Increase Trust, Improve Quality
PID(s) in Journal Publishing
We’ll briefly cover:

● Current contexts for publishing communities
● Re/introduction to ORCID
● Case Studies: improve trust and quality
● Call for Actions
● Discussion and feedback
Getting to know you first..

Who is here:
- Journal editors
- Representing a publisher (or research organisation)
- Representing government agency
- As a researcher

Who has an ORCID iD already?
Let’s start from some analysis
The meaning of journal quality has evolved

Back in the 90s...

- The *quality* of journals was tied with citations, implying high impact.
- Questionable publishing practices were not a widespread concern for the level of technology.
- Dissemination of research was in print materials. Visibility and discoverability of research was more about catching “human” attention.

Nowadays

- The quality of journals has to do more with *trustworthiness*, rather than just the number of citations.
- Submission of suspected fake research papers is growing, and thus the *integrity* of the scholarly record is in question.
- Dissemination of research relies more over the *Internet*. Visibility and discoverability is even more about *machine-readability* and *interoperability*. 
Submission of suspected fake research papers is growing

“The publishing world is faced with a large and problematic pollution of the publication record with false and inaccurate research, risking public trust in research, introducing dangers to public health and medicine, and undermining the research process. Many of these papers originate from third party commercial agencies offering services to authors (“paper mills“) for the creation of fake or manipulated data and articles.”

Committee on Publication Ethics position statement, 19 Jan 2024
How Persistent Identifiers like ORCID can help

The Challenge

- The integrity of the scholarly record is in question. Editors spend a lot of time and effort screening submissions to check integrity criteria, and to ensuring visibility and discoverability of research outputs.

The solution

- Disambiguate your researchers with ORCID and relating research information.
- Use ORCID and other PIDs and their respective APIs to obtain trustworthy metadata about people, places, and outputs so to connect multiple systems.
A very brief re/introduction to ORCID
A Few ORCID Facts

- Independent not-for-profit open to participation by all
- 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 provides three main services

The ORCID iD
A unique, persistent identifier (PID) free of charge to researchers

An ORCID record
Connected to the ORCID iD, that can include employment, education and research output metadata

The ORCID APIs
To enable the data exchange between ORCID records and member organizations
Information on ORCID records is useful

Researchers and members can add:
- Affiliations
- Professional activities
- Funding information
- Publications
- Other outputs
- Website URLs

In addition, ORCID Member organizations can add:
- Peer Review
- Research Resources
ORCID’s community network spans the globe

Users in 250 countries
Almost every country on the planet!

2023
1.62B items
of data in ORCID records was reused by external systems

Member organizations in 60 countries
27 national consortia and 1 regional consortium

Yearly Active Researchers
8.5 Million

Active Integrated Systems
5,734

Organizational Members
1,407

Data collected on 5 July 2024
More data available at https://info.orcid.org/orcid-statistics/
ORCID’s commitment to trust
Importance of transparent “source”

Data can be added by researchers themselves...

...or, by an ORCID member organization, with the record holder's permission

Transparency in who is adding the information is important to evaluate trustworthiness
Validated information by organization is even more useful

When an ORCID member updates an ORCID record, the source (provenance) of that update is captured for re-use:

- **Research organizations** add affiliations
- **Publishers** add outputs and reviews
- **Funders** add funding awards

These provide ‘trust markers’ that can be used to help in decision making.
Publishers can use the Trust Summaries in editorial workflows

Trust summaries provides a quick means of understanding the contents of an ORCID record

- They could be displayed directly within editorial systems and link to the full record
- ... and pulled from our APIs and reused in other tools and workflows
More Trust Markers = More Trustworthiness
Case Studies
ORCID helps publishers and their researchers ...

Save time and money by:

- **Sign into** submission systems using ORCID - authors, co-authors, reviewers, contributors
- **Pre-fill** the submission form based on their ORCID record
- **Have their ORCID record automatically updated** with the work once published
- **Synchronized** with the ORCID Registry for most up-to-date data

Ensure recognition by:

- **Be given credit for their review work** by having the peer review activity added to their ORCID record

Increase Trust by:

- Review ORCID records to help with research integrity checks
Publishers have added a lot of validated works and peer review trust markers.
Call for Actions
ORCID is a hub of research-related data circulated throughout scholarly systems

- Data in the ORCID registry is **machine-readable**, and **interoperable** with other systems, and thus is reused millions of times a month, including indexing platforms or discovery services.

- **The more validated trustworthy data** to the ORCID Registry, **the better quality**, which enhances **visibility and discoverability** for your authors, reviewers, and for the research outputs.
Let’s work towards more trust markers from Asian journal publishing

- Maintaining integrity in scholarly publishing is not only limited to “global” publishers or English journals, but a community challenge across disciplines or borders.

- Although some major (global) publishers have adopted ORCID, it is unlikely to increase trust of scholarly records if the whole publishing communities do not take further actions.
Individuals and organizations both play a vital role

Register for an ORCID ID and connect it with any systems that encountered in the research workflow!

Integrate ORCID into your systems in any research workflow. Apply for FREE ORCID Sandbox to try out the APIs

Individuals

Organizations
Don’t forget to check the Certified Service Provider (CSP) program

Specific best-practice ORCID certification criteria for 5 scholarly workflows:

1. Manuscript Submission Systems

2. Research Information Systems

3. Grant/Facility Application Management Systems

4. Repository Systems

5. Discovery Systems (New)

CSP make it easier for members to adopt ORCID

- Out-of-the-box, best-in-class ORCID-related functionality
- No need for custom technical development
- A more consistent user experience
- Training and support support from the vendor

https://info.orcid.org/vendors-and-service-providers/become-an-orcid-certified-service-provider/
Increase trust, improve quality
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
WeChat ID j493520
Resources

- ORCID Use Case https://info.orcid.org/category/use-cases/
- ORCID on-demand https://info.orcid.org/orcid-on-demand/
- ORCID events https://info.orcid.org/events/
- ORCID Resources https://info.orcid.org/resources/
- ORCID membership https://info.orcid.org/membership/
- ORCID member directory https://orcid.org/members
- ORCID Blog https://info.orcid.org/category/blog/
- ORCID Statistics https://info.orcid.org/orcid-statistics/
- ORCID workflows https://info.orcid.org/documentation/workflows/
Discussion and Feedback
UNESCO Recommendations on Open Science

- As in UNESCO Recommendations on Open Science, Persistent identifiers (PIDs) are one of the critical components of open science infrastructures that realize a FAIR Data Ecosystem.

“The critical components of open science infrastructures allow unambiguous identification of scientific items by unique persistent identifiers. They provide essential open and standardized services to manage and provide access, portability, analysis and federation of data, scientific literature, thematic science priorities or community engagement. Examples of unique persistent identifiers (PIDs) include ORCiD iDs for people.”
Persistent identifiers — what is a PID?

**Globally unique**
Each PID resolves to one entity, be it a dataset, person, journal article, project or book.

**Persistent**
The ‘P’ in PID. Persistent identifiers stick around. They’re not reassigned, they’re well governed, and technically resilient.

**Resolvable by humans and machines**
PIDS are easily made into URLs, with landing pages and underlying metadata.

They uniquely identify things
They’re stable and reliable
They’re Findable, Accessible, Reusable and Interoperable
Persistent identifiers — why is a PID?

**PIDs provide clarity**
Exactly which book, person, article do you mean? PIDs prevent confusion and solve this problem well.

They disambiguate

**PIDs facilitate sharing, reuse and attribution**
Making it easier for researchers to discover and give attribution to authors, organisations and funders in publication & reporting.

They provide a more accurate picture of activity

**PIDs enable automation and interoperability**
Automation saves time, disseminates information, facilitates trusted exchanges, enables aggregation and removes transcription errors

They save money.
There are PIDs for many entities

In the early days, we talked of “People, Places, Things”:

<table>
<thead>
<tr>
<th>People (authors, editors, curators etc)</th>
<th>ORCID, Scopus ID, ISNI etc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Places (universities, funders etc)</td>
<td>RINGGOLD, ROR, GRID etc</td>
</tr>
<tr>
<td>Things (articles, datasets, books etc)</td>
<td>DOI, ISSN, ISBN, PMCID etc</td>
</tr>
</tbody>
</table>

Now we include:

<table>
<thead>
<tr>
<th>Grants</th>
<th>Crossref Grant IDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects</td>
<td>RAID</td>
</tr>
</tbody>
</table>

(and there's a lot more where those came from - shown here are the ‘priority PID’ entities)
ORCID solves name ambiguity, variations and connected with trustworthy information

<table>
<thead>
<tr>
<th>Traditional government ID:</th>
<th>Scholarly bona-fides:</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="ID Card" /></td>
<td><img src="image" alt="Graduate" /></td>
</tr>
<tr>
<td>X  Useful if you want to sue the researcher, but not for much else</td>
<td>✓ Likely strong correlation with genuine researchers</td>
</tr>
<tr>
<td>X  Intrusive from a privacy point of view</td>
<td>✓ Information that researchers generally make public on their profiles</td>
</tr>
<tr>
<td>X  Difficult to apply consistently around in all countries</td>
<td>✓ Universally used around the world</td>
</tr>
</tbody>
</table>


The integrity of the scholarly record is in question

The COPE & STM Paper Mills Research report recommends:

- Continued investment in tools and systems to detect potential paper mill manuscripts at submission, with consistent and shared guidance in the use of these tools.

- A major education exercise to ensure that editors and reviewers are aware of the problem of paper mills and are better equipped to help identify these papers if they encounter them.

- Investigation of protocols that can be put in place to impede paper mills from succeeding in their goals.
The integrity of the scholarly record is in question

Estimates suggest that hundreds of thousands of paper-mill publications are polluting the scientific literature. Paper mills often sell authorships on bogus papers to researchers trying to pad their CVs. One analysis indicates that some 2% of all scientific papers published in 2022 resembled paper-mill productions.”
The integrity of the scholarly record is in question

“Tens of thousands of bogus research papers are being published in journals in an international scandal that is worsening every year, scientists have warned. Medical research is being compromised, drug development hindered and promising academic research jeopardised thanks to a global wave of sham science that is sweeping laboratories and universities.”

The situation has become appalling, Robin McKie, 3 Feb 2024
ORCID integration allows publishers to provide better credit to researchers for their work
The promise of PIDs — less cost, more benefits

It’s estimated that ubiquitous use of priority PIDs to provide automation and remove the need to re-key data could save the UK higher education sector £45 million over a five-year period, and Australia A$24m dollars a year.