) O. Akhavan, R. Azimirad, S. Safa, E. Hasani

PIDs make data FAIR

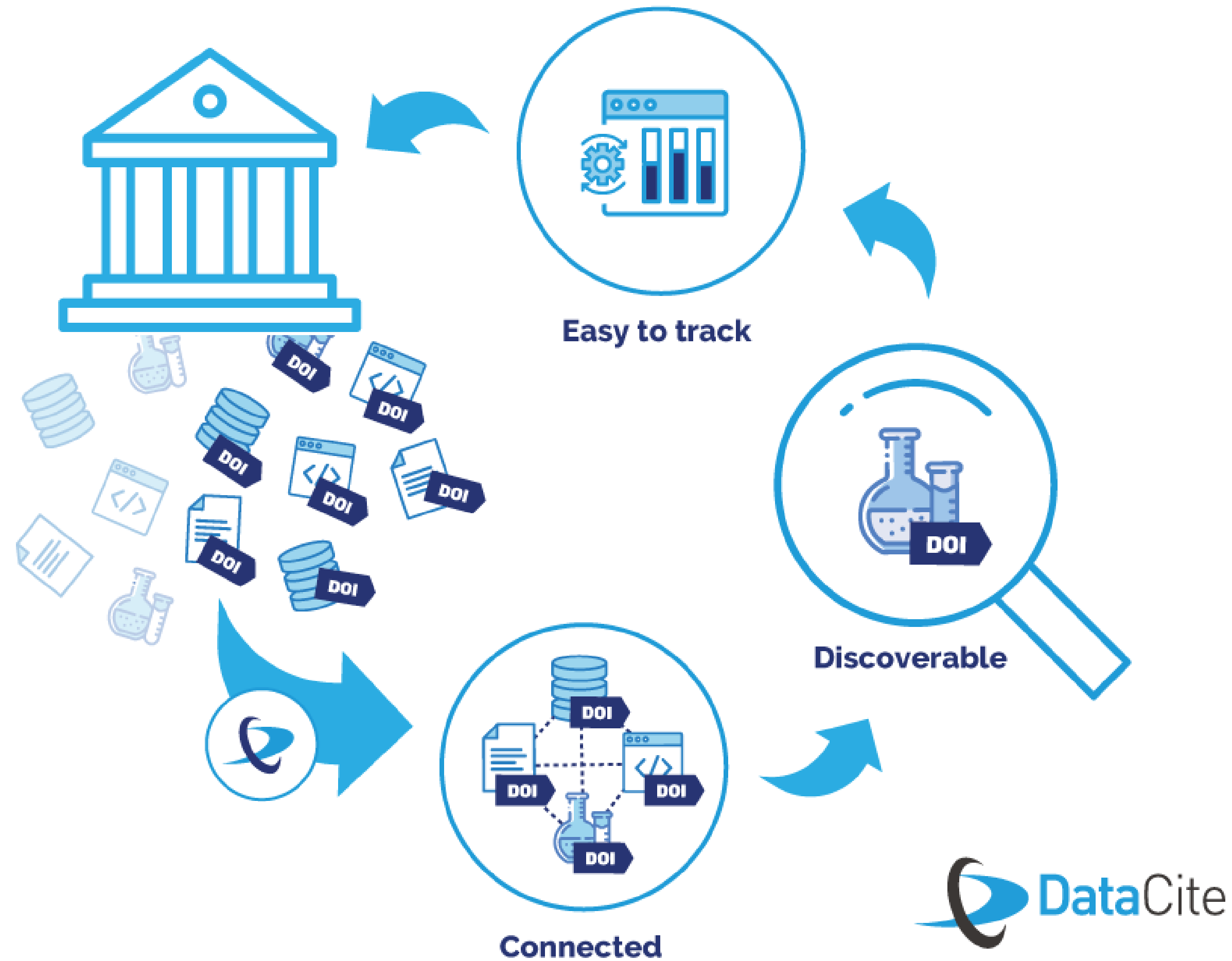


Data should be Findable	<p>F1. (meta)data are assigned a globally unique and persistent identifier (DOI)</p> <p>F2. data are described with rich metadata</p> <p>F3. metadata clearly and explicitly include the identifier of the data it describes</p> <p>F4. (meta)data are registered or indexed in a searchable resource</p>
Data should be Accessible	<p>A1. (meta)data are retrievable by their identifier using a standardized communications protocol</p> <p>A1.1 the protocol is open, free, and universally implementable</p> <p>A1.2 the protocol allows for an authentication and authorization procedure, where necessary</p> <p>A2. metadata are accessible, even when the data are no longer available</p>
Data should be Interoperable	<p>I1. (meta)data use a formal, accessible, shared, and broadly applicable language for knowledge representation.</p> <p>I2. (meta)data use vocabularies that follow FAIR principles</p> <p>I3. (meta)data include qualified references to other (meta)data</p>
Data should be Reusable	<p>R1. meta(data) are richly described with a plurality of accurate and relevant attributes</p> <p>R1.1. (meta)data are released with a clear and accessible data usage license</p> <p>R1.2. (meta)data are associated with detailed provenance</p> <p>R1.3. (meta)data meet domain-relevant community standards</p>

DataCite

DOIs for research outputs

What we do



Types of research outputs

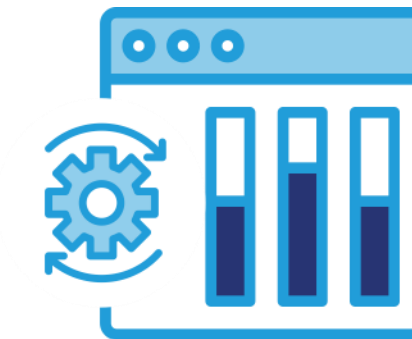
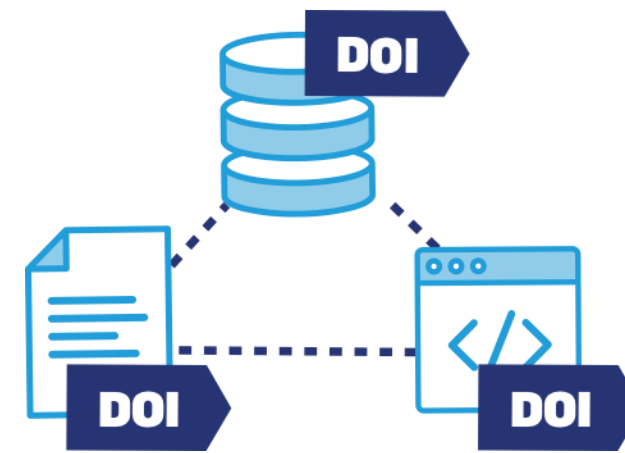


DATA CITE DOIs ARE SUITABLE FOR A WIDE
RANGE OF RESEARCH OUTPUTS

**1. Research datasets and collections, associated workflows,
software, images, and models**

**2. Grey literature such as theses, dissertations, reports, unpublished
conference papers, newsletters, preprint journal articles, technical
standards, and specifications for which the institutional repository
is the primary publication point.**

Our value



Registering DataCite DOIs makes your research outputs discoverable.

- A DOI makes your research outputs uniquely identifiable.
- Metadata that you register with DataCite is in a central location, harvestable by anyone.
- Metadata for our Members' research outputs appear in other search engines.

DataCite services make it easy to follow best practices.

- We make research data management easy: you register your first DOI in less than 1 minute.
- DataCite DOIs and metadata help you make your research FAIR.
- We connect you to the DataCite Member community, which is full of passionate people who share experience and continue to support best practice.
- Our metadata schema is extensive and has been adopted by other PID service providers globally.

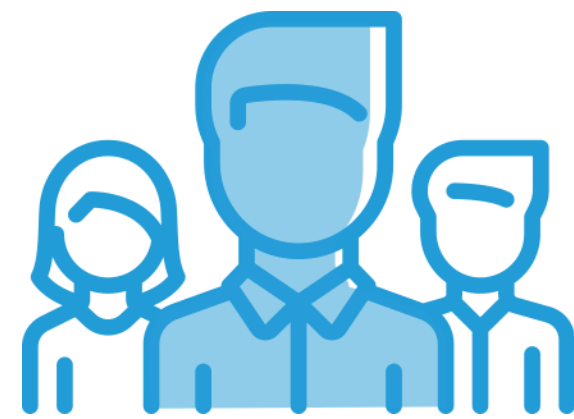
DataCite services help you track and report on your research.

- A DOI enables easy tracking of your research outputs through simple user interfaces.
- DataCite services make institutional reporting simple.
- DataCite services support data citation and usage analytics

Our community



2200+
Repositories



245
Members



48
Countries



25m+
DOIs

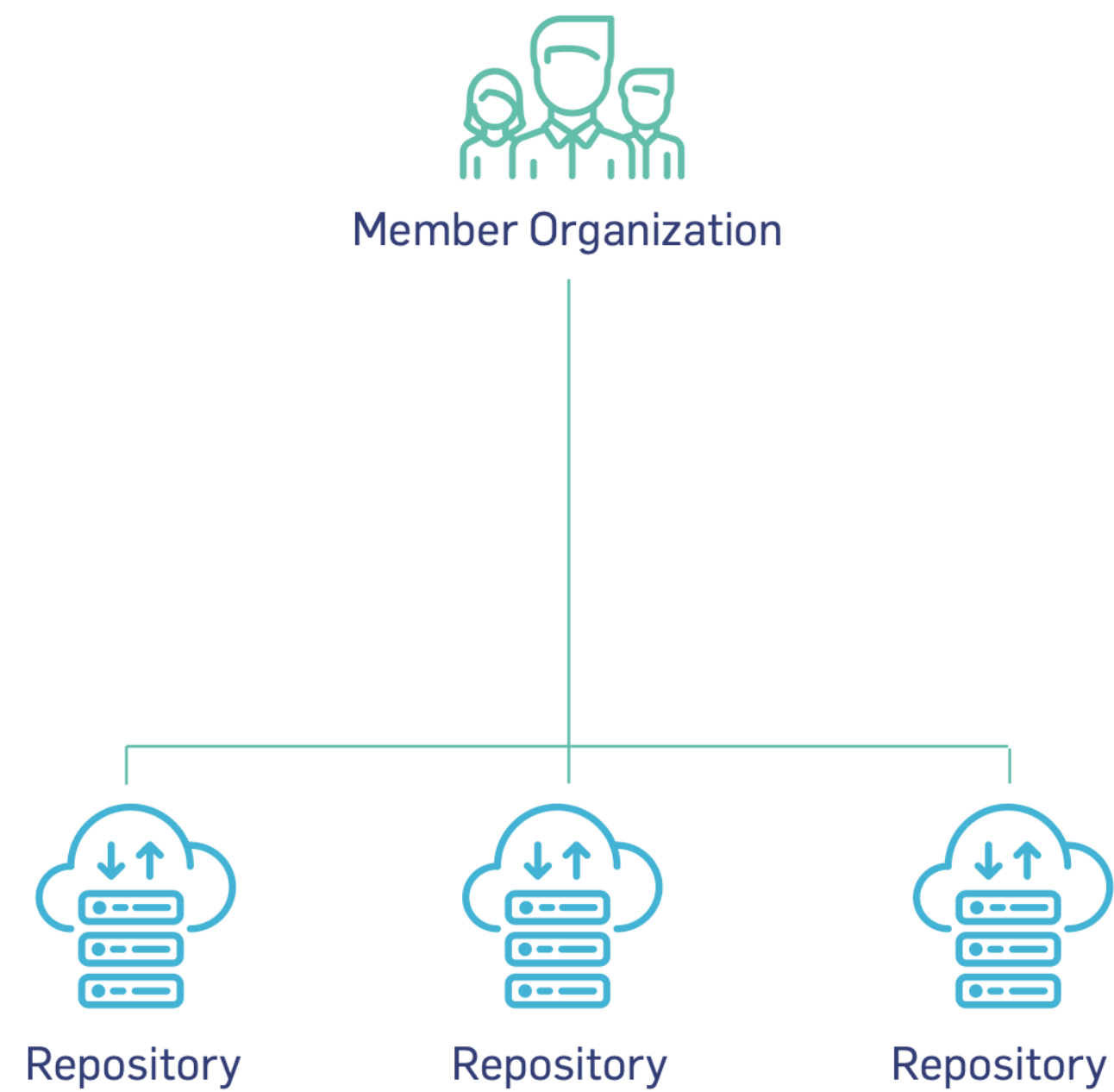


1000+
Organizations

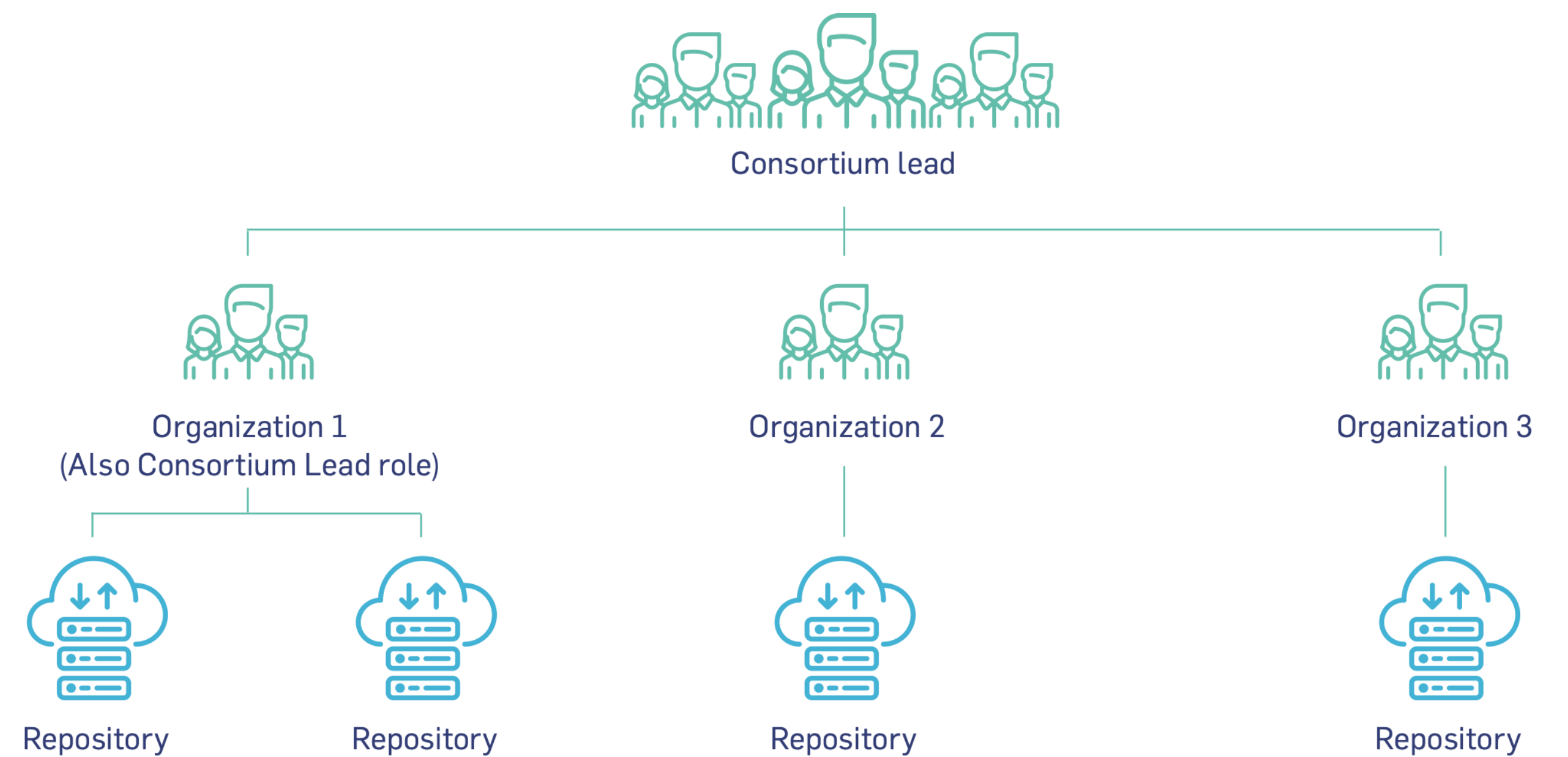
DataCite Membership



Direct Membership



Consortium Membership



Create and Manage DOIs



DataCite membership allows you to create and manage DOIs for all of your repositories. You can do this through:

- Our primary REST API that supports JSON and enables automated DOI registration
- Our manual interface that enables you to register DOIs in less than a minute.
- Registered DataCite Service providers that provide a platform where you can register DOIs.



Current service providers



UNIVERSITY
OF LONDON



DSpace



Public roadmap



About us ▾

Services ▾

Resources ▾

Community ▾

Become a member



DATA CITE - ROADMAP



DataCite Public Roadmap

+ Submit idea

UNDER CONSIDERATION

PLANNED

IN PROGRESS

LAUNCHED

Fabrica

DOI exporting from DOI Fabrica

Export lists of your DOIs from DOI Fabrica so that you can use them in other applications or for internal curation projects.

Authentication by individuals

Right now you can only sign into DataCite services with a single organizational account. We're considering allowing login by individuals, and organizations could manage the groups of people who have permissions for that

Batch update for DOIs

Enable the ability to update DOIs in a batch via Fabrica.

Examples might be:

- bulk assign DOIs to a list of uploaded metadata

Batch transfer for DOIs

Enable the ability to transfer DOIs between clients in a batch via Fabrica, based on search results.

Join the PIDforum



<https://www.pidforum.org/>

the PID Forum

[Sign Up](#) [Log In](#)

all categories ▾ **Categories** Latest Top

Category	Topics
General Topics that don't need a category, or don't fit into any other existing category.	22
PID Best Practices A category to bring together information (papers, guidelines etc) and ideas on PID best practices for different communities and disciplines.	16
PID News & Blogs Share interesting PID news & blogs here	35
PID Graph Persistent identifiers and associated metadata describe resources such as datasets, software, publications, people, research organizations, funders, and grants. An important part of this metadata is the description of connections between these resources. Together these resources and their connection...	32
PID Services Post anything related to PID Services here.	4
PID-related events	40

Latest
Welcome to the PID Forum!
Where can I find an overview of all active PIDs? <small>■ Questions</small>
Share your PID slides! <small>■ PIDapalooza</small>
Survey on PIDs in academic assessment systems
Is there a PID that is designed for or robustly supports metadata for music scores/manuscripts? <small>■ Questions</small>
Organizational Identifier Adoption in DataCite Metadata <small>■ PID News & Blogs datacite, ror</small>

- Share best practices
- Hear about events
- Ask questions
- Engage in PID chatter
- And more!

DataCite Connected PIDs

Relations in the metadata



Organizations that register DOIs submit metadata following a metadata schema

<i>Mandatory</i>	<i>Recommended</i>	<i>Optional</i>
Identifier	Subject	Language
Creator (with ORCID)	Contributor	Alternate ID
Title	Date	Size
Publisher	Related identifier	Format
Publication year	Description	Version
Resource Type	GeoLocation	Rights

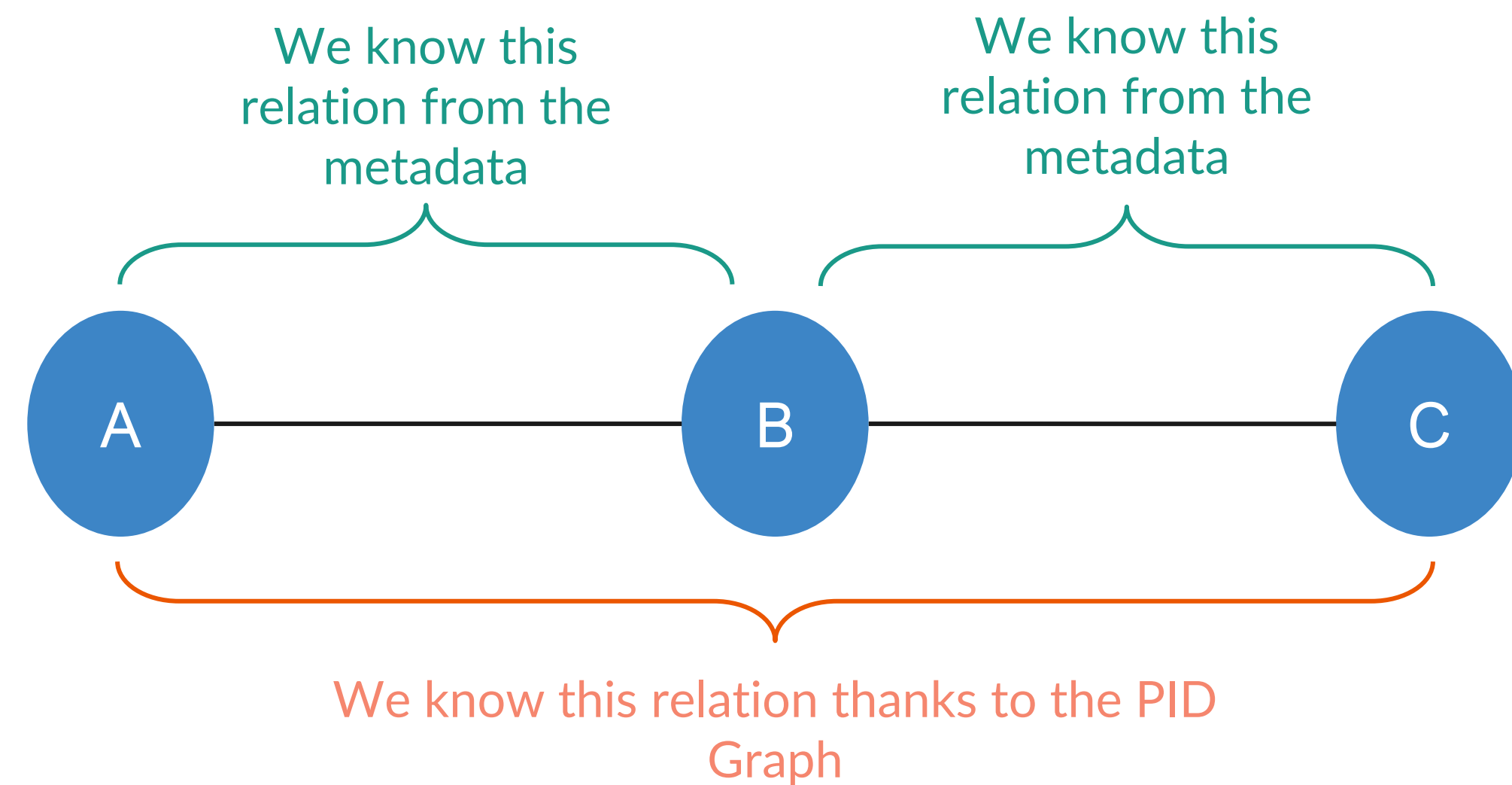
<https://schema.datacite.org>

Current version 4.4

PID Graph

The PID Graph is a concept from one of our partner projects, FREYA (<https://www.project-freya.eu>).

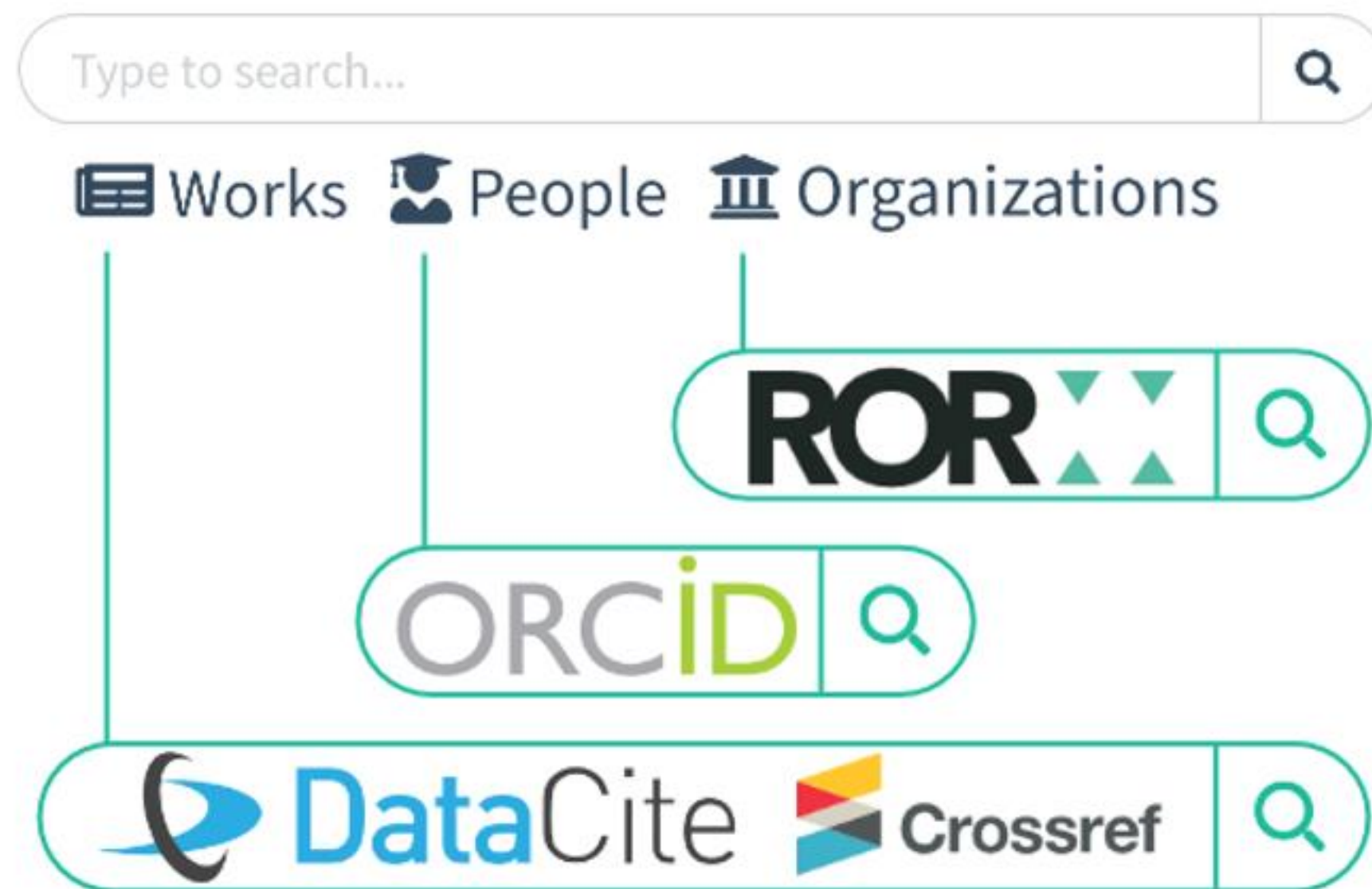
The basic idea is to link PIDs for different entities together via relations in their metadata to enable the discovery of connections at least two steps away.



Find and Connect Research

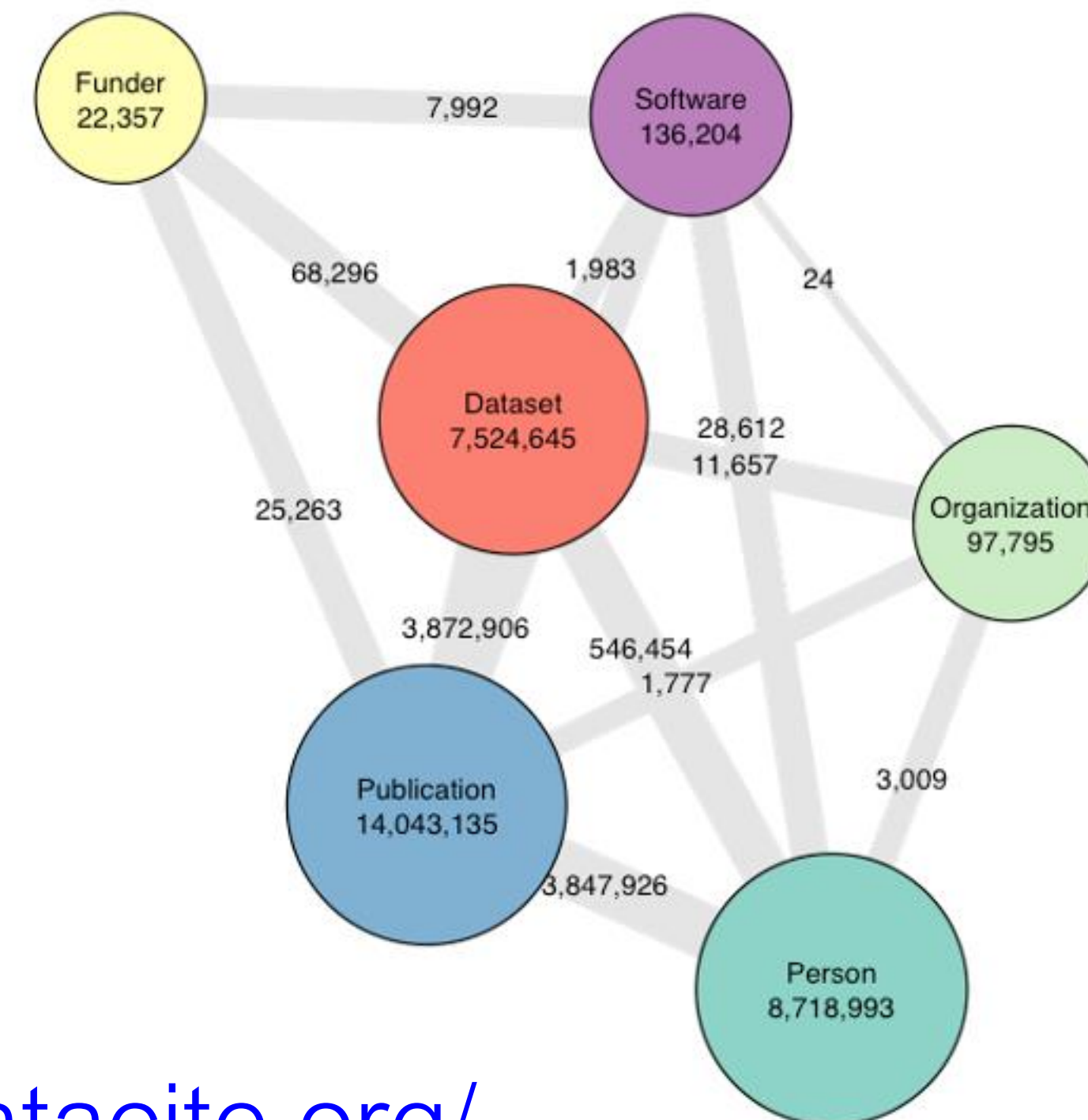


Find Research
with DataCite Commons



PID Graph

Number of nodes and connections (May 2020)



<https://commons.datacite.org/>

Connecting outputs to researchers

DataCite Commons

Type to search... 

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<https://orcid.org/0000-0003-2926-8353>

Shelley Stall

Shelley Stall is the Senior Director for the American Geophysical Union's Data Leadership Program. She works with AGU's members, their organizations, and the broader research community to improve data and digital object practices with the ultimate goal of elevating how research data is managed and valued. Better data management results in better science. Shelley's diverse experience working as a program and project manager, software architect, database architect, performance and optimization analyst, data product provider, and data integration architect for international communities, both nonprofit and commercial, provides her with a core capability to guide development of practical and sustainable data policies and practices ready for adoption and adapting by the broad research community. Shelley's recent work includes the Enabling FAIR Data project (<https://copdess.org/enabling-fair-data-project/>) engaging over 300 stakeholders in the Earth, space, and environmental sciences to make data open and FAIR targeting the publishing and repository communities to change practices by no longer archiving data in the supplemental information of a paper but instead depositing the data supporting the research into a trusted repository where it can be discovered, managed, and preserved.

Links

[AGU Data Leadership](#)

Other Profiles

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[Impactstory](#)

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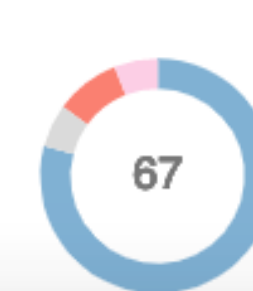
<input type="checkbox"/> 2020	39
<input type="checkbox"/> 2019	28

Work Type

Publication Year



Work Type



License



Supporting recognition

Creators

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University of Tokyo

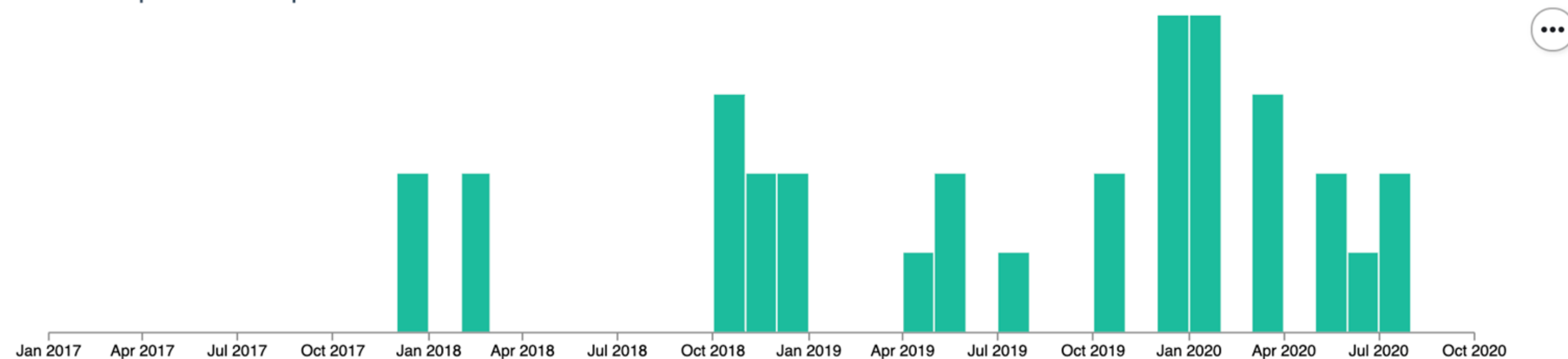
K Michiharu

Kyoto University

99 Views

16 Views

99 views reported since publication in 2012.



Showing the effects of funding



DataCite Commons

fundingReferences.awardNumber:777523

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Crossref Funder ID [10.13039/501100000887](#)

Wikidata [Q8880](#)

Wikidata [Q20855594](#)

Geolocation

50° 50' 37" N, 4° 22' 58" W

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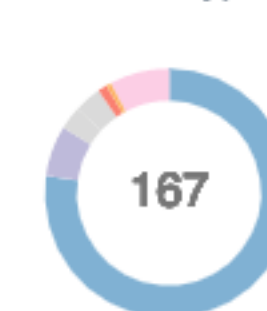
Publication Year

<input type="checkbox"/> 2021	14
<input type="checkbox"/> 2020	88
<input type="checkbox"/> 2019	62
<input type="checkbox"/> 2018	2
<input type="checkbox"/> 2005	1

Work Type



Work Type



License



Surfacing data citation and usage

Data from: Impact of negative frequency-dependent selection on mating pattern and genetic structure: a comparative analysis of the S-locus and nuclear SSR loci in *Prunus lannesiana* var. *speciosa*

Kato Shuri, Teruyoshi Nagamitsu, Hiroyoshi Iwata, Yoshihiko Tsumura, Yuzuru Mukai, K Michiharu, K Saika & K Junko

Version 1 of Dataset published 2012 in [DRYAD](#)

Mating processes of local demes and spatial genetic structure of island populations at the self-incompatibility (S-) locus under negative frequency-dependent selection (NFDS) were evaluated in *Prunus lannesiana* var. *speciosa* in comparison with nuclear simple sequence repeat (SSR) loci that seemed to be evolutionarily neutral. Our observations of local mating patterns indicated that male-female pair fecundity was influenced by not only self-incompatibility, but also various factors such as kinship, pollen production and flowering synchrony. In spite of the mating bias caused by these factors, the NFDS effect on changes in allele frequencies from potential mates to mating pollen was detected at the S-locus but not at the SSR loci although the changes from adult to juvenile cohorts were not apparent at any loci. Genetic differentiation and isolation-by-distance over various spatial scales were smaller at the S-locus than at the SSR loci, as expected under the NFDS. All allele sharing distributions among the populations also had a unimodal pattern at the S-locus, indicating the NFDS effect except for alleles unique to individual populations probably due to isolation among islands, although this pattern was not exhibited by the SSR loci. Our results suggest that the NFDS at the S-locus has an impact on both the mating patterns and the genetic structure in the *P. lannesiana* populations studied.

DOI registered April 17, 2012 via DataCite.



 1 Citation  99 Views  16 Downloads

Dataset

English

 <https://doi.org/10.5061/dryad.7c425>



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pidforum.org



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