ORCID: More Connections, Better Dissemination

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We'll briefly cover a few things:

- Re/introduction to ORCID

- ORCID in supporting the FAIR Principles

  - Research Contributions

  - Research Resources

  - Research Outputs
- Discussion and feedback

Re/introduction to ORCID

A Few ORCID Facts

- Independent not-for-profit open to participation by all

- Registry launched in 2012

- Sustained by fees from our member organizations

- Guided by our values and founding principles

- Community-governed by a Board of Directors elected by our members

ORCID's Mission

ORCID's mission is to **enable transparent** and **trustworthy connections** between **researchers**, their **contributions**, and their **affiliations** by providing a **unique, persistent identifier** for **individuals** to use as they engage in **research, scholarship, and innovation activities**.

iD

ORCID, which stands for Open Researcher and Contributor Identifier, provides three main services

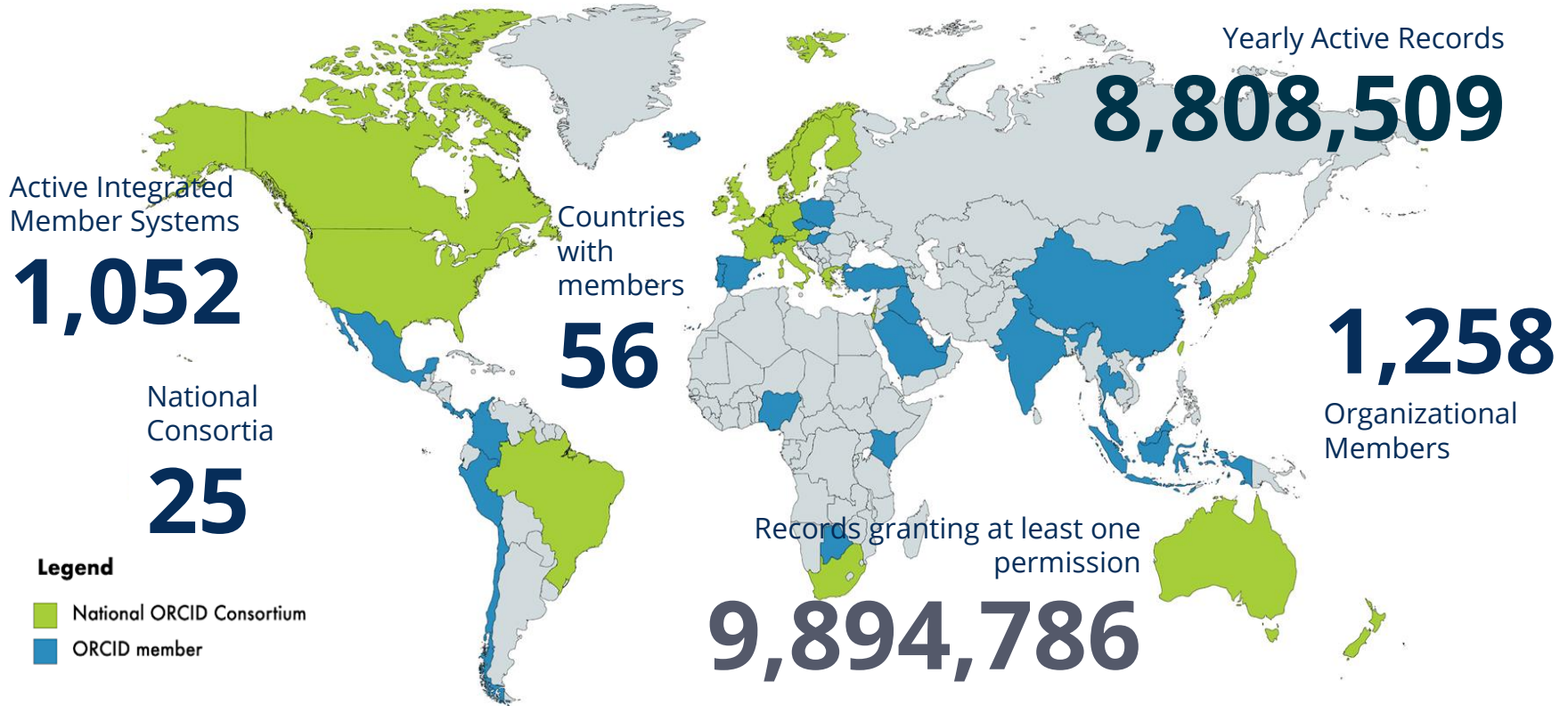1. The ORCID iD: a unique, persistent identifier (PIDs)free of charge to researchers

2. A set of Application Programming Interfaces (APIs), services and support of communities of practice enabling interoperability between an ORCID record and member organizations. Researchers can share ORCID iD with organizations that can exchange information in the research workflow

3. A place to store and share the resulting connections between iDs and research activities and affiliations

We have reached a critical mass of global participation

Yearly Active Records
8,808,509

Active Integrated Member Systems
1,052

Countries with members
56

National Consortia
25

1,258
Organizational Members

Records granting at least one permission
9,894,786

Legend

National ORCID Consortium

ORCID member

ORCID works with different stakeholders

ORCiD in the APAC Community

- 163 Members
    - 117 Consortia members
    - 46 Direct Members
- Four Consortia in Australia, Japan, New Zealand and Taiwan
- 171 systems connecting with ORCID (adopting ORCID member API)
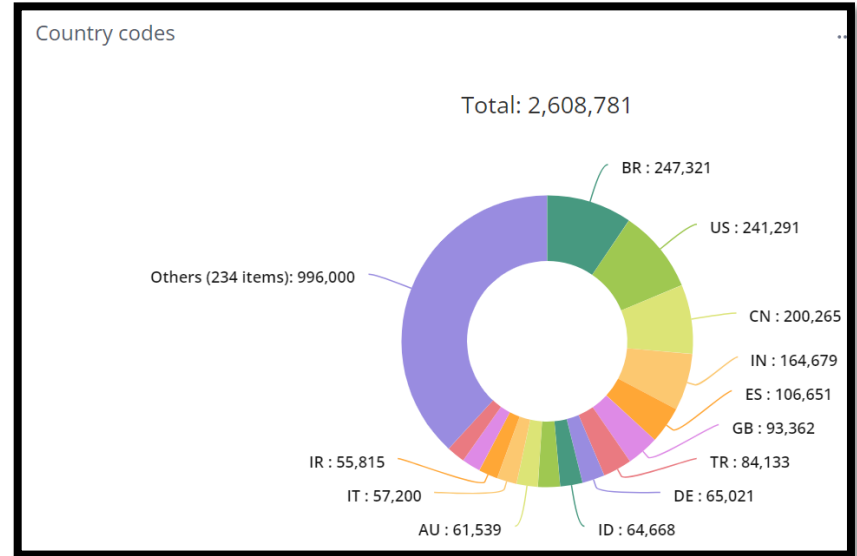- Asia accounts for the second largest traffic to the ORCID Registry
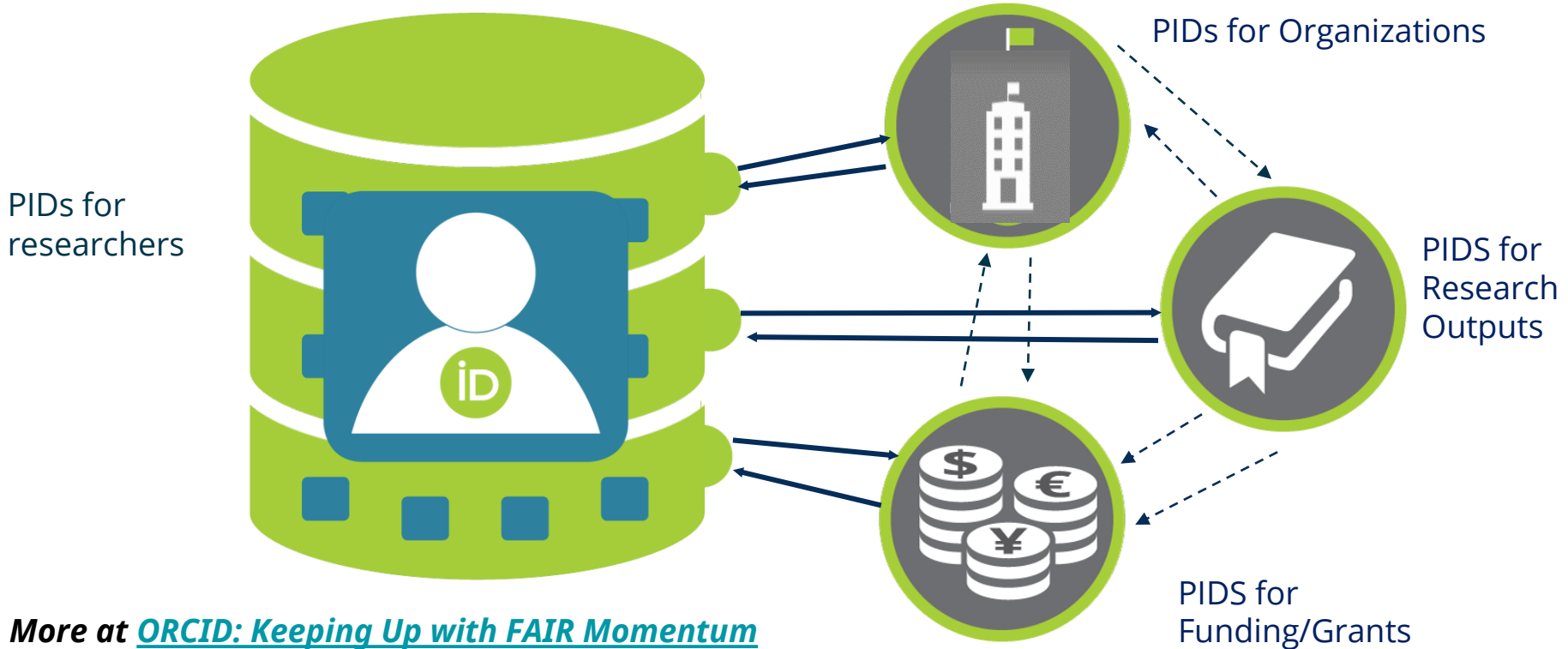
Interesting Information

- The Top 10 Family names are all from Asia

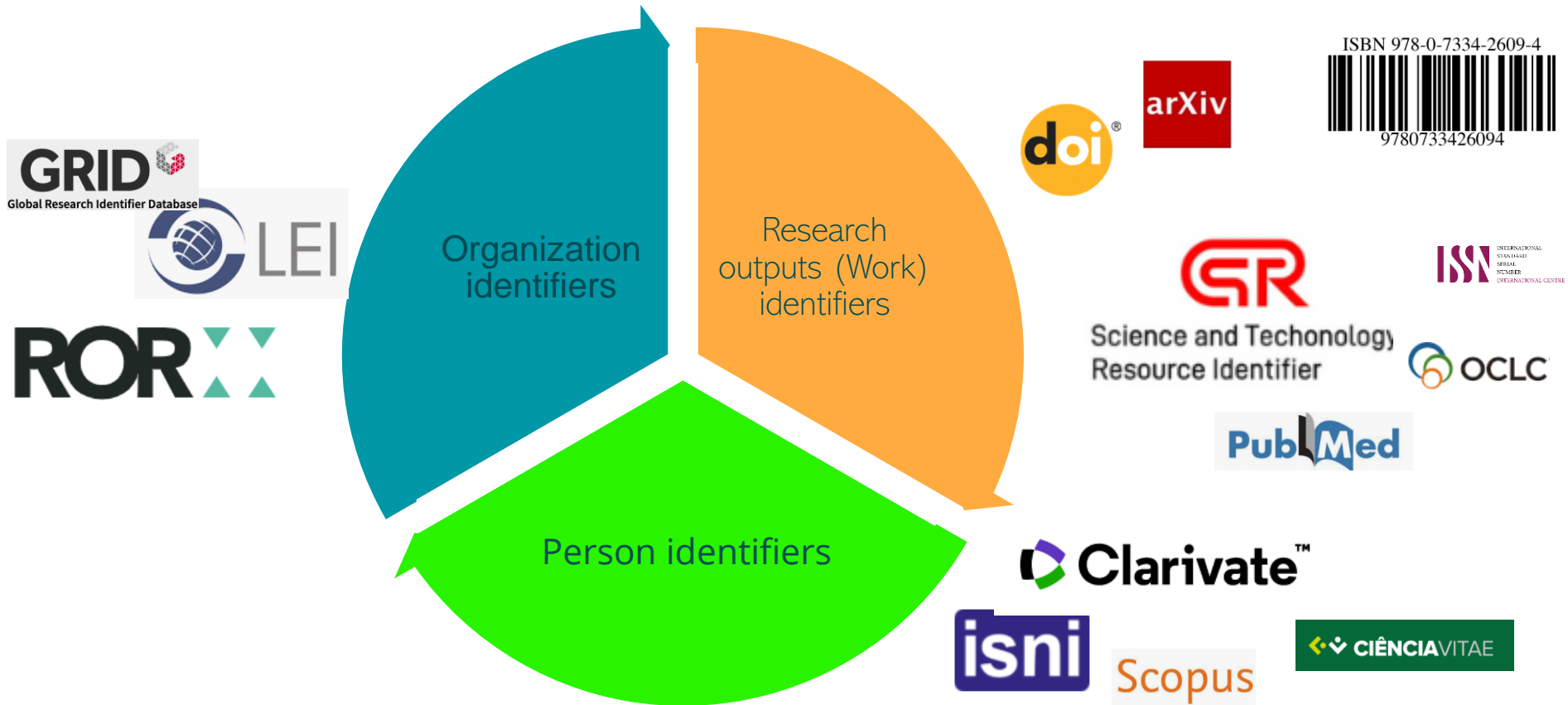|	Family Name	
	Family Name	⌄
1	Wang	
2	Li	
3	Zhang	
4	wang	
5	Liu	
6	Chen	
7	Yang	
8	Family Name Deactivated	
9	Kim	
10	Lee	

Top family names

- Records with a Country Code (the actual number could be higher)

Country codes

Total: 2,608,781

BR : 247,321
US : 241,291
CN : 200,265
IN : 164,679
ES : 106,651
GB : 93,362
TR : 84,133
DE : 65,021
ID : 64,668
AU : 61,539
IT : 57,200
IR : 55,815
Others (234 items): 996,000

Open PIDs enable an infrastructure to connect researchers, institutions, and research outputs

PIDs for Organizations

PIDs for researchers

PIDS for Research Outputs

PIDS for Funding/Grants

More at **ORCID: Keeping Up with FAIR Momentum**

ORCID works with different identifiers

ORCID in supporting the FAIR Principles

Connecting researchers with research outputs, enabling reliable attribution of authors and contributors

iD

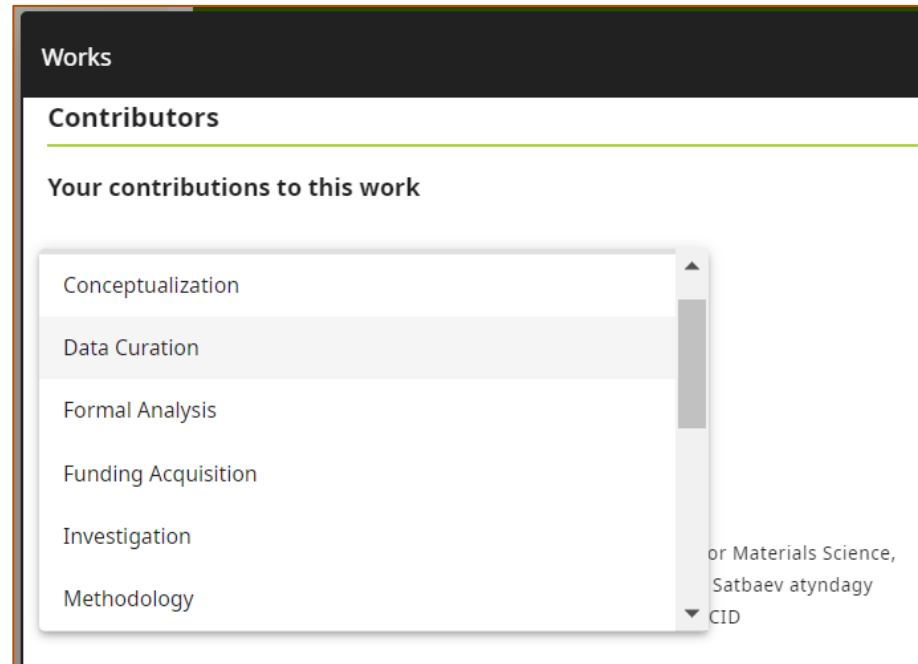# ORCID and Research Contributions

Recognizing Authorship as well as Contributorship

- In addition to authorship, there is the growing trend that researches shall get credits to different roles they have in producing research outputs

Recognizing Authorship as well as Contributorship

- ORCID supports CRediT (Contributor Roles Taxonomy), a high-level taxonomy, including 14 roles, that can be used to represent the roles typically played by contributors to research outputs.
- This can be done both via ORCID's member API, or contributors to enter their own contributor role when manually adding works in to their ORCID records

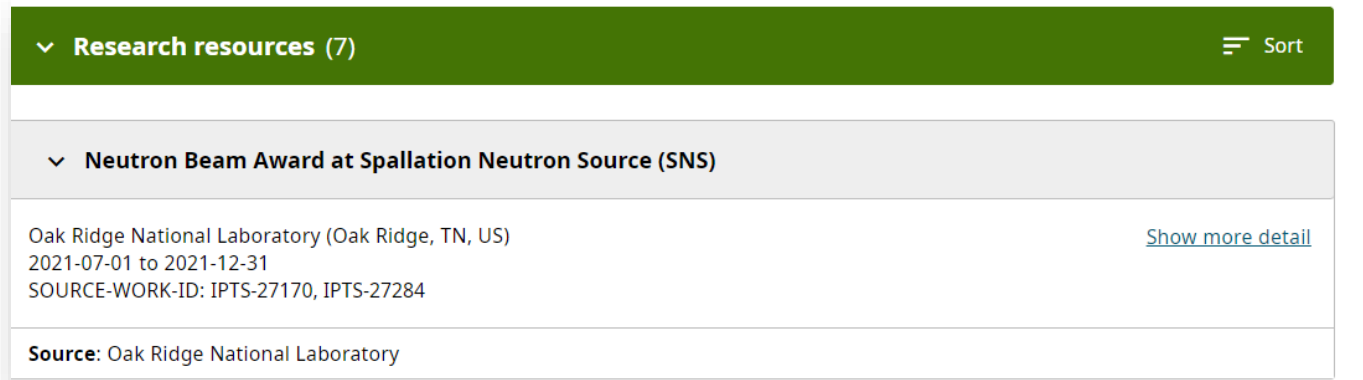# ORCID and Research Resources

Research Resources

- Researchers use special shared scientific facilities, equipment, and collections, from which datasets are generated
- These resources are not exposed in research "outputs".
- This has relevance for transparency and reproducibility – and ongoing funding

Resource Type	Definition	Examples
Infrastructure	A facility, building, or other physical space used to perform research.	Neutron spallation source, animal facility, data enclave, archaeological site, telescope array. ships, planes, farms, laboratories
Collection	An object or group of objects used for research purposes; can be tangible or digital.	Ocean mission, field campaign, collaborative data sets or resources; rare book collection; museum collection; biological specimen collection
Equipment	Hardware used for research purposes	Microscope, computers, glassware, samples, materials
Service	Services used for research purposes	Proteomics analysis, computing services, data analysis, logistical support, legal services, copyediting, expert or staff advisement

Connecting ORCID and Research Resources

- Identifying which resources were used to create research findings

  - Make your resource(s) citable

  - Share information about the research at your facility

  - Improves transparency between users and resources

* Research Resources can only be added by ORCID member organizations

⌄ **Research resources** (7)	≡ Sort

⌄ **Neutron Beam Award at Spallation Neutron Source (SNS)**

Oak Ridge National Laboratory (Oak Ridge, TN, US)
2021-07-01 to 2021-12-31
SOURCE-WORK-ID: IPTS-27170, IPTS-27284

Show more detail

Source: Oak Ridge National Laboratory

ORCID and Research Outputs

Publications are only one type of research outputs

- Researchers circulate and share research in numerous types
- ORCID supports various types of works

  - Publications

  - Conference

  - Intellectually Property

  - Other

Work types

	Work Type
1	JOURNAL_ARTICLE
2	CONFERENCE_PAPER
3	BOOK_CHAPTER
4	OTHER
5	BOOK
6	CONFERENCE_ABSTRACT
7	REPORT
8	PREPRINT
9	CONFERENCE_POSTER
10	DISSERTATION_THESIS

Member organizations can increase the trustworthiness of ORCID records by writing validated data to researcher's records (with their permission)

iSamples (Internet of Samples): Cyberinfrastructure to support transdisciplinary use of material samples

Zenodo
2022-07-20 | Conference poster
DOI: 10.5281/zenodo.6851643
CONTRIBUTORS: Dave Vieglais; Kerstin Lehnert; Sarah Ramdeen; Hong Cui; Danny Mandel; Quan Gan; Sarah Hyunju Song; Neil Davies; John Deck; Eric Kansa et al.

Show more detail

Source: DataCite

VizieR Online Data Catalog: Radial velocities of GJ 357 (Luque+, 2019)

VizieR Online Data Catalog
2019-07 | Data set
BIBCODE: 2019yCat..36280039L
CONTRIBUTORS: Luque, R.; Palle, E.; Kossakowski, D.; Dreizler, S.; Kemmer, J.; Espinoza, N.; Burt, J.; Anglada-Escude, G.; Bejar, V. J. S.; Caballero, J. A. et al.

Show m

Source: NASA Astrophysics Data System

Provenance data shows that these items were added by ORCID member organizations

We call these validated assertions
"Trust Markers"

We have made it easier for researchers to have new research outputs automatically added to their records

Crossref Auto-update Permission Success	
July + August 2021	**85%** granted permission, with 586K works pushed
6 months prior	**64%** granted permission, with 1.7M works pushed

ORCID Organization ✔ @ORCID_Org · 1h

🎉🎉🎉🎉 That's 7.4 million works (and counting!) that researchers don't have to hunt for or key into multiple systems - reducing the burden (and time!) it takes to manage your #research outputs and contributions.

> **Ed Pentz** @epentz · 8h
>
> just passed 2 million authors granting Crossref permission to automatically update their ORCID records via Auto Update - 7.4 million works have been auto pushed to ORCID records to date. Some authors deny permission/some don't respond - planning blog post with more details.

Last year year we implemented improvements to the inbox notifications and emails, incorporating clear and concise messaging which includes highlighting the type of notification.
ORCID users now clearly see what the notification relates to, e.g. needing to provide permission to a member to update the user record.
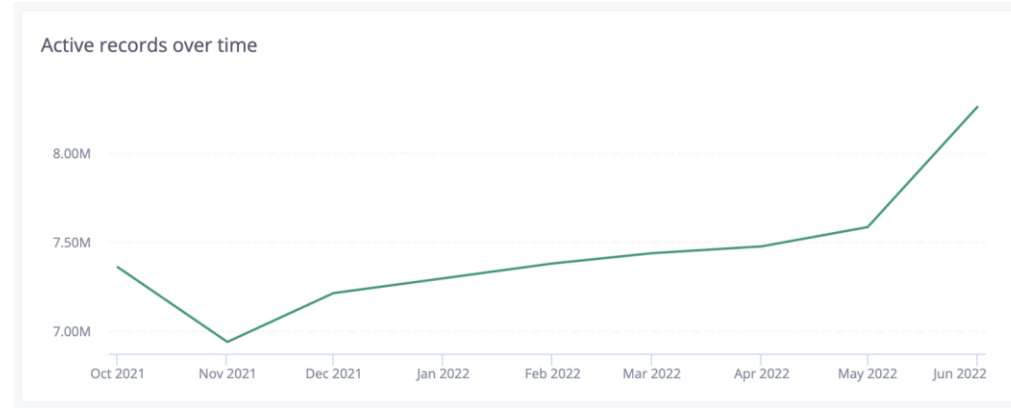
To Recap

Connections improve dissemnating research outputs

- Researchers deserve credit and recognitions for their various roles in doing research, where their outputs can be in different types of works

- More transparent connections between researchers, research outputs and research organizations will improve the quality and diversity of sharing research outputs
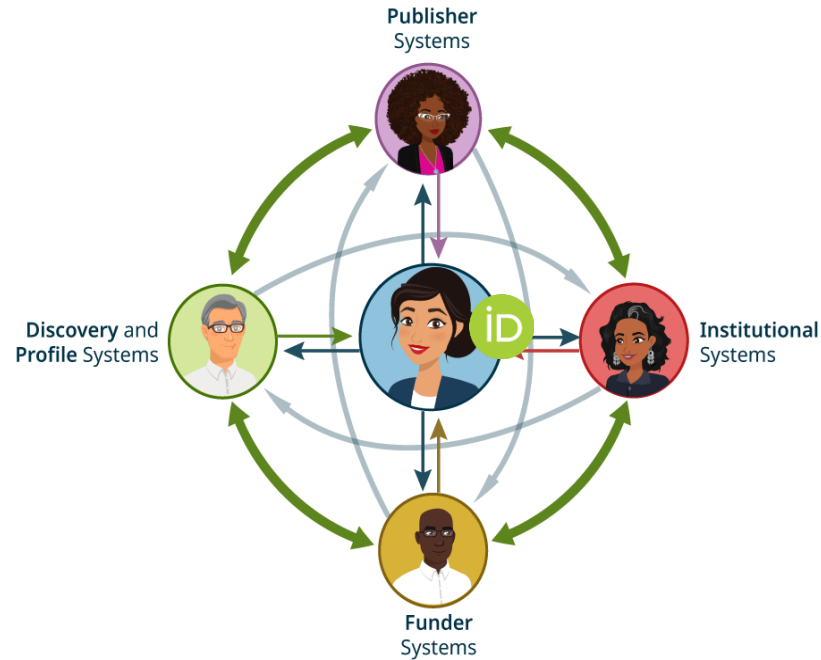
Reuse of data is key to support the FAIR Principle

- In order to fully realize the value of ORCID, researchers rely on ORCID member systems to automatically populate their records, and re-use the information that's already there.

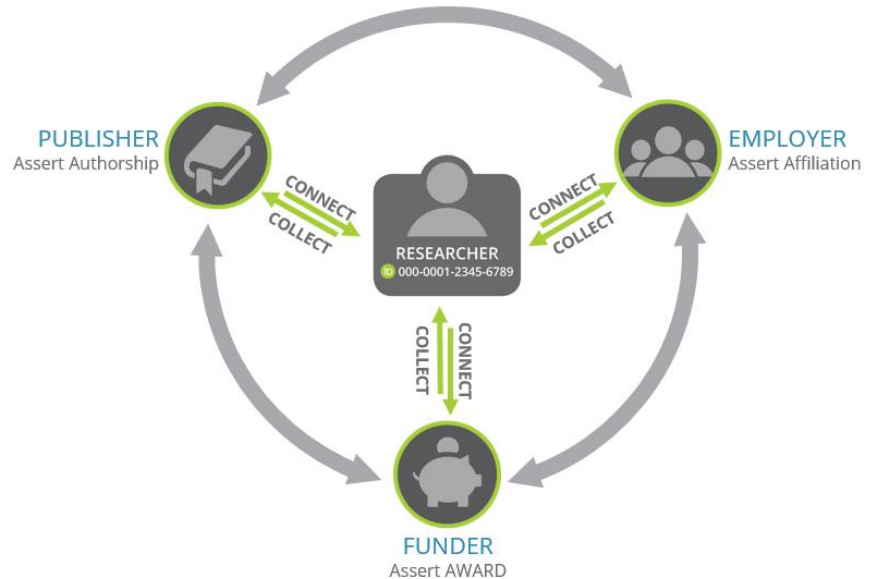- Not only does this add trust, it saves even more time.

Active records over time

ORCID enables openness, persistence and interoperability throughout the research ecosystem

The Community build and benefit from Open Research Infrastructure

- ORCID strives to enable transparent and trustworthy connections between researchers, their contributions, and their affiliations

- Adopting PIDs to foster such an open research infrastructure will further require **commitment from both individuals and organizations**.

- ORCID anticipates increased engagement in Asia through additional community adoption, conversation, and collaboration.

Discussion and
Feedback

How to find out more

Reach out to us for additional information:

1. **Contact Estelle Cheng** to learn more **about how engage with ORCID** (if you haven't) or **how to deepen your integration (**e.cheng@orcid.org**)**

2. **Further information can be found on ORCID's website: https://info.orcid.org/resources/**

3. **More detailed information about our workflows: https://info.orcid.org/documentation/workflows/**

Thank you!

Find out more at https://orcid.org

Register at https://orcid.org/register

Email - e.cheng@orcid.org

Skype - j493520@hotmail.com

Twitter @ChihEstelle

More Resources

All about ORCID

https://orcid.org/about

ORCID Membership

https://info.orcid.org/membership/

ORCID for Research Organizations

https://info.orcid.org/orcid-for-research-organizations/

Support Center: Start Connecting with ORCID API

https://info.orcid.org/documentation/integration-guide/

ORCID News and Events

https://info.orcid.org/

Appendix
Additional Information

ORCID's Values

Open

Inclusive

Trusted

Collaborative

Transparent
Persistent

Diverse
Global

ORCID is strongly supported by each of its major stakeholder groups

User NPS

+49

Member NPS

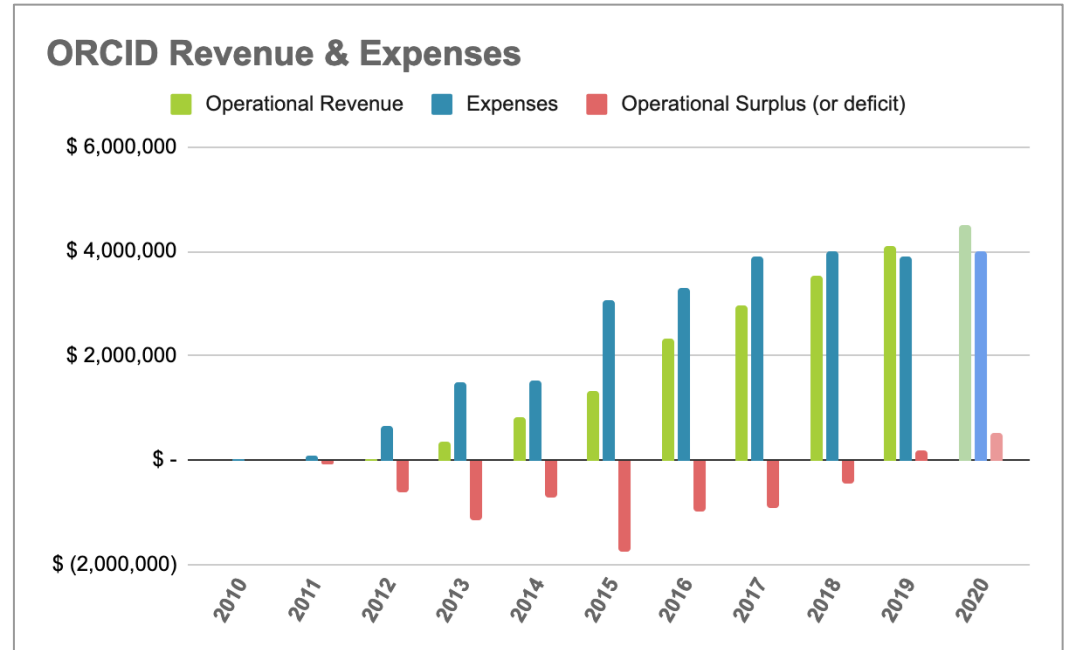**+41**

Publishers
+100

Funders
+88

Universities
+33

NPS, or Net Promoter Score is a standard metric used to measure audience loyalty and satisfaction.

NPS scores range between -100 and +100. Scores above 0 are considered "good", those above +20 "favourable" and those above +50 "excellent"

Sources: ORCID Q1 2021 User Value Survey; ORCID Member Value Survey, Feb 2021

ORCID has been working towards financial sustainability and reached operating breakeven in 2019

- ORCID achieved Financial breakeven in 2019

- We expect this trend to continue with steady growth in membership and careful cost management

ORCID Revenue & Expenses

Legend: Operational Revenue · Expenses · Operational Surplus (or deficit)

Excludes grants and miscellaneous income. 2020 figures are draft subject to audit

ORCID 2022 - 2025 Strategic Plan

Increasing Value to Members

We will be more **proactive in delivering value** to member research institutions, rather than **simply enabling and expecting** them to integrate with our API.

We will equip our members with **more compelling ways to encourage their researchers** to use ORCID.

We will work with **influential organizations** such as **Funders and Government Agencies** to encourage the use of ORCID.

Increasing Value to Researchers

We will **reduce the effort** that researchers need to invest in **completing and updating** their ORCID records with activities such as improving workflows and guiding users to the most appropriate services to connect with.

We will **incentivize researcher participation** in ORCID with initiatives like encouraging member organizations to update and re-use ORCID data save researchers time.

Increasing Global Participation

To encourage membership in **low and lower-middle income countries**, we will move towards a fee structure based on **equity**, adjusted according to regional affordability, while also supporting the development of local expertise and communities of practice.

We will develop **new partnership models** with national or regional organizations to **spearhead organizational membership growth** in their locations.

Upholding Trust and Integrity

We will take a more proactive approach to improving **data quality**.

In order to **fulfill expectations of the reliability of our infrastructure**, we will improve resiliency through means such as moving our hosting to the cloud and implementing a high-availability architecture.

To ensure ORCID's **long-term sustainability**, we will bolster ORCID's reserves.