

Using Identifiers in research workflows: I know this stuff is important, but tell me why

Crossref

Crossref lets organizations that publisher research register identifiers and metadata for their content. This metadata can contain ORCID iDs, funding and licence information and more. This information is made freely available so that it can be integrated into their research information systems to track research outputs.

ORCID

ORCID provides a persistent digital identifier that distinguishes each researcher from other researchers and, through integration in key workflows such as manuscript and grant submission, supports automated linkages between them and their professional activities ensuring that their work is recognised.

Heard about ROR?

Research Organizations Registry ROR is a community-led project to develop an open, sustainable, usable, and unique identifier for every research organization in the world. We'd love your input! <https://ror.org>

Imagine a world where your researchers can spend more time making research contributions, and be less frustrated managing and sharing those contributions; and where you can more easily follow their professional activities throughout their career.

ORCID and DOIs are vital components of the toolkit that can make this vision a reality. DOIs allow the community to distinguish unique professional activities such as research outputs and funding. ORCID iDs can distinguish your researchers and with APIs can significantly improve the flow of research information within and between organizations at every stage of the research lifecycle, from grant application and publication to research information management reporting. Connecting identifiers for people, place and things enables interoperability across sectors, borders and time.

Laying the foundations

Researcher registers for an ORCID iD

Researcher visits ORCID.org and signs up for an iD, and adds data to their record using free tools.

Researcher applies for funding

Institution adds employment data to ORCID record

Researcher authorises employer to read/update record

Employer system pushes their employment information to ORCID.

How & why

ORCID ID	name	names	Affiliations
https://orcid.org/0000-0001-6643-0618	Miles	Padgett	University of Glasgow, University of St Andrews, PA Consulting Group, Wellcome, University of Cambridge, The University of York
https://orcid.org/0000-0003-3093-3832	Miles		
https://orcid.org/0000-0003-9192-7783	Miles		
https://orcid.org/0000-0002-1728-5714	Miles		
https://orcid.org/0000-0003-2622-3635	Miles		
https://orcid.org/0000-0002-4951-7855	Jennifer	Padgett	
https://orcid.org/0000-0001-6189-2979	Michael	Padgett	

Many researchers have the same or similar names. Signing up for a free ORCID iD gives them a unique identifier to distinguish them.

Employment details change over time. ORCID records this so their activities are kept together in one place.

Supporting research

Funder pulls in career and CV data from ORCID record

Researcher authorises funder to read/update record.

Funder system pulls in grantee information by entering their ORCID and having their system pull back the rest of the information.

Funding application succeeds

Funder registers a DOI for the grant

Funders will soon start registering DOIs for grants with Crossref. A researcher can then enter their grant number and have the full grant information pulled in. Crossref will push this information to ORCID if an ORCID iD is included in the metadata funders provide.

Research information systems enable researchers to connect information about their affiliation, funding, works and more, seamlessly to their ORCID record. This enables this trusted information to be added and updated automatically across systems.

Publishing research

Funder adds award and review citations to ORCID record

Funder system sends data to ORCID when reward is granted

Ensures researcher (and their co-authors) are correctly identified

Publisher collects and authenticates author ORCID iDs during submission

Single sign-in to submission systems using ORCID credentials

Publisher queries ORCID for funding and employment

Information tied to ORCID records can be pulled into systems by ORCID members to increase accuracy

Funding information collected and disseminated

Publisher matches funder against funder publication policy so that they can publish in line with funder policies.

Reporting

Institutions and funders harvest publication data

Auto-update automatically adds publications to the researcher's ORCID record. They can then be found, reported on and pulled into research information systems or reported directly to funders.

Single-sign on in manuscript submission systems mean fewer account details to remember.

When a publisher registers content with Crossref or DataCite that has an ORCID iD, they'll push that publication information to the author's ORCID record, making it simple to keep it up-to-date.