



Increase Trust, Improve Quality PIDs in Journal Publishing

*The 8th Asian Science Editors' Conference and
Workshop 2024*

Chieh-chih Estelle Cheng 鄭潔之
Engagement Manager
<https://orcid.org/0000-0002-3207-0527>



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 event more about **machine-readability** and **interoperability**.



Submission of suspected fake research papers is growing



Committee on Publication Ethics position statement, 19 Jan 2024



“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.”

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

The screenshot displays an ORCID iD profile for Sofia Maria Hernandez Garcia. The profile includes a header with the ORCID logo and the iD number 0000-0001-5727-2427. The main section shows the published name, a biography, and a list of activities categorized by type and count. The left sidebar contains sections for Emails, Websites & social links, Other IDs, and Countries.

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

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:

- > Employment (2)
- > Education and qualifications (4)
- > Invited positions and distinctions (3)
- > Membership and service (2)
- > Funding (1)
- > Research resources (2)
- > Works (7)
- > Peer review (2)

Left Sidebar:

- Emails:** s.garcia@orcid.org
- Websites & social links:** Faculty profile webpage
- Other IDs:** Profile system identifier: A-123456, ResearcherID: L-8716-2018, eScientist: 0000-0001-5727-2427
- Countries:** United States

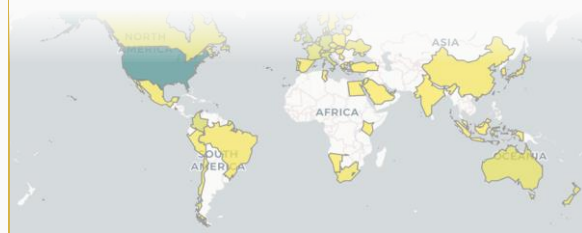
ORCID's community network spans the globe

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...

Thor: Conceptual Model Of Persistent Identifier Linking

2016-03-31 | Report [Show more detail](#)
DOI: [10.5281/ZENODO.48705](https://doi.org/10.5281/ZENODO.48705)
Funded by GRANT_NUMBER: [H2020-EU.1.4.1.3](#)


Source:  Sofia Maria Hernandez Garcia

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

▼ Review activity for **F1000Research**. (1)

journal, F1000Research
ISSN: [2046-1402](#)

Review date: 2022-04-14 **Type:** review **Role:** reviewer [Show more detail](#) [View](#)

Source:  F1000

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.



Regulatory Developments in Peer-to-Peer (P2P) Lending to Combat Frauds

Handbook of Research on Theory and Practice of Financial Crimes

[Show more detail](#)

2021-03-18 | Book chapter | Author

DOI: [10.4018/978-1-7998-5567-5.ch010](https://doi.org/10.4018/978-1-7998-5567-5.ch010)

Part of ISBN: [9781799855675](https://doi.org/9781799855675)

CONTRIBUTORS: Poshan Yu; Yingzi Hu; Maimoona Waseem; ABDUL RAFAY

Source: IGI Global Preferred source (of 3)

The Impact of News on Public-Private Partnership Stock Price in China via Text Mining Method

Intelligent Analytics With Advanced Multi-Industry Applications

[Show more detail](#)

2021-01-08 | Book chapter | Author

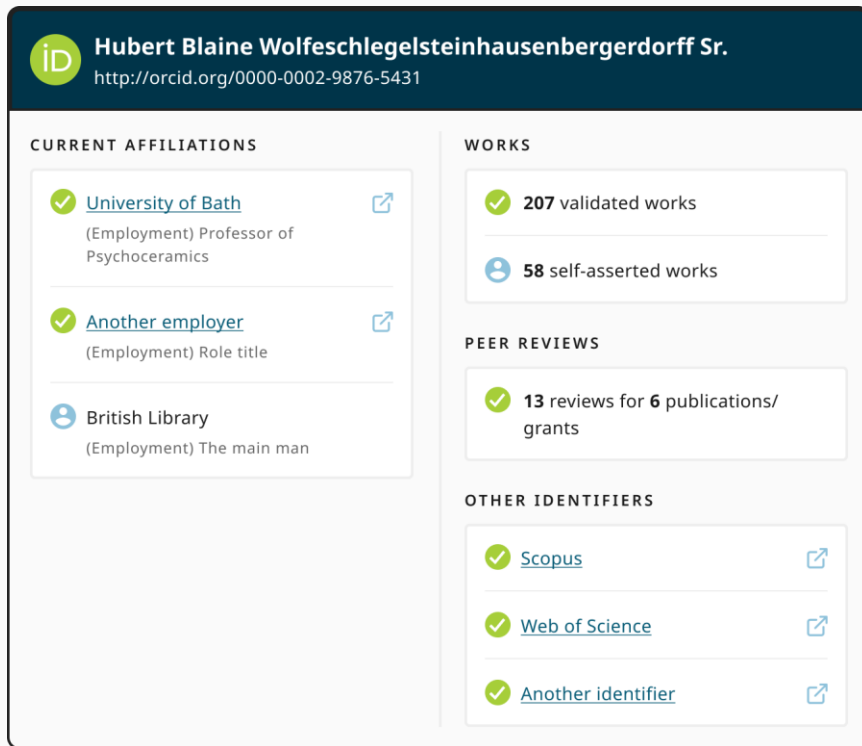
DOI: [10.4018/978-1-7998-4963-6.ch013](https://doi.org/10.4018/978-1-7998-4963-6.ch013)

Part of ISBN: [9781799849636](https://doi.org/9781799849636)

CONTRIBUTORS: Poshan Yu; Zhenyu Xu

Source: IGI Global Preferred source (of 3)

Publishers can use the Trust Summaries in editorial workflows



The screenshot displays an ORCID iD record for Hubert Blaine Wolfeschlegelsteinhausenbergerdorff Sr. The record is organized into several sections: 'CURRENT AFFILIATIONS' on the left and 'WORKS', 'PEER REVIEWS', and 'OTHER IDENTIFIERS' on the right. Each section contains a list of items with a green checkmark icon, indicating they are verified or trusted. The 'CURRENT AFFILIATIONS' section lists three entries: 'University of Bath' (Professor of Psychoceramics), 'Another employer' (Role title), and 'British Library' (The main man). The 'WORKS' section shows '207 validated works' and '58 self-asserted works'. The 'PEER REVIEWS' section shows '13 reviews for 6 publications/grants'. The 'OTHER IDENTIFIERS' section lists 'Scopus', 'Web of Science', and 'Another identifier'. Each entry in the 'OTHER IDENTIFIERS' section has a blue link icon to its right.

iD Hubert Blaine Wolfeschlegelsteinhausenbergerdorff Sr.
http://orcid.org/0000-0002-9876-5431

CURRENT AFFILIATIONS

- ✓ [University of Bath](#)
(Employment) Professor of Psychoceramics
- ✓ [Another employer](#)
(Employment) Role title
- ✓ [British Library](#)
(Employment) The main man

WORKS

- ✓ 207 validated works
- ✓ 58 self-asserted works

PEER REVIEWS

- ✓ 13 reviews for 6 publications/grants

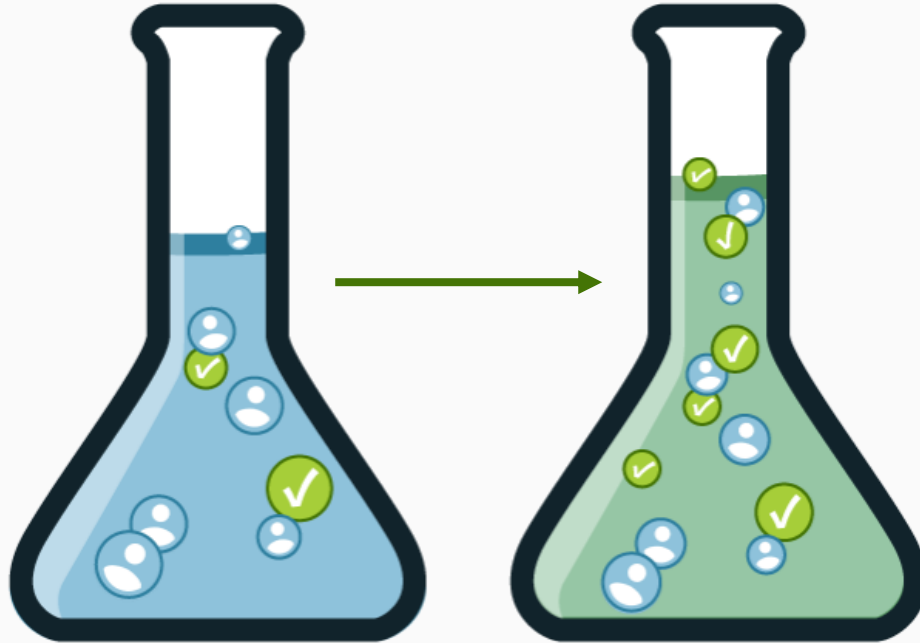
OTHER IDENTIFIERS

- ✓ [Scopus](#)
- ✓ [Web of Science](#)
- ✓ [Another identifier](#)

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



WORKS
✓ 3 Validated works
4 Self-asserted works
PEER REVIEWS
✓ 2 reviews for 2 publications/grants
FUNDING
1 Self-asserted funding

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:

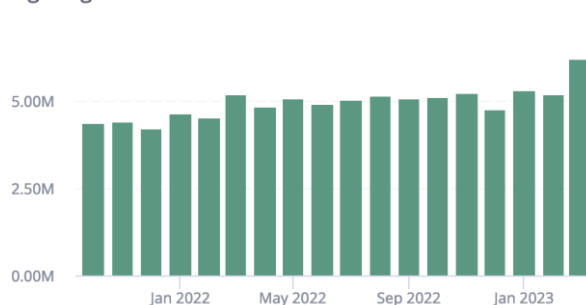


Review ORCID records to help with research integrity checks

Yearly Active Researchers Over Time



Single Sign-On Over Time



Publishers have added a lot of validated works and peer review trust markers

In Vitro Antimicrobial Studies of Mesoporous Silica Nanoparticles Comprising Anionic and Organic Salts

Pharmaceutics
2023-07-12 | Journal article
DOI: [10.3390/pharmaceutics15071934](https://doi.org/10.3390/pharmaceutics15071934)
CONTRIBUTORS: [Luisa Helena Gomes de Sousa](#), [Sara Maria Magalhães](#), [Sara Maria Magalhães](#), [Sara Maria Magalhães](#), [Sara Maria Magalhães](#), [Sara Maria Magalhães](#), [Sara Maria Magalhães](#), [Sara Maria Magalhães](#), [Sara Maria Magalhães](#), [Sara Maria Magalhães](#)

URL
<https://doi.org/10.3390/pharmaceutics15071934>

Contributors

- [Luisa Helena Gomes de Sousa](#) (Author)
- [Sara Maria Magalhães](#) (Author)
- [Sara Maria Magalhães](#) (Author)
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Added
2023-07-13

Last modified
2023-07-13

Source: Crossref Preferred source (of 3)

▼ **Peer review** (11 reviews for 5 publications/grants) Sort

▼ Review activity for **Macromolecular materials and engineering**. (4)

Journal, Macromolecular Materials and Engineering
ISSN: [1439-2054](#)

Review date: 2023 Type: review Role: reviewer Show more detail View
Source: Editorial Manager Journals at Wiley
Review date: 2023 Type: review Role: reviewer Show more detail View
Source: Web of Science Researcher Profile Sync
Review date: 2022 Type: review Role: reviewer Show more detail View
Source: Web of Science Researcher Profile Sync
Review date: 2022 Type: review Role: reviewer Show more detail View
Source: Editorial Manager Journals at Wiley

Decline of a distinct coral reef holobiont community under ocean acidification [Show less detail](#)

Microbiome
2024 | Journal article
DOI: [10.1186/s40168-023-01683-y](https://doi.org/10.1186/s40168-023-01683-y)

Added
2024-05-15

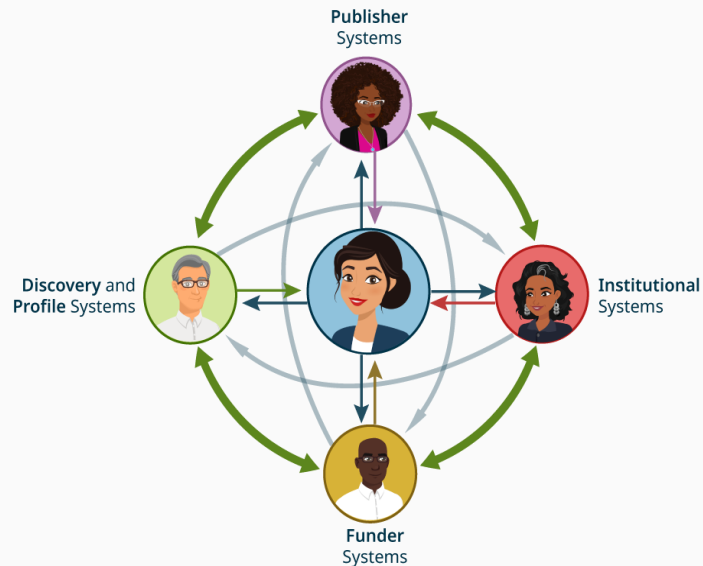
Last modified
2024-05-15

Source: Smithsonian Institution

Call for Actions

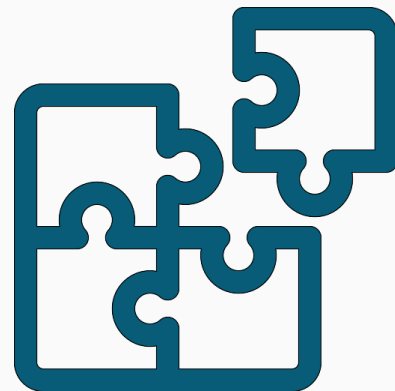
ORCID is a hub of research-related data circulated throughout scholarly systems

- 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!

Individuals



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



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



Editorial System



PKP PUBLIC KNOWLEDGE PROJECT

2. Research Information Systems



Esploro

3. Grant/Facility Application Management Systems



proposalcentral

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



Appendix

Additional Information



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.

They uniquely identify things



Persistent

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

They're stable and reliable



Resolvable by humans and machines

PIDs are easily made into URLs, with landing pages and underlying metadata.

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”:

People (authors, editors, curators etc)	ORCID, Scopus ID, ISNI etc	
Places (universities, funders etc)	RINGGOLD, ROR, GRID etc	
Things (articles, datasets, books etc)	DOI, ISSN, ISBN, PMCID etc	

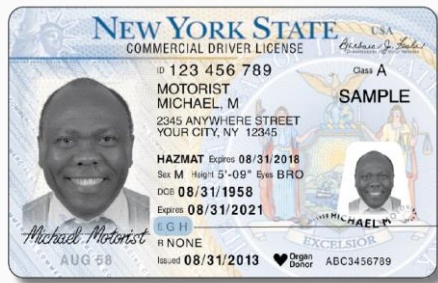
Now we include:

Grants	Crossref Grant IDs	
Projects	RAID	

(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

Traditional government ID:



- X Useful if you want to sue the researcher, but not for much else
- X Intrusive from a privacy point of view
- X Difficult to apply consistently around in all countries

Scholarly bona-fides:



- ✓ Likely strong correlation with genuine researchers
- ✓ Information that researchers generally make public on their profiles
- ✓ Universally used around the world

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

nature

How big is science's fake-paper problem?
Richard Van Noorden, 6 Nov 2023

“

*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

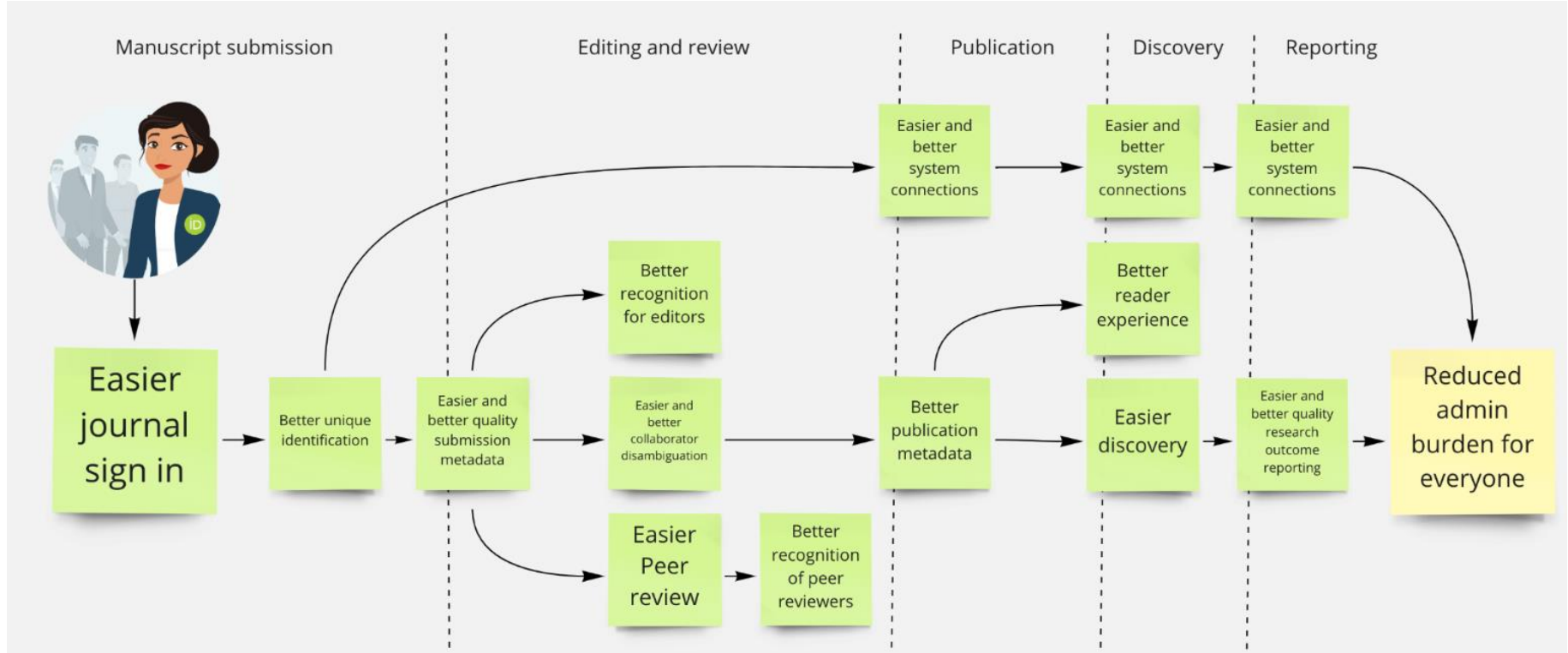
**The
Guardian**

The situation has become appalling, Robin McKie, 3 Feb 2024

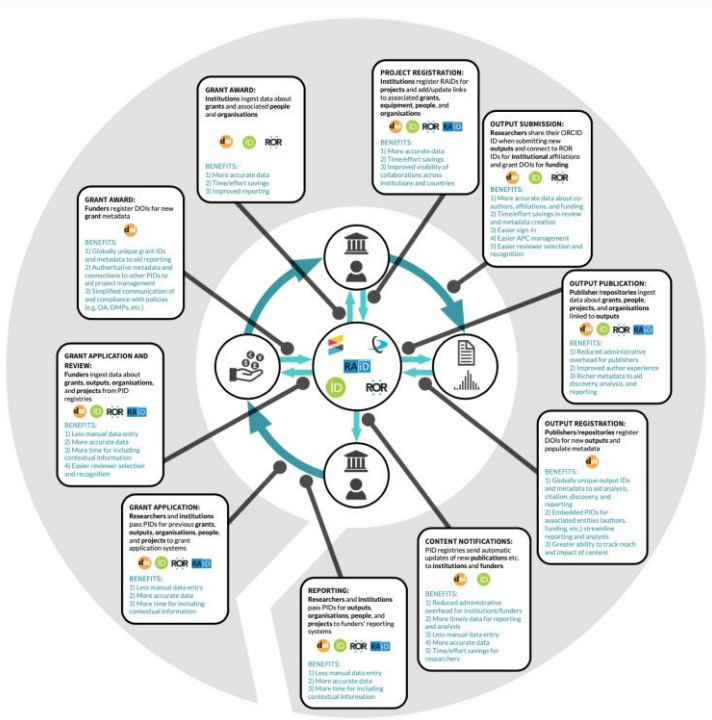
“

*“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.**”*

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.