

Why Persistent Identifiers Matter to S&T Agencies

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The ability to uniquely identify contributors is a deceptively simple concept which, if realized, could enable forms of real-time understanding of scientific research that up to now have been extremely costly (if not impossible).

-Jonathan Kram, Wellcome Trust



What's in a Name?

Most names are not unique



Many people have the same name

Names may change through marriage or other circumstances



People use different versions of their name during their career

Individuals use different alphabets, abbreviations, or naming conventions



To address this issue, the global research community is adopting **digital names**

Globally unique persistent identifiers that specify the person, organization, activity, or research asset to which a name refers



OPEN ACCESS

First M87 Event Horizon Telescope Results. I. The Shadow of the Supermassive Black Hole

The Event Horizon Telescope Collaboration, Kazunori Akiyama^{1,2,3,4}, Anton Alberdi⁵, Walter Alef⁶, Keiichi Asada⁷, Rebecca Azuly^{8,9,6}, Anne-Kathrin Baczko⁶, David Ball¹⁰, Mislav Baloković^{4,11}, John Barrett², Dan Bintley¹², Lindy Blackburn^{4,11}, Wilfred Boland¹³, Katherine L. Bouman^{4,11,14}, Geoffrey C. Bower¹⁵, Michael Bremer¹⁶, Christiaan D. Brinkerink¹⁷, Roger Brissenden^{4,11}, Silke Britzen⁶, Avery E. Broderick^{18,19,20}, Dominique Brogiere¹⁶, Thomas Bronzwaer¹⁷, Do-Young Byun^{21,22}, John E. Carlstrom^{23,24,25,26}, Andrew Chael^{4,11}, Chi-kwan Chan^{10,27}, Shami Chatterjee²⁸, Koushik Chatterjee²⁹, Ming-Tang Chen¹⁵, Yongjun Chen (陈永军)^{30,31}, Ilje Cho^{21,22}, Pierre Christian^{10,11}, John E. Conway³², James M. Cordes²⁸, Geoffrey B. Crew², Yuzhu Cui^{33,34}, Jordy Davelaar¹⁷, Mariafelicia De Laurentis^{35,36,37}, Roger Deane^{38,39}, Jessica Dempsey¹², Gregor...

DOI

<https://doi.org/10.3847/2041-8213/ab0ec7>

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ORCIDiDs and DOIs are in use by thousands of journals, hundreds of universities, and funders around the world

- ORCID has been adopted on a national scale in 18 countries
- The US ORCID consortium has over 100 members
- The US Department of Energy just established a consortium for its national labs

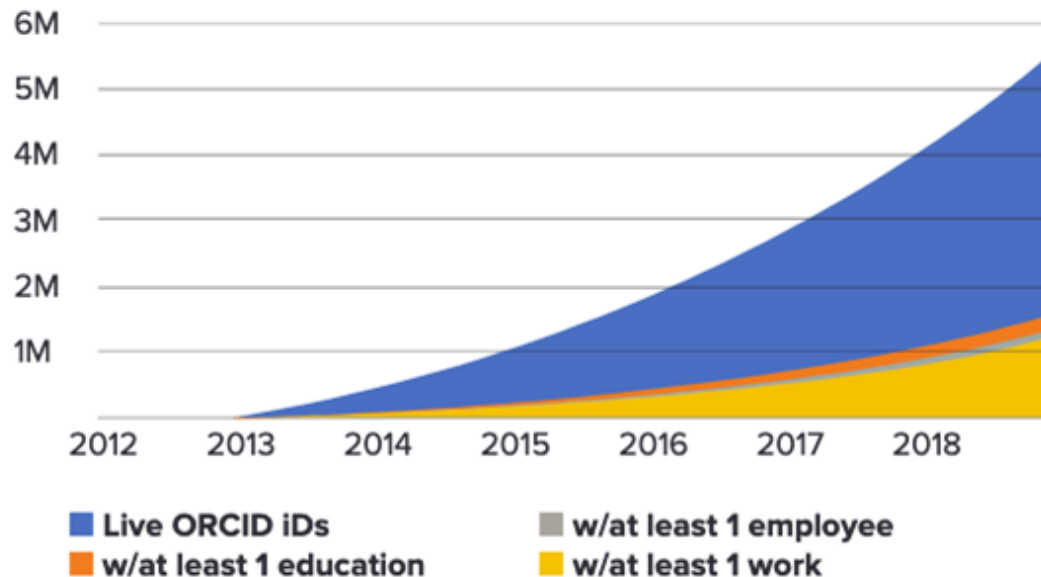


Hundreds of members and systems use ORCID globally

6.5 MILLION+

live ORCID iDs registered since its 2012 launch

Connections to ORCID records



- **3.7** ORCID iDs created every minute
- **193** different languages included in ORCID records
- **73.6%** of records have granted update permissions
- **1.97** record updates made per second



Tackling Information Overload

ORCID is a non-profit organization, which provides a fully open and interoperable identifier to reliably connect researchers with their research contributions. The ORCID iD is a 16-digit identifier that researchers can register for and use for free.

Connects individuals and their professional contributions across disciplines, organizations, and time



Enables recognition of all types of research contributions and innovation

Helps research institutions, funders, publishers, and other organizations better track and support research work

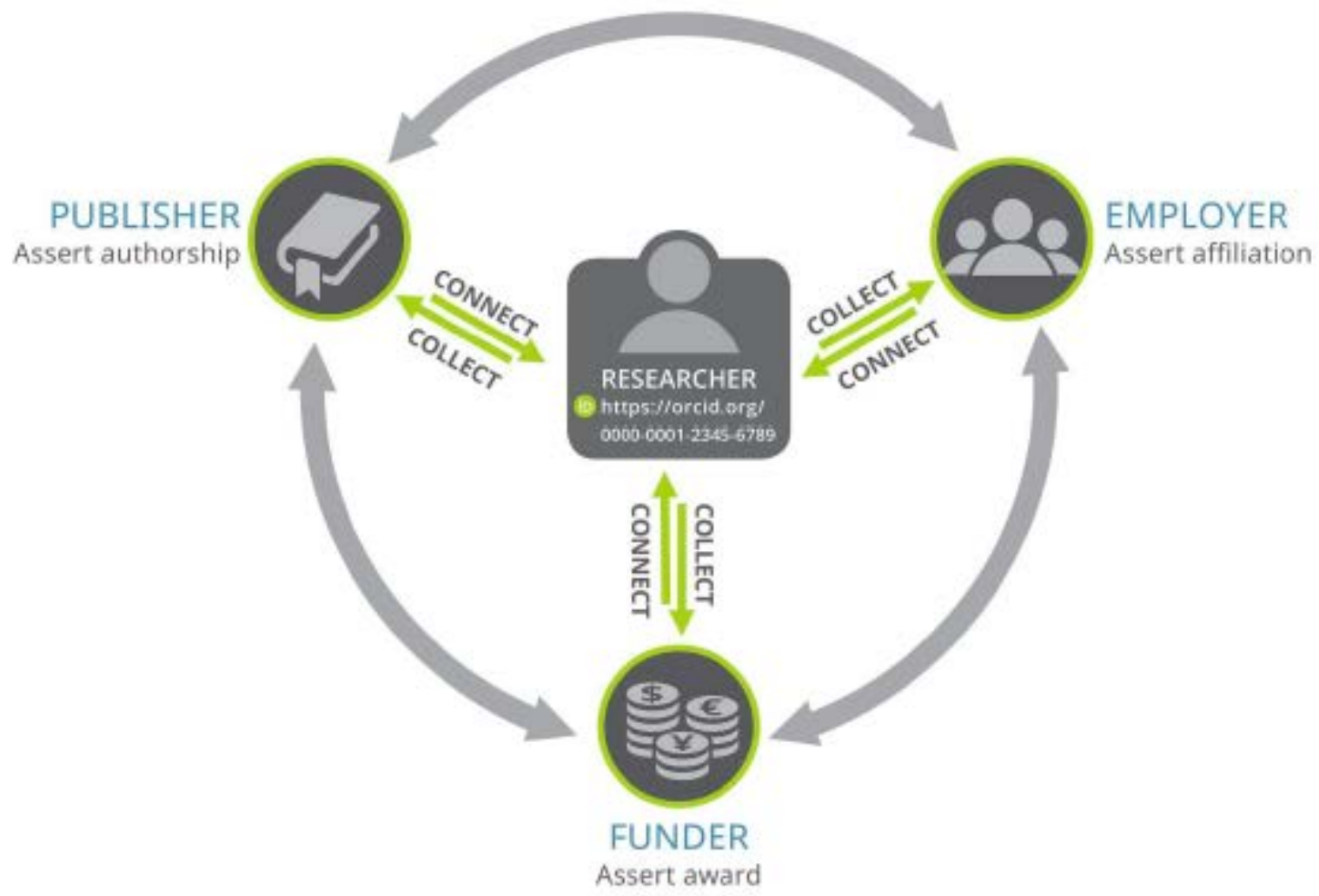




**TO REALIZE THE OPEN
RESEARCH VISION,
EVERY STAKEHOLDER
MUST TAKE ACTION**

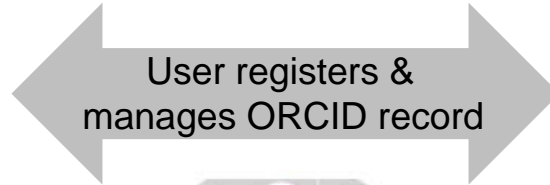
INTEROPERABILITY

ENTER ONCE
REUSE OFTEN

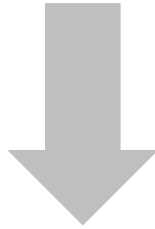


Making Connections

Researcher
Gives permission to
COLLECTID and
access their record



Controls visibility



University



CONNECTS
affiliation

Funder



CONNECTS
grant award

Publisher



CONNECTS
publication

ORCID record

Researcher Name

ORCID ID

 orcid.org/xxxx-xxxx-xxxx-xxxx

Basic information

- Other names
- Email addresses
- Biography

Account settings

Affiliations, Activities, Resources

Employment :

XXX University
Source: XXX University (ID139)

Funding :

YYY Agency, Grant #123
Source: YYY Agency (ID45)

Works :

Book, Chapter, 2016
Source: ZZZ Publisher (DOI)

US Agencies are using global IDs

ORCID members
EPA • DOE • FDA •
NIH • Smithsonian •
USDA • USUHS

Many agencies are members of Crossref and DataCite and use DOIs for publications and datasets

Benefits accrue as identifiers and open infrastructure components are coordinated within Agencies and sectors and across the research ecosystem



How Organizations and Researchers Benefit

INSTITUTIONS

- Save time and reduce errors with automated information-sharing and cross-system interoperability
- Manage your organization name and your researchers' connections with it
- Maintain links with your researchers - past, present, and future



RESEARCHERS

- Improve recognition and discoverability of their research
- Spend more time doing research, less time managing it
- Control and manage a trusted and easily shareable record of their research activities and affiliations – for free

EVIDENCE OF INSTITUTIONAL VALUE

Examples of time/staff savings achieved by implementing ORCID from around the world



UK: 0.2 – 0.4 FTEs per institution¹

Portugal: 100,000 researcher hours per year²

Australia: 15-30 minutes per grant application³

1. Jisc/ARMA Institutional ORCID Implementation and Cost Benefit Analysis Report 2015

2. Cátia Laranjeira, FCT - Fundação para a Ciência e a Tecnologia 2017

3. Australian Research Council governance meeting, September 2018

"Having ORCID iDs for most of our researchers has helped in providing authoritative accounts in our various databases, ensuring accuracy in reviewer identities, and helping editors find reviewers and check expertise."

—Brooks Hanson, Executive Vice President, Science, American Geophysical Union



<http://idcdocserv.com/US44453318>

Three Ways to Get Involved

1. Encourage and support your researchers in getting, sharing, and using their ORCID iD
2. Invest in integrating ORCID into your systems
3. Connect data to and from your researchers' ORCID records to support information use and reuse across organizations

To learn more: <https://orcid.org>

