

Identifying identities

ORCID, identities and the blockchain

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What is ORCID the organization?

ORCID: The organization

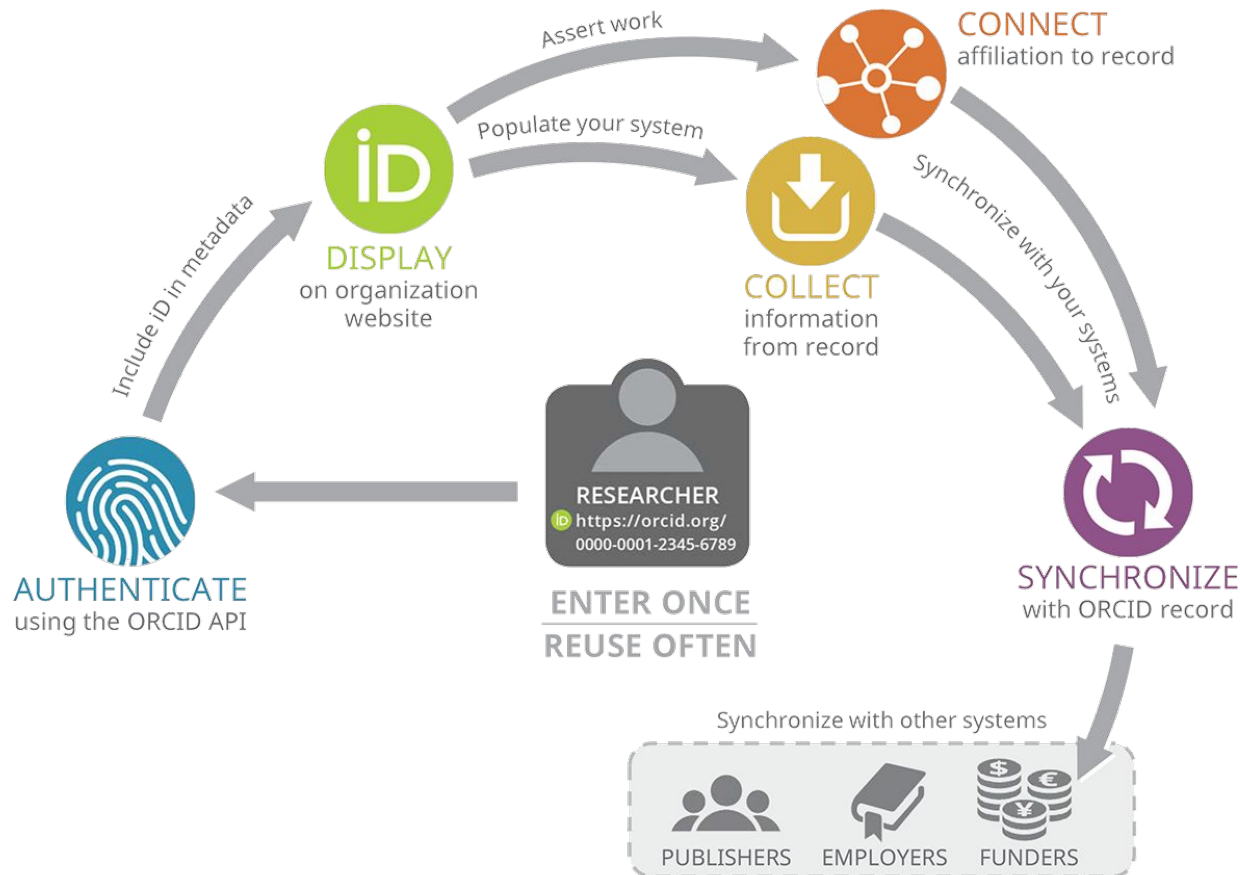
- Open, not-for-profit organization
- Run by and for the research community
- Provides researchers with a unique identifier - ORCID iD - that reliably and clearly connects them with their research contributions and affiliations

 <https://orcid.org/0000-0002-1825-0097>

- 500+ systems have integrated ORCID iDs

Grant application and manuscript submission systems, CRIS, repositories and more

How do researchers interact with ORCID?



About ORCID - the technology

ORCID's tech stack

- Typical J2EE (Java webapp)
- Open source
- Public API (Free to anyone)
Read public information from researcher records
- Member API (Member organizations only)
Write to/read from researcher records, including non-public information
- Access to record controlled by researcher via OAuth2
- No short term blockchain plans

OK...ORCID is a *centralized* service based on standard software stacks

So why are we still excited for blockchain?

Hint: see our vision statement!

ORCID'S VISION IS A WORLD WHERE ALL WHO
PARTICIPATE IN RESEARCH, SCHOLARSHIP, AND
INNOVATION ARE UNIQUELY IDENTIFIED AND
CONNECTED TO THEIR CONTRIBUTIONS AND
AFFILIATIONS ACROSS TIME, DISCIPLINES, AND
BORDERS.



What many people think ORCID is



**Researcher
Identity**

But ORCID is an identifier first...
And only *part* of a researcher's identity

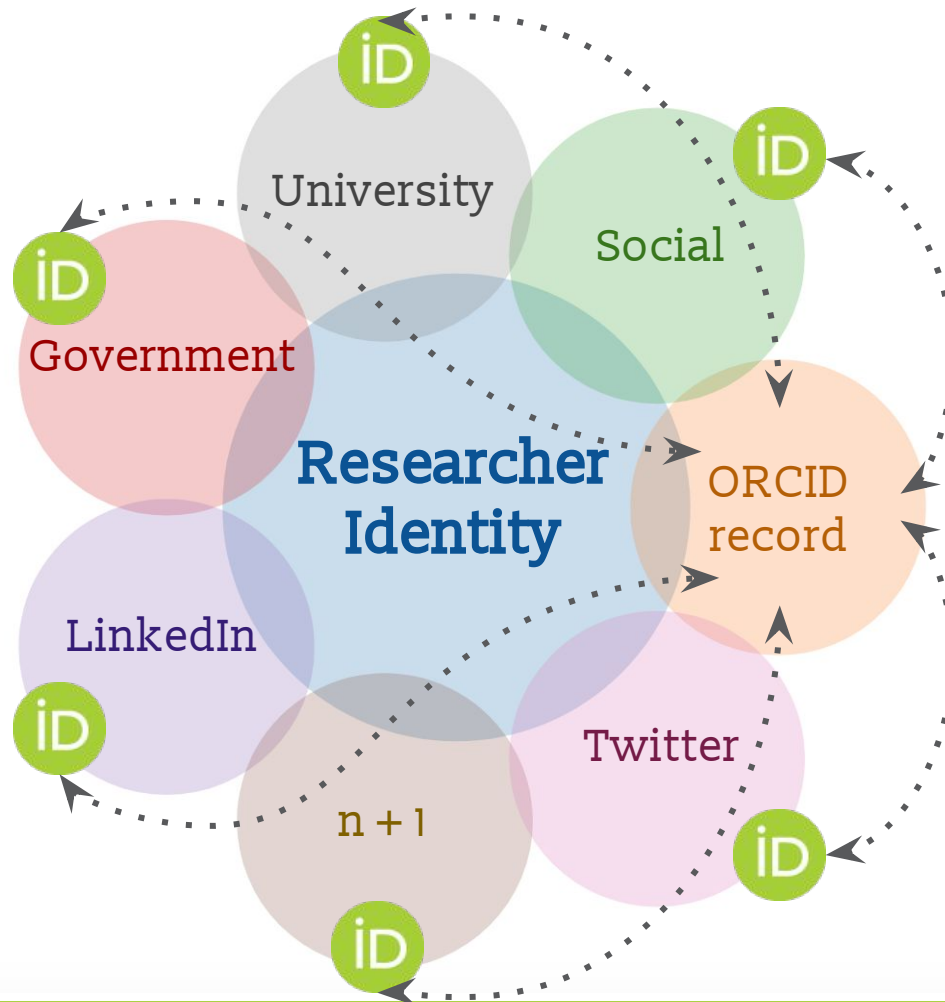


ORCID alone can't cover all the identity needs of researchers

- National identity
 - Local university identity
 - Local research facility identity
 - Social identity needs
- ... and more needs constantly emerging

Instead, we offer a researcher identifier and a record that can connect researchers to their many identities and activities.

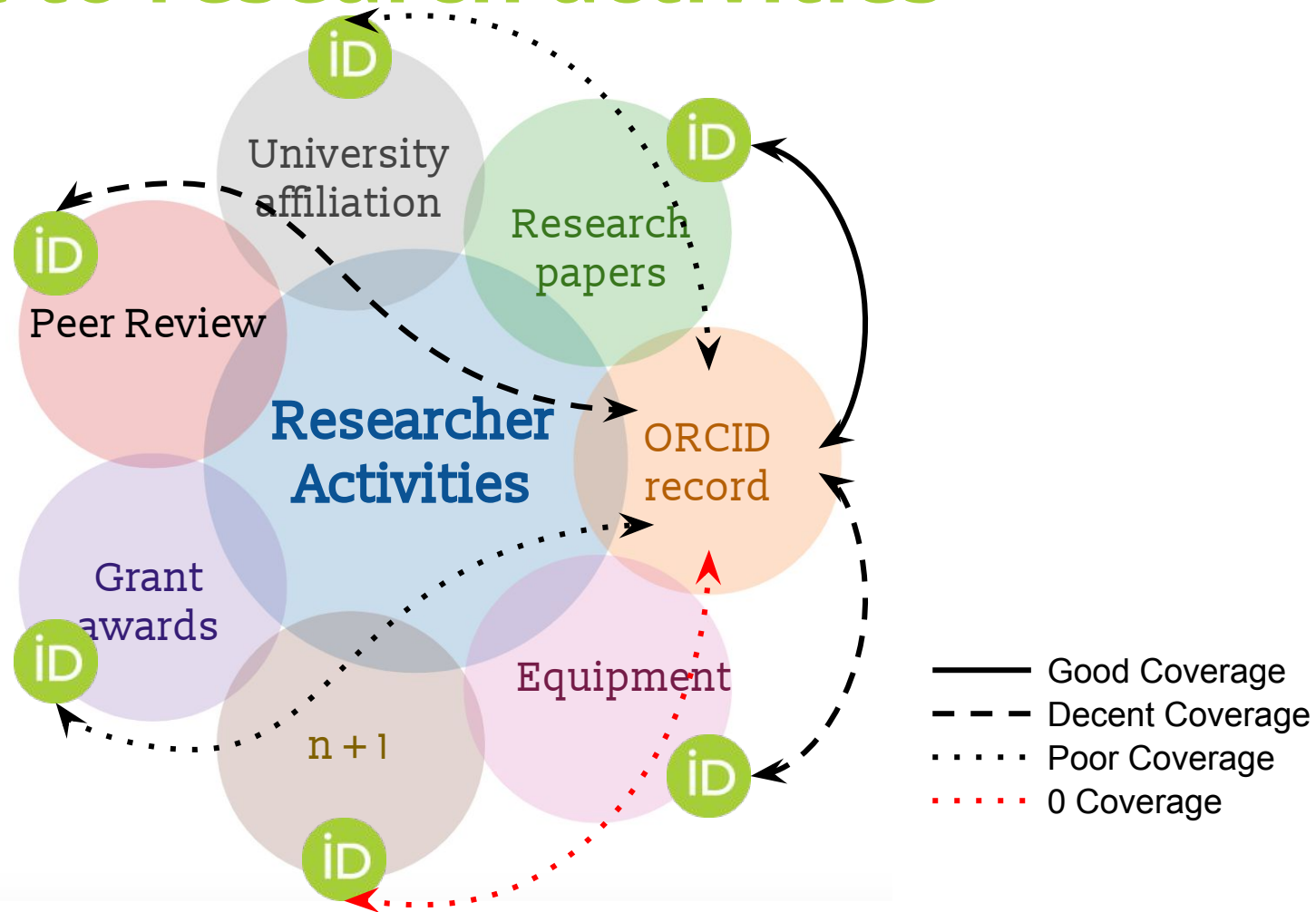
Ideally, we want to see ubiquitous use of the ORCID identifier



Great!

Now that we understand the ORCID identifier, let's talk about how ORCID connects with other identifiers

We also need the identifier to connect to research activities



We need *useful* PIDs to help connect researchers to their identities and activities

- Affiliation Types [\(link\)](#)
- Researcher Resources [\(link\)](#)
- Grant IDs
-



But wait, what's a PID?

Resolvable, actionable, durable identifiers that can be used to locate and describe 'things'.

Persistent

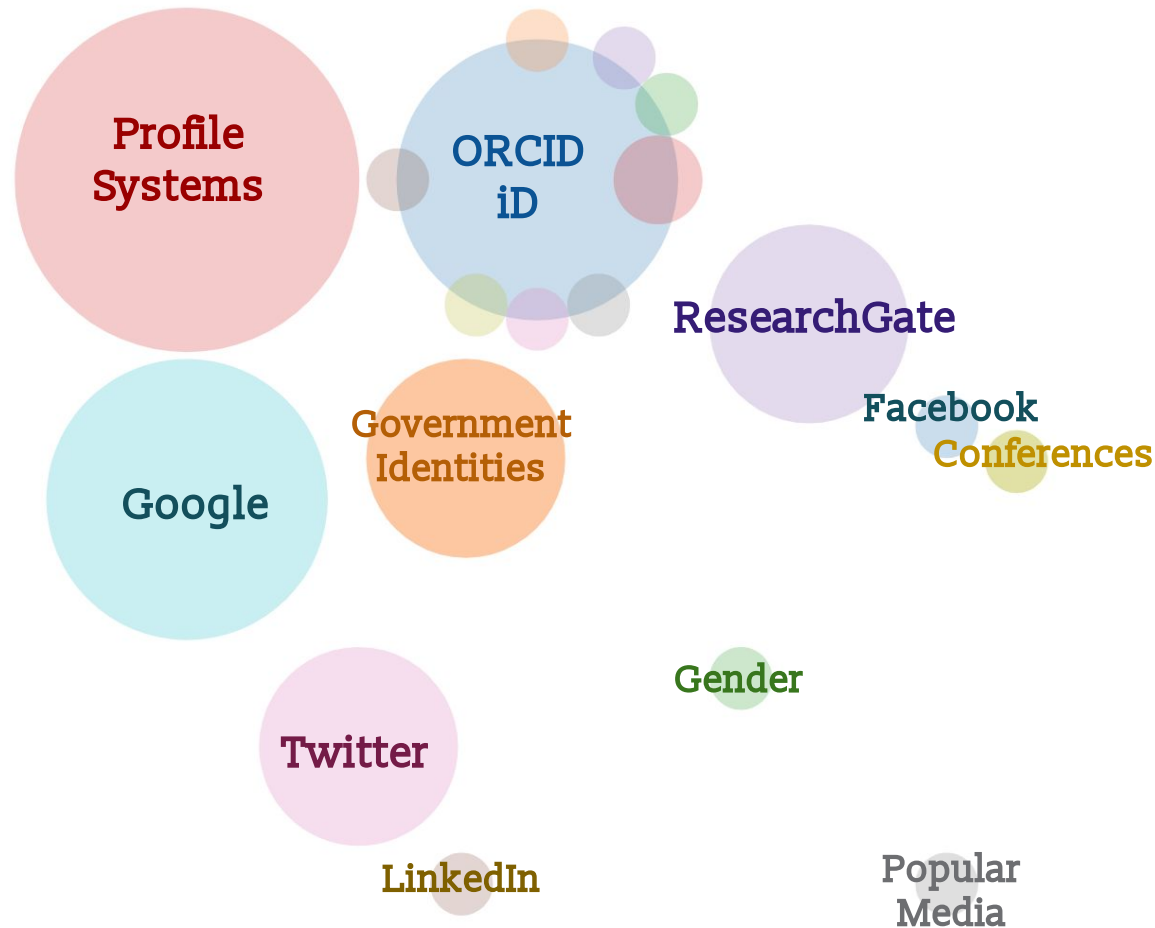
identifier

Unique string of letters/numbers/symbols
assigned to a thing

Always points to the thing
(or some representation)

But wait, there's more!

Lots of other possible connection points



**Clearly we can't go it alone -
connecting researchers to their
activities is a community effort!**

**...which brings us
back to blockchain.**

**Lots of possibilities for
managing researcher identity
and attribution of activities!**

Why ORCID + blockchain?

Immutable *and* distributed

- Verifiable claims built on Decentralized / self-sovereign Identifiers (DIDs)
- Track researcher activities with decentralized systems
- Collaboration on new PIDs and PID infrastructure

**So what is ORCID asking
blockchain projects to consider?**

1. **Add authenticated ORCID iDs** to your data/metadata where appropriate
2. **Add PIDs** or PID-like resolution to researcher activities pushed to blockchains
3. **Push a reference to your PIDs** to the ORCID record

As blockchain creates innovation in the researcher community, incorporate that innovation into ORCID

Thanks!

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