



We don't need copies of metadata
everywhere if we have PIDs and links

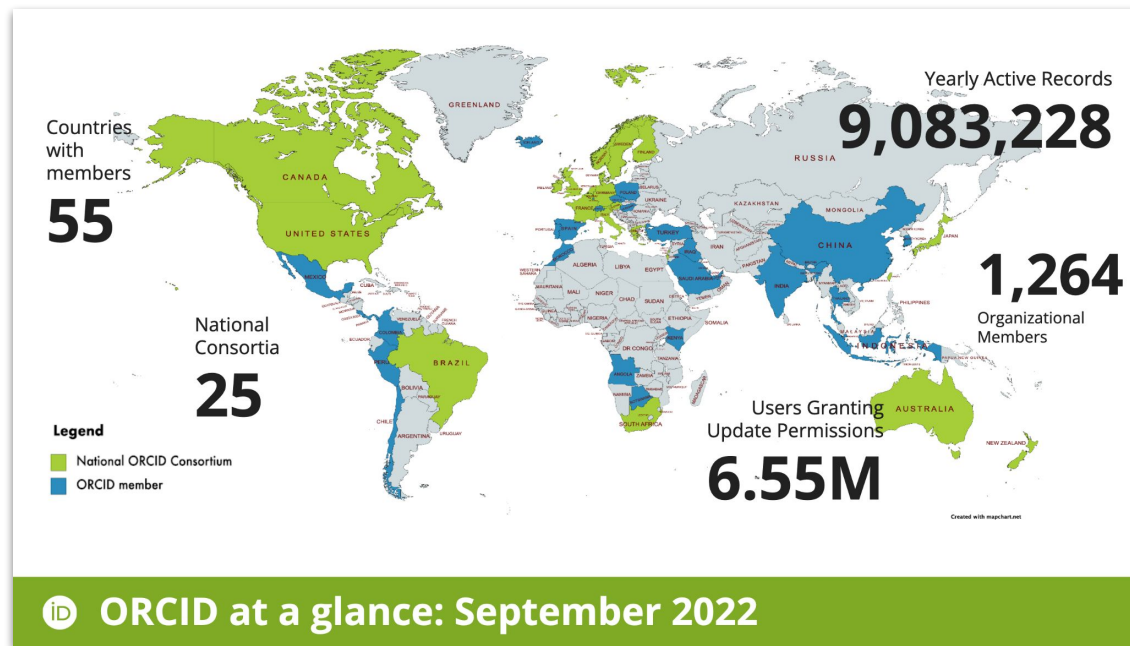
CHORUS Forum: Improving Scholarly Publishing Metadata
29 September 2022



Chris Shillum, *Executive Director, ORCID*

A Few ORCID Facts

- Independent not-for-profit open to participation by all
- Registry launched in 2012
- Guided by our [values and founding principles](#)
- [Committed to making FAIR Open data available](#) via our Public API and Annual Public Data File



ORCID is a people-centric PID Infrastructure provider — we offer **three main services**



1. The ORCID iD: a unique, persistent identifier (PID) that uniquely identifies a researcher, free of charge to them

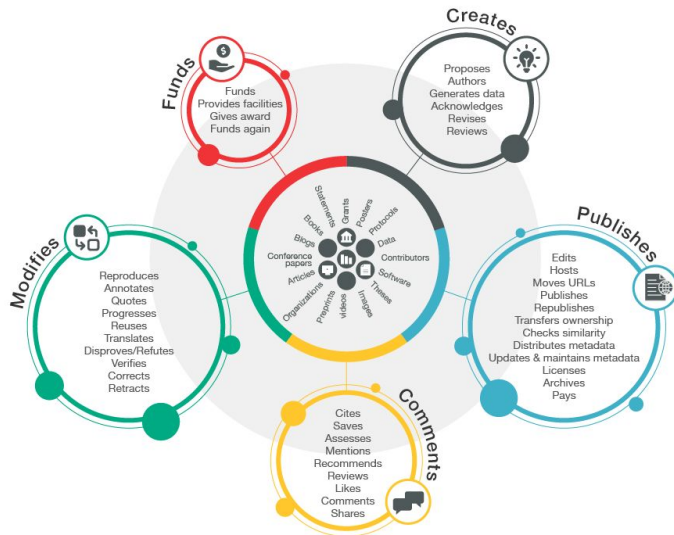


2. An ORCID record/digital cv connected to the ORCID iD, that can include employment, education and research output relationships



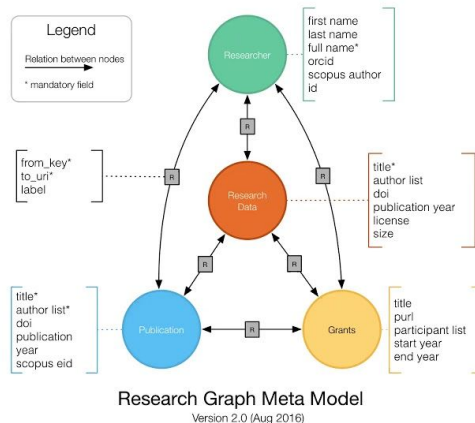
3. A set of Application Programming Interfaces (APIs), as well as the services and support of communities of practice that enable interoperability between an ORCID record and member organizations

Each PID Infrastructure provider has their own version of this slide (with their own focus at the centre!)

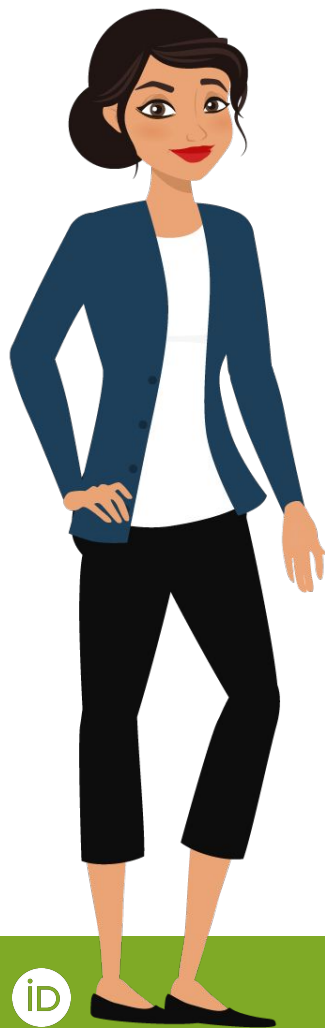


Crossref Research Nexus

The ResearchGraph data model is a good starting point for what resources should be included



Datacite PID Graph



[https://orcid.org/
0000-0001-5727-2427](https://orcid.org/0000-0001-5727-2427)

Emails >

s.garcia@orcid.org

Websites & social links >

Faculty profile webpage
@sofiamhg

Other IDs >

Profile system identifier: A-123456
ResearcherID: L-8716-2018
eScientist: 0000-0001-5727-2427

Countries >

United States

Is this you? [Sign in to start editing](#)

Printable version

Published name

Sofia Maria Hernandez Garcia

Name
Sofia Garcia

Also known as
S. M. Garcia, Sofia Maria Garcia >

Biography

Sofia Maria Hernandez Garcia is used for testing and demonstrating ORCID records.

Activities

[Expand all](#)

> Employment (2)

Sort

> Education and qualifications (4)

Sort

> Invited positions and distinctions (3)

Sort

> Membership and service (2)

Sort

> Funding (1)

Sort

> Research resources (2)

Sort

> Works (6)

Sort

> Peer review (2)

Sort



<https://orcid.org/0000-0001-5727-2427>

Person PID

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Person-centric links

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> Funding (1)

> Research resources (2)

> Works (6)

> Peer review (2)

Person
Metadata





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Organization
PID

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Activities

[Collapse all](#)

▼ Employment (2)

Sort

New Arizona State University: Sedona, Arizona, US

2015-09 to present | Associate Professor (Department of Geography)
Employment

[Show more detail](#)

Source: Sofia Maria Hernandez Garcia

ORCID: Bethesda, MD, US

2014-05-14 to 2019-09-25 | Engagement Lead
Employment

Organization
Metadata

Organization identifiers

ROR: <https://ror.org/04fa4r544>
ORCID: Bethesda, Maryland, US
<http://orcid.org/>

Other organization identifiers provided by ROR

GRID: [grid.455335.1](#) (preferred)
ISNI: [0000000446638501](#)
WIKIDATA: [Q19861084](#)
WIKIPEDIA_URL: [https://en.wikipedia.org/wiki/](https://en.wikipedia.org/wiki/ORCID)[ORCID](#) (preferred)

Added
2022-09-28

Last modified
2022-09-28

Organization-centric
links

Source: ORCID via ORCID Member Portal



Work Metadata

[Show less detail](#)

Work PIDs

URL

Citation (bibtex)

Description

Added

2021-07-06

Last modified

2021-07-06

Source: Sofia Maria Hernandez Garcia

Work-centric links

Procedia Computer Science

2014 | Journal article

[Show more detail](#)DOI: [10.1016/j.procs.2014.06.045](https://doi.org/10.1016/j.procs.2014.06.045)Part of ISSN: [1877-0509](#)

CONTRIBUTORS: Laure Haak; David Baker, david.baker@utoronto.ca; Jan Hoellrigel

Source: Sofia Maria Hernandez Garcia via Crossref Metadata Search ★ Preference

ORCID Annual Public Data File, 2013

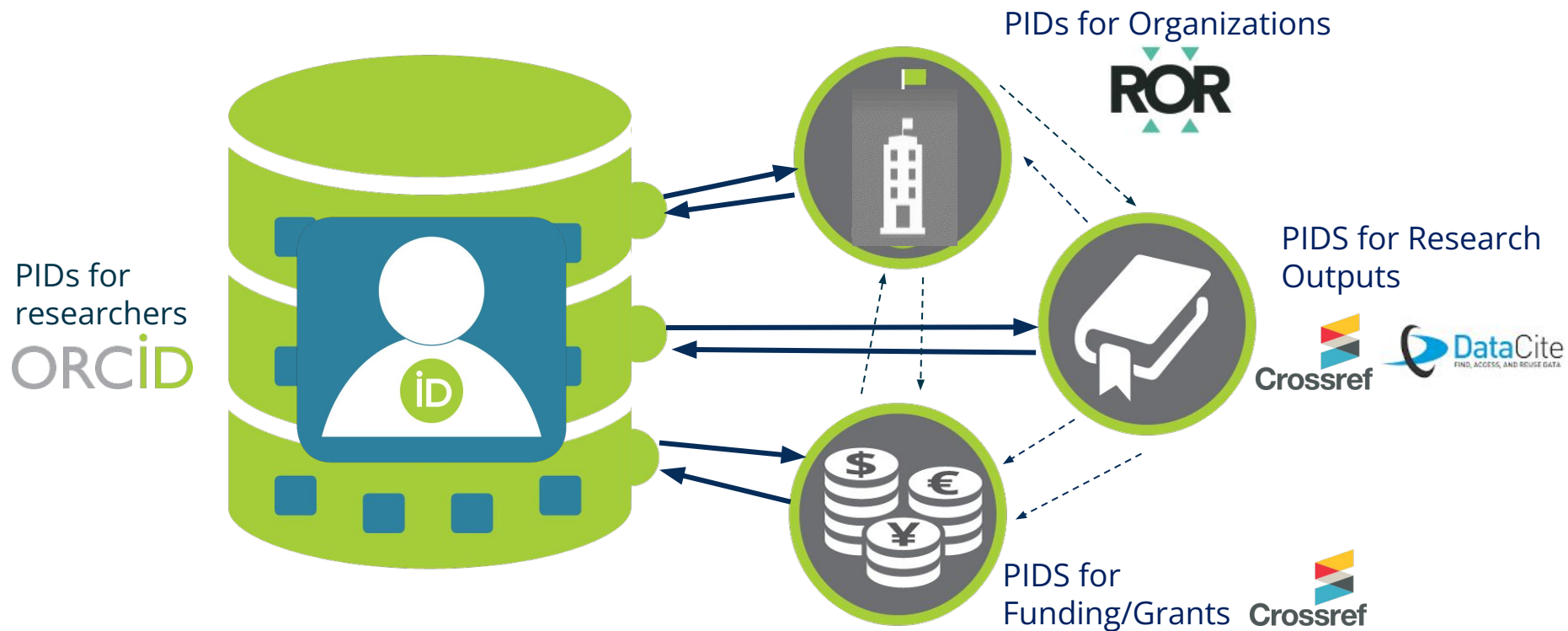
2013 | Data set

[Show more detail](#)





DOI: 10.14454/07243.2013.001

Source: DataCite

We associate researchers with institutions and research outputs through via links to other PIDS



Each PID providers stores metadata about their primary object AND metadata about linked objects

				
Primary Object	People	Works (Publications)	Works (Datasets)	Organizations
PID	ORCID ID	DOI	DOI	ROR ID
Primary Metadata (about the object)	Name, Alternate Names, Email	Title, Source, Publishers, Abstract, Pub Date, References	Title, Publisher, Pub Year, Resource Type	Name, Aliases, Address, Website
Secondary Metadata (about linked objects)	Publication Citations, Affiliation Names, Funding Award Titles	Author Names, Affiliation Names	Contributor Names, Affiliations Names	

PID Providers should focus on holding definitive, authoritative metadata for their primary objects

Metadata about secondary (linked) objects can be cached for convenience, but should be regenerated from authoritative sources from time to time using PID links and APIs

We can improve metadata quality by:

- **Ensuring that PIDS are assigned to research objects and that the metadata deposited with the primary PID provider for the object is complete and accurate:**
 - Definitive researcher names, email addresses at ORCID
 - Definitive titles, source titles, pub dates at Crossref and Datacite
 - Definitive org names at ROR
- **Ensuring that links between PIDs are accurate and consistent**
- **Being thoughtful about where to store authoritative metadata about an object, and when to cache rather than duplicate copies of that metadata using PIDs and their respective APIs** (In database terms thinking about metadata binding and denormalization)

PID Infrastructure providers are starting to work together to make it easier to access consistent metadata across our services no matter your preferred point of access