



CROSSREF ANNUAL MEETING & BOARD ELECTION

2023-10-31

GOOD TO KNOW

- Review the Crossref code of conduct: crossref.org/code-of-conduct
- Join the discussion on Mastodon and X: #Crossref2023
- Please use the Q&A box for your questions
- The slides and recordings will be shared afterwards



Tuesday, October 31

9:30am UTC

✓ ✓ Welcome, introductions, and the latest on the Research Nexus

10:00am UTC

Updates from the community

Vincas Grigas • Martin Fenner • Iratxe Puebla

11:00am UTC

Product demonstrations + Q&A

Martyn Rittman • Erik Hanson • Luis Montilla • Lena Stoll • Rachael Lammey • Martin Eve • Esha Datta

1:00pm UTC

What do we still need to build a robust Research Nexus?

Ran Dang • Matt Buys • Kevin Stranack • Ludo Waltman • Mercury Shitindo • Ginny Hendricks • Patrica Feeney

2:00pm UTC

Annual meeting and board elections and Crossref strategy

3:00pm UTC

Updates from the community

Joann Fogleson • Shelley Stall • Edilson Damasio • Amanda French • Engjellushe Zenelaj • Kristina Vrouwenvelder

5:00pm UTC

Unplugged (watch this space)

2023 BOARD SLATE

Tier 1 candidates (electing five seats):

- Beilstein-Institut, Wendy Patterson
- Korean Council of Science Editors, Kihong Kim
- Lujosh Ventures Limited, Olu Joshua
- NISC Ltd, Mike Schramm
- OpenEdition, Marin Dacos
- Universidad Autónoma de Chile, Dr. Ivan Suazo
- Vilnius University, Vincas Grigas

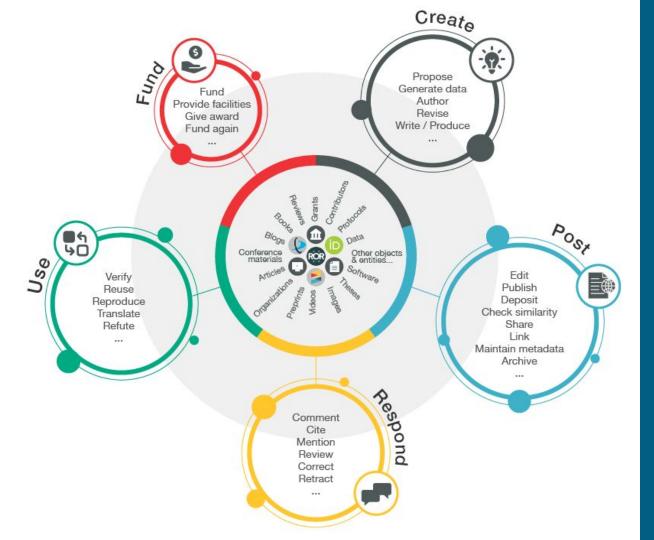
Tier 2 candidates (electing two seats):

- Association for Computing Machinery (ACM), Scott Delman
- Oxford University Press, James Phillpotts
- Public Library of Science (PLOS), Dan Shanahan
- University of Chicago Press, Ashley Towne

Voting closes at 13:00 UTC Email lucy@crossref.org if you still need to place or change your vote.

THE LATEST ON THE RESEARCH NEXUS





WHAT WE'RE AIMING FOR

- Bringing together the disparate parts of the scholarly record
- Better view of relationships (beyond PIDs)
- Exposing internal stuff publicly
- Enabling multi-party assertions
- Evidence. Provenance. Persistence.
- 60% of this is possible, the rest is aspirational



THE SCALE OF CROSSREF INFRASTRUCTURE

- >19,000 organisational members from 152 countries
- >150 million open metadata records with a DOI
- 1.1 billion DOI resolutions every month
- 000s (?) systems reusing metadata through search/API and
 1.2 billion queries every month (up from 607mil in 2018)
- 150 Sponsor orgs; 50 Ambassadors
- \$1,150,000 on data storage and processing alone in 2024
- 47 staff across 7 time zones and 10 countries

Records	As of Oct 2018	As of Oct 2023	% change	Growth slowing gradually
Total records registered	100,774,749	151,255,483	50%	over the years from 13% 7-8
Number of Journals	62,226	123,336	98%	years ago, to 10% 3-4 years ago, to now under 8% from
Number of Journal articles	73,957,459	102,775,406	105%	2022-23
Number of Books	1,285,818	1,913,683	49%	
Number of Book-related records	14,288,511	24,576,712	72%	
Number of Conference proceedings	62,190	105,077	69%	Preprints still growing,
Number of Conference papers	5,477,054	8,125,166	48%	particularly from American Association for Cancer
Number of Preprints	79,084	1,637,103	1970%	Research (AACR)
Number of Reports	586,195	746,921	27%	
Number of Peer reviews	13,456	421,782	3035%	Peer review reports also growing, this is typical
Number of Standards	257,470	378,946	47%	growth the last few years
Number of Components	3,454,155	7,865,443	128%	
Number of Databases	21,806	63,926	193%	
Number of Database-related records	1,704,946	2,919,950	71%	
Number of Dissertations	240,407	618,951	157%	Grant records have more than doubled, thanks to the
Number of Grants	6	87,259	1454217%	European Commission

Research Nexus connections	As of Oct 2018	As of Oct 2023	% change	
Records with references	41,516,410	66,508,539	60%	
Number of Cited-by matches	758,372,968	1,542,481,107	103%	
Number of Preprint-to-article links	17,883	555,134	3004%	
Number of unique records with Funder IDs	2,431,939	8,099,744	233%	
Records with one or more authors with ORCID iDs	1,950,216	12,114,204	521%	R
Total unique ORCID iDs	1,293,649	6,093,373	371%	
Total works auto-pushed to ORCID	1,363,337	16,256,452	1092%	4
Records with abstracts	2,707,893	26,814,551	890%	
Records with ROR IDs	n/a	73,560	n/a	
Records with Crossmark	7,747,598	25,013,338	223%	_
Crossmark status updates	93,223	267,583	187%	
Crossmark retractions	4,477	14,004	213%	4
Crossmark popup displays (av. per month)				
Research Nexus adoption	As of Oct 2018	As of Oct 2023	% change	
Members registering references	4,636	10,158	119%	
Members registering abstracts	3,645	22,312	512%	
Members participating in Crossmark	324	516	59%	Y
Members registering ORCID iDs	3,645	15,154	316%	
Members registering ROR IDs	n/a	290	n/a	
Members registering Funder IDs	746	2,161	190%	

Preprint to article links rising

ORCID Auto-update going well. And we reached 3 million authors granting us permission

No. retractions still very small (compared to RW) and No. members using Crossmark still small

The I4OA message is starting to get traction. Wiley!



TOP 15 BY MEMBER

Memb 21 n a 1e	Participation	No. records
Life Science Alliance, LLC	78.7%	1065
American Society for Microbiology	71.2%	294896
The Korean Association of Immunobiologists	70.0%	781
F1000 Research Ltd	69.5%	18126
The Korean Nutrition Society and The Korean Society of Community Nutrition	69.4%	1084
Korean Society of Clinical Nutrition	69.2%	308
Korean Vaccine Society	67.8%	268
The Korean Academy of Asthma, Allergy and Clinical Immunology and The Korean Academy of Pediatric Al	67.8%	1492
The Korean Society of Ocean Engineers	67.7%	313
Korean Society of Cardiovascular Disease Prevention	67.5%	71
The Korean Nutrition Society	67.4%	756
The Korean Association of Robotic Surgeons	66.3%	26
The Korean Society of Veterinary Science	66.3%	1554
Korean Society of Heart Failure	66.0%	89
The Korean Society for Brain and Neural Science	65.6%	544

TOP 10 LARGE MEMBERS

Member name	Participation	No. records
American Society for Microbiology	71.2%	29 <mark>4,8</mark> 96
Hindawi Limited	62 <mark>.4%</mark>	509,504
Rockefeller University Press	5 <mark>7.2%</mark>	62,414
Proceedings of the National Academy of Sciences	56.8%	158,254
American Geophysical Union (AGU)	54.4%	259,730
SAGE Publications	5 <mark>3.3%</mark>	3,000,311
Public Library of Science (PLoS)	53.2%	341,736
The Royal Society	53.0%	106,949
Royal Society of Chemistry (RSC)	49.6%	810,113
MDPI AG	48.5%	1,246,986







Home > Blog > Shooting for the stars - ASM's journey towards complete metadata

2 14 minute read.

Shooting for the stars - ASM's journey towards complete metadata



Kornelia Korzec, David Haber, Deborah Plavin – 2023 March 14 In Metadata, Community, Publishing, Research Nexus, Content Registration

At Crossref, we care a lot about the completeness and quality of metadata. Gathering robust metadata from across the global network of scholarly communication is essential for effective co-creation of the research nexus and making the inner workings of academia traceable and transparent. We invest time in community initiatives such as Metadata 20/20 and Better Together webinars. We encourage members to take time to look up their participation reports, and our team can support you if you're looking to understand and improve any aspects of metadata coverage of your content.

In 2022, we have observed with delight the growth of one of our members from basic coverage of their publications to over 90% in most areas, and no less than 70% of the corpus is covered by all key types of metadata Crossref enables (see their own participation report for details). Here, Deborah Plavin and David Haber share the story of ASM's success and lessons learnt along the way.





Crossref Member Metadata Metrics

Member Metrics Tables

The is a Crossref Labs Project. You have been warned.

That being said, please report any issues.

And the source code is on Gitlab.

Data last refreshed: Tue Oct 31 03:06:06 2023

Metadata coverage data for 22,418 Crossref members

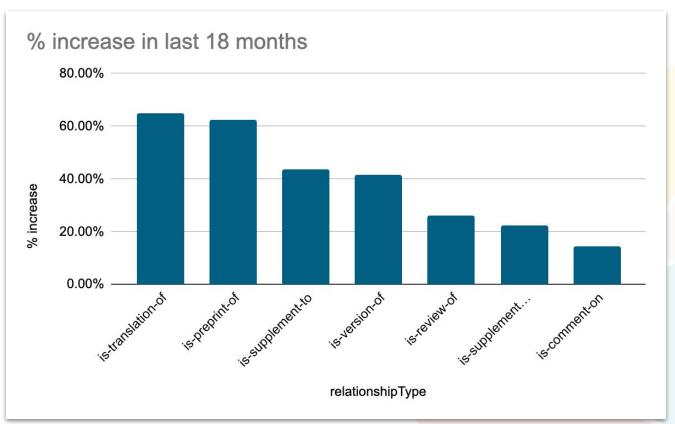
Filter dataframe on

Choose an option

https://member-metrics.fly.dev



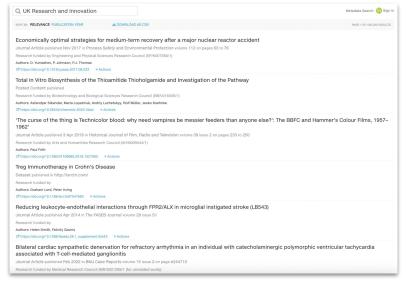
RELATIONSHIPS





FUNDING RELATIONSHIPS



























Society°





























Australian Research Data Commons















Vienna Science and Technology Fund





Project Title Implementing FAIR Workflows: a proof of concept study in the field

- Patilibgog, The Faith Global Crisinal Internation, IX

- Patilibgog, The Faith Global Crisinal Internation, IX

- Rata Barata, CAPES, Brazil

TWCF Grant No TWCF0568 https://doi.org/10.54224/20568

D3.2 Guide for funders to support FAIR workflows & enable research tracking

Date August 31, 2023

Authors Xiaoli Chen, DataCite Helena Cousijn, DataCite Ginny Hendricks, Crossref Shawna Sadler, ORCID Kelly Stathis, DataCite

Status Public

https://doi.org/10.5281/zenodo.8289142



crossref.org/working-groups/funders



oaswitchboard.org/blog-post-18july2 023-funder-pilot HOME MEMBERS



RESOURCES NEWS

ORFG Advances Efforts to Improve Research Output Tracking

JUNE 5, 2023

In June of 2022, the Open Research Funders Group (ORFG) <u>launched a public effort</u> to improve research output tracking. We began by publishing an <u>open lette</u> to the community, outlining priority areas such as persistent identifiers (RIDs) and machine readable metadata, and recommended actions for funders, publishers, infrastructure providers, and other key actors. We then opened up a <u>unrey</u> to receive community feedback, and <u>resorted publicly</u> on the results in September of 2022. Later that same month, we began holding regular <u>open community</u> calls to bring together diverse actors across the research ecosystem and discuss possible workstreams. Our community calls – four in total to date – have consistently had good engagement, with 40–50 participants per essession.

orfg.org/news/2023/6/5/orfg -advances-efforts-to-improv e-research-output-tracking



LABS METADATA PIPELINE

Testing	Queued up	Planning
Alternate namesROR as funder ID	 publication types in citations expand contributor roles (CRediT) Grants updates Preprint updates 	 Statements expand markup for abstracts multi-lingual metadata relationships review





Including ROR as a funder identifier in your metadata 🎤

Questions from Crossref ror, grants, funder-registry, labs, 2+ PFeeney



PFeeney Crossref team

18h

As many of you know, the Open Funder Registry will transition into the ROR Registry 3. We will be supporting ROR IDs instead of Funder IDs in Crossref metadata record registration soon but first would like to test the process using our Labs metadata pipeline and need your XML - we've done some internal testing but as we all know the fun doesn't really begin until we have real-world metadata records to ingest. We'll have an API available soon but for our initial round of testing we'd like to upload your XML ourselves to work out any problems in advance.

If you collect ROR identifiers and want to include them as funder identifiers, details on the changes and logic are available [in this document], or feel free to contact us with any questions or comments.

Assigned topic to PFeeney







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last reply 16h reply

52 views

users

likes

link





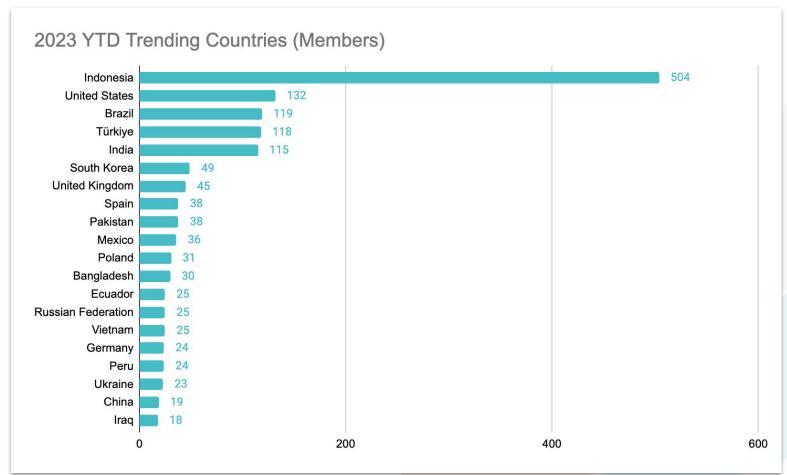




GLOBAL EQUITABLE MEMBERSHIP (GEM) PROGRAM

- 59 countries covered, based on International Development Association data
- >350 GEM members since January 2023
- Goal is to include as much research as possible in the global scholarly record
- Only necessary because our fee model hasn't kept up with how our community has evolved
- "Rightsizing Crossref" consultation project in 2024 to include fee remodelling





UPDATES FROM THE COMMUNITY



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FLASH TALKS

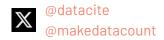
- Iratxe Puebla, DataCite
- Vincas Grigas, Vilnius University
- Martin Fenner, Front Matter
- Izabela Szprowska, OP and European Commission; Nikolaos Mitrakis, European Commission; and Paola Mazzucchi, mEDRA



Making data citations available at scale: The Global Open Data Citation Corpus

Iratxe Puebla

Director of Make Data Count at DataCite Crossref annual meeting 31 October 2023







Data sharing is valuable, but what value do we assign to data sharing?



To nurture data sharing, we need to make it rewarding

There is currently a lack of incentives > Research assessment frameworks often focus on publications and do not include data

As a result, researchers perceive data sharing as a burden that brings little professional benefit

"I don't have time. [...] It's not incentivized either [...] so why would I spend some time on something where it really amounts to no recognition [...]. People who are in this community might think I'm a good person [...] and that's fine. I can accept that. But I'm not going to track it, necessarily, because it doesn't amount to anything that's recognized."

Professor, Anesthesiology, Canada

Make Data Count



Make Data Count is an initiative that **promotes** open data metrics to enable evaluation and reward of research data usage and impact.

Data metrics should be:

- Community led
- Open
- Contextualized

Make Data Count leads projects to drive adoption of data usage metrics, including open infrastructure, best practices and outreach.

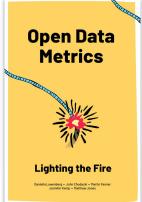


The COUNTER Code of Practice for Research Data

The Code of Practice for Research Data Usage Metrics standardizes the generation and distribution of usage metrics for research date, enabling for the first time the consistent and credible reporting of research data usa COUNTER welcomes input and feedback from the community on this first iteration, so that it can be further developed and refined.

A downloadable PDF is now available in the download section below





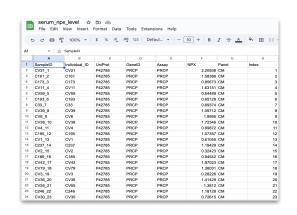
makedatacount.org/about-us/

Data Citations



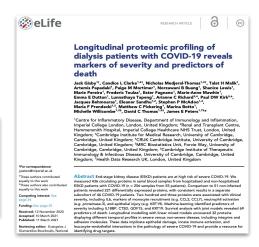
Data citations are one measure of data usage: they provide a link between the dataset and another research object, clearly pointing to the data being used or reused in research.

- Data citations are useful:
 - Valued by researchers
 - Work has been done to develop workflows (at repository & publishers) and AI tools to identify data citations





Gisby J, Clarke CL, Medjeral-Thomas N, Malik TH, Papadaki A, Mortimer PM, Buang NB, Lewis S, Pereira M, Toulza F, Fagnano E, Mawhin M, Dutton EE, Tapeng L, Kirk P, Behmoaras J, Sandhu E, McAdoo SP, Prendecki MF, Pickering MC, Botto M, Willicombe W, Thomas DC, Peters JE (2020) **Dryad Digital Repository** Longitudinal proteomic profiling of high-risk patients with COVID-19 reveals markers of severity and predictors of fatal disease. https://doi.org/10.5061/dryad.6t1g1jwxi



Data Citations: The challenges



The data citation workflow requires several steps involving different stakeholders in order for the information to propagate



Event data

Data Citations: The challenges



Data citation workflow requires several steps involving different stakeholders in order for the information to propagate



Researchers do not always cite the data they use

Not all repositories capture citation information

Some repositories use accession numbers instead of DOIs

Citations and/or associated metadata may be lost when the publisher deposits in Crossref Event data

We know there are many more instances of data usage than we are currently capturing

Workflow adapted from Susan Borda '<u>If Data is Used in the Forest and No-one is Around to Hear it, Did it Happen? a Citation Count Investigation</u>'.

Global Open Data



Goal: Develop a comprehensive corpus that incorporates data citations from different sources into a centralized, publicly accessible community resource



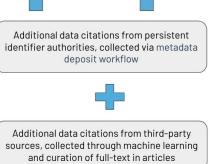


from CZI

Knowledge Graph

Zuckerberg

Initiative



The second secon

<u>makedatacount.org/data-citation/</u> <u>http://corpus.stage.datacite.org/dashboard</u>

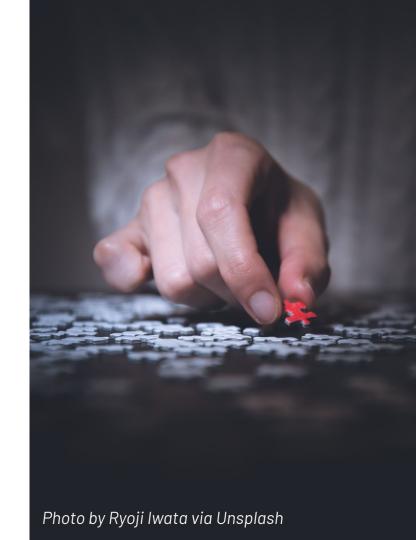
Thank you!

We will seek community input as we work on the development of the data citation corpus. Interested in learning more? Do get in touch:

<u>iratxe.puebla@datacite.org</u> <u>info@datacite.org</u>

Make Data Count: makedatacount.org

Data citation corpus: makedatacount.org/data-citation



Who Cares? Defining Citation Style in Scholarly Journals

Vincas Grigas, Pavla Vizváry

Vilnius University, Lithuania Masaryk University, Czech Republic #Crossref2023:

Updates from the community

Hello!

Quote by Dr. Ian Malcolm:

"Your scientists were so preoccupied with whether or not they could, they didn't stop to think if they should."

Academic publishing and the labyrinth of citation styles.

The number in the Zotero Style Repository: 10,377!



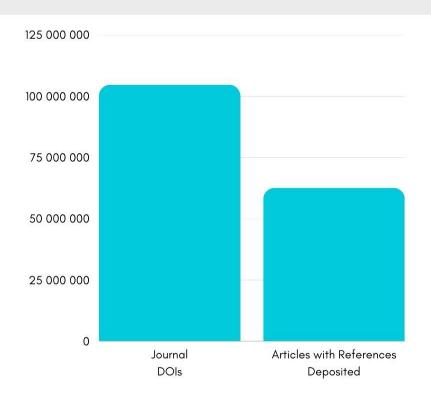
Joe Shlabotnik, Flickr

Challenges

Challenges faced by authors:

- Finding the correct citation style.
- Locating it in their citation manager.
- Ensuring correct referencing.

Use of DOIs



Observation

- Only half of the articles registered in Crossref provide reference lists with article metadata.
- Crossref's recognition of references depends on the provision of DOIs in references.
- Do journals require the provision of DOIs in references?

Why and what?

Goal of the study:

• Understand journal practices for citation guidelines.

Method:

 Analyzed 270 high-quality journals from Scopus (distribution by region).

Objectives:

- Prevalence of citation styles.
- How journals set citation style guidelines.
- Mandate of DOIs in references.

Results

- 54.1% of journals don't specify a citation style.
- Rankings of styles:
 - o APA: 18.1%
 - Vancouver, Harvard, Chicago: 6.3% to 4.8%
 - ISO 690 and AMA: 4.1% and 3.3%

ChatGPT analysis



Findings

Assessment goal:

• Determine conformity of unnamed reference styles.

Findings:

• Presence of known styles, but with slight modifications.

Implications:

• Complications with reference managers due to modified styles.

Image generated by DALL·E 3

Concerns and impacts

The "unnamed" approach:

 More complexity for authors and potential incorrect formatting.

DOIs as a solution:

- 41.1% of journals request DOIs.
- 78.1% include DOIs in reference lists.

Additional insights

- No significant impact based on the country of origin.
- Influence is related to the journal's scientific field.
- No attention to reference styles.
- Lack of requirements to include DOIs.

Conclusion & Recommendations

- Need for standardization or clear guidelines.
- Emphasize the importance of DOIs in improving the referencing system.
- Need for education among journals and authors.

October 31, 2023

Who Cares? Defining Citation Style in Scholarly Journals

Open for the questions.

Emails:

vincas.grigas@leidykla.vu.lt kovarova@phil.muni.cz #Crossref2023:

Updates from the community

FLASH TALKS

Martin Fenner, Front Matter

DOI registration for scholarly blogs

Martin Fenner, Front Matter, Münster, Germany, https://orcid.org/0000-0003-1419-2405

Scholarly blogs are an essential part of scholarly communication, but have not yet become a formal part of the scholarly record.

Here we present initial work on content registration for scholar blog posts with Crossref DOIs, named Rogue Scholar (https://rogue-scholar.org). We explored the interest by the scholarly community, the technical challenges, and the costs associated with building and maintaining this infrastructure.

Introduction

Blogs are a technology to publish content on the web that became popular in the early 2000s. Common functionalities include serial publication as *posts*, and *feeds* in RSS or Atom formats to automatically consume content and metadata.

The most common platform is Wordpress, but there are many open source and commercial alternatives.

The technology has been widely used to publish scholarly content, but with a few exceptions has not been integrated with traditional scholarly publishing efforts, including the use of persistent identifiers and standard metadata, and efforts on long-term preservation.

Use Cases

Scholarly blogs are a particularly good fit for some scholarly publishing use cases:

- Individual researchers self-publishing their work, or providing feedback on published work.
- Emerging publication efforts with limited resources.
- Provide context, e.g. editorials or perspectives, for other publication formats such as preprints, datasets, software, or traditional research articles.
- Front matter content from organizations or projects, e.g. news or announcements.

Initial Work

January 2023. Announced Rogue Scholar project, and opened a waitlist for interested blogs.

April 2023. Launched the initial service with support for importing blogs via RSS, Atom and JSON Feed.

June 2023. Started DOI registration and full-text search. Started extracting references from full-text. Twenty science blogs included.

August 2023. Added automated signup via user accounts. Launched payment system for larger blogs and donations.

September 2023. Added support for retrieving blog posts via API (Wordpress, Ghost, Substack). Initial Fediverse (Mastodon) integration. Fifty science blogs included.

October 2023. Launched initial version of a dedicated API. (https://api.rogue-scholar.org).

Results

DOI registration for scholarly blogs is feasible, cost-effective and of interest to the scholarly community, with close to 10,000 (9,139 as of October 19, 2023) blog posts from 63 blogs, using 12 different platforms in 4 languages, registered in less than six months.

DOi registrations work with existing blogs and don't require technical work by the blog (some configuration changes are helpful).

DOI registration includes rich metadata without major efforts by participating blogs, including abstract, license, language, ORCID IDs, references, and relationships (e.g. *IsIdenticalTo, IsTranslationOf*).

By requiring full-text content with an open license (CC-BY) and proving an open API, additional services reusing and mixing content are possible and encouraged. The first such service is a central full-text search.

Future Work

- Long-term archiving with the Internet Archive
 Signed up with the Internet Archive Archive-It service for long-term archiving of all participating blogs.
- Improve and better document the open API
 Further work on the dedicated API that was launched in October,
 including better integration with participating blogs, and additional metadata conversions.
- Other output formats
 Started working with the Zenodo open repository to provide blog posts in other formats, including PDF and ePub.

Wish List for Crossref

Going forward, the following improvements could make it easier to register scholarly blog posts as content with Crossref:

- Encourage other Crossref sponsors to work with science blogs.
- Add support for the content type Blog Post as sub-type of Posted Content.
- Add support for container name (the blog name) and container
 ID (e.g. ISSN and/or DOI) to Posted Content metadata.
- Consider adding *Feature Image* (optional, string), the URL of the main image for the content, to *Posted Content* metadata.

FLASH TALKS

- Izabela Szyprowska (OP, European Commission)
- Nikolaos Mitrakis (RTD, European Commission)
- Paola Mazzucchi (mEDRA)



GRANT DOIS AT THE EU PUBLICATIONS OFFICE

Izabela Szyprowska (Publications Office)
31/10/2023



Implementing DOIs for grants at the European Commission

Nikolaos MITRAKIS

Deputy Head of Unit

Directorate-General for Research & Innovation Common Knowledge and Data Management Service Unit

31/10/2023



Horizon Europe

 Horizon Europe is the EU's key funding programme for research and innovation

It tackles climate change, helps to achieve the UN's Sustainable
 Development Goals and boosts the EU's competitiveness and growth.

- Programme duration: 2021-2027
- Total budget 2021-2027: € 95.51 billion



Why DOIs for Grants?

 An internal discussion on the use of grant IDs lead in an agreement that the European Commission (EC) should issue grant IDs for Horizon Europe.

 The overall purpose for the EC is to contribute to the general development of PIDs in a mid- and long-term timescale.

 The idea underpinning this effort is that the availability of PIDs will become an important factor in the steering and evaluation of R&I Policies.



Key Use Case of DOIs for Grants

Evaluation and monitoring of the impact of the framework programme.

 Better links between grants and related publications, including other research outputs such as patents, prototypes, software components, etc

 Objective: Simplified analysis when the link is declared via a PID instead of as free-form text



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@EU Commission



EUTube



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EU Spotify



European Commission



Thank you



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DEMOS, EXPERIMENTS AND Q&A

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Tier 2 candidates (electing two seats):

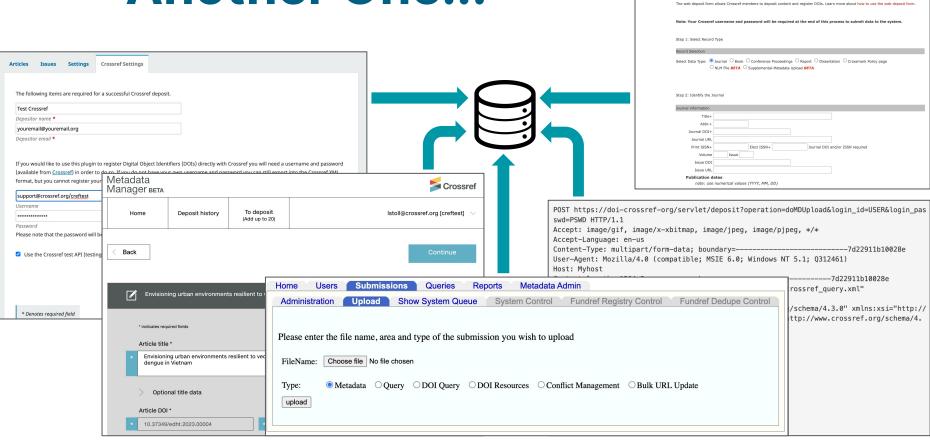
- Association for Computing Machinery (ACM), Scott Delman
- Oxford University Press, James Phillpotts
- Public Library of Science (PLOS), Dan Shanahan
- University of Chicago Press, Ashley Towne

Voting closes at 13:00 UTC Email lucy@crossref.org if you still need to place or change your vote.

PRODUCT DEMO #1

- Making it easier for our members to register content
 - Simple content registration form for journal articles
 - Lena Stoll, Crossref

Another One..?



Crossref

webDeposit

Var. 1.56

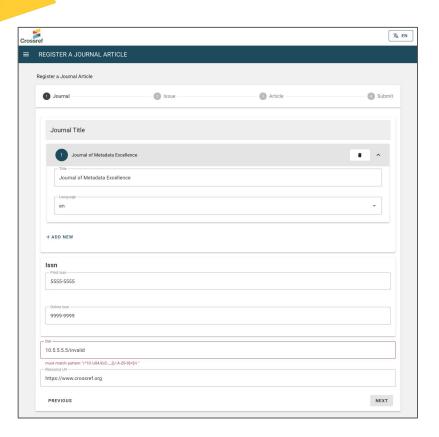
Another One..?

Each of the existing tools serves a different set of use cases. Each of the existing tools has critical limitations.

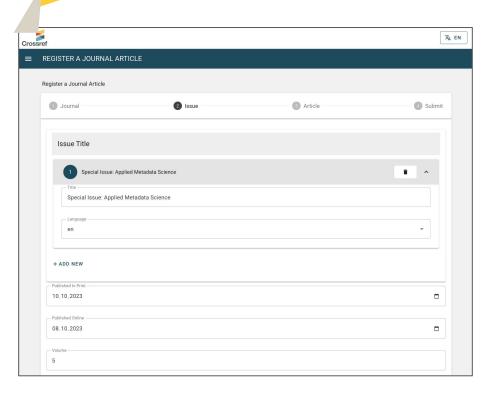
With the new content registration tool, we aim to:

- Build on a flexible, scalable, and schema-driven framework
- Unify multiple disparate user interfaces
- Offer a localisable and accessible user experience

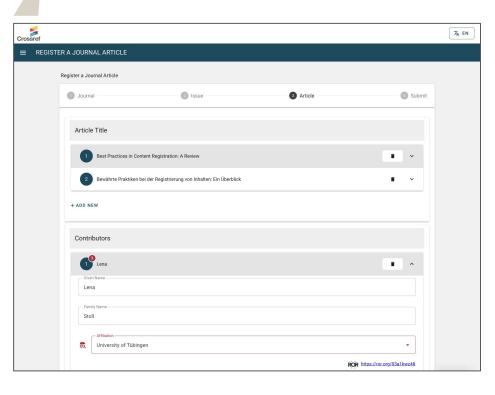
https://www.crossref.org/blog/next-steps-for-content-registration/



- Focus on key metadata fields
- Input validation to combat human error
- Localisable and accessible by design

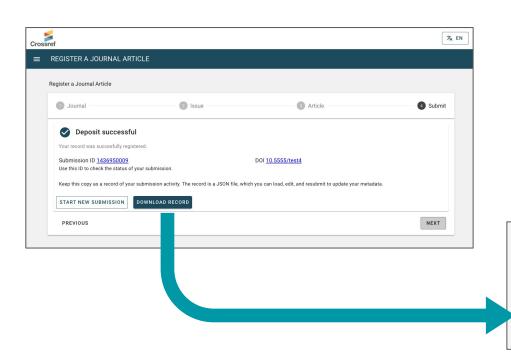


- Focus on key metadata fields
- Input validation to combat human error
- Localisable and accessible by design



- Focus on key metadata fields
- Input validation to combat human error
- Localisable and accessible by design





Coming soon:

Load in previously created records for easy editing

Start record submission Register your metadata with Crossref. Create a new record by completing the form or by loading a record.	
NEW RECORD	
LOAD RECORD	
You can load a previously downloade	d record. Drag & drop a record anywhere on this page to load.

Next Steps

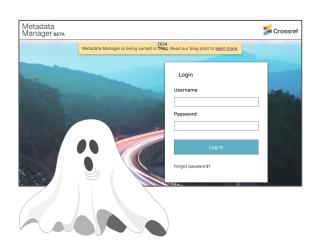
Share and Test Prototype

Iterate and develop MVP

Sunsetting Metadata Manager

- Feedback from Crossref staff
- Feedback from Crossref Ambassadors
- User testing

- Feedback from Crossref staff
- Feedback from Crossref Ambassadors
- User testing
- Wider community feedback
- Production rollout





Thank you!

- Grants registration form: https://manage.crossref.org/records
- Community Forum: https://community.crossref.org
- Email: <u>Istoll@crossref.org</u>

- Making it easier for our members to register content
 - PKP's improvements to the OJS content registration plugin
 - Erik Hanson, PKP

- Building the Research Nexus
 - Providing more comprehensive support for data citation
 - Martyn Rittman, Crossref

- Building the Research Nexus
 - Making the most of metadata using Crossref's REST API
 - Luis Montilla, Crossref



...an intro to the Crossref API

Or how I learned to love APIs

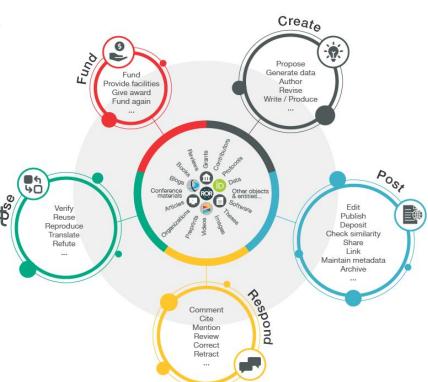
Luis Montilla Technical Community Manager



The 'research nexus'

"A rich and reusable open **network**of relationships connecting
research organizations, people,
things, and actions; a scholarly
record that the global community
can build on forever, for the benefit
of society."

Metadata is the thread that is woven to produce such a network





We make this metadata open through our REST API

A software intermediary that allows two applications to talk to each other.





APIs are often compared to a waiter's service, facilitating communication between customers ordering items from a menu and the kitchen producing those items.









We make this metadata open through our REST API

https://api.crossref.org/



/swagger-docs

Explore

Crossref Unified Resource API

/swagger-docs

Preamble

The Crossref REST API is one of a variety of tools and APIs that allow anybody to search and reuse our members' metadata in sophisticated ways.

If you read nothing else, please at least look at the API TIPs document and the "Etiquette" section of this document. It will save you (and us) much heartburn.



Good to remember...

You have three access levels to the API metadata:

- Public. Free, fully anonymous.
- Polite. Free, you provide your email (recommended).¹
 - We only use this information to contact you in case of issues.
 - Include 'mailto' field in your API query.
- Plus. Premium service, you get:
 - A service level agreement guaranteeing you extra service and support, giving you a consistent and predictable experience.
 - Additional features such as snapshots and priority service/rate limits.

¹We get rid of your information after 90 days.



How to...?

We can send requests using a command line interface or pasting our queries in the web browser.

Alternatively, API clients are powerful tools to assist us in our data retrieval

You can also execute the queries directly in your web browser







How to...?

https://api.crossref.org/v1/funders?query=german+research+foundation&mailto=your.name@org.org

Server Endpoints ?Parameters

GET

Enter URL or paste text

Send

Send

Who is providing the data?

Digital locations where an API receives requests about specific resources

They determine the type of action you want to take on the resource

Prefixes Endpoints that expose prefix related data Funders Endpoints that expose funder related data /funders/{id}/works GET /prefixes/{prefix}/works GET /funders/{id} /prefixes/{prefix} GET GET /funders **Members** Endpoints that expose member related data Journals Endpoints that expose journal related data GET /members/{id}/works /journals GET GET /members/{id} /journals/{issn} GET /members GET /journals/{issn}/works Types Endpoints that expose type related data Works Endpoints that expose works related data GET /types/{id} GET /works/{doi} GET /types GET /works /types/{id}/works GET /works/{doi}/agency



Let's see some basic examples

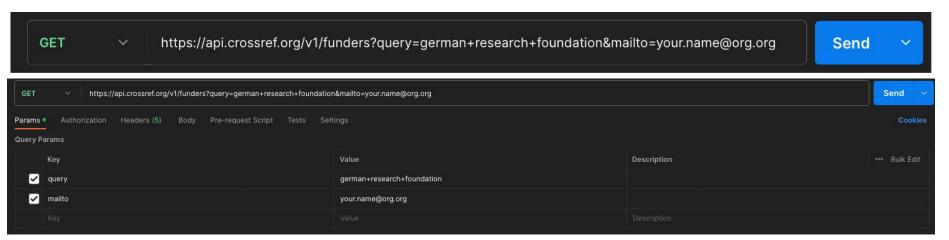
Funder to article relationships

"Funders do not automatically know when work they have funded is published, but it is important for reporting on the impact of grants.

This is difficult for them to find out by some other means as publishers, authors, and institutions do not systematically report this information."



Funder to article relationships



Query Params				
	Key	Value		
	query	german+research+foundation		
$\overline{\mathbf{Z}}$	mailto	lmontilla@crossref.org		
	Key	Value		

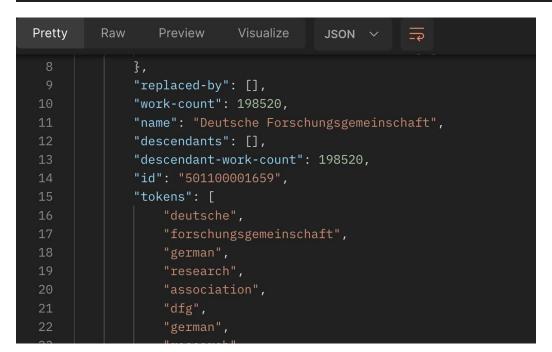




```
"total-results": 4.
"items": [
       "id": "501100001659",
       "name": "Deutsche Forschungsgemeinschaft",
        "alt-names": [
            "German Research Association",
            "German Research Foundation"
       "replaces": [],
       "replaced-by": [],
        "tokens": [
            "dfg",
       "id": "501100005970",
        "name": "Deutsche Stiftung für Herzforschung",
        "alt-names": [
            "German Heart Research Foundation"
        "uri": "http://dx.doi.org/10.13039/501100005970",
```



GET v https://api.crossref.org/v1/funders/501100001659?mailto=your.name@org.org





Funder to article relationships

- You try it?

- 1. Visit https://api.crossref.org/
- 2. Scroll down to Funders and click GET
- 3. Scroll down to the parameter fields
- 4. Add your email to the mailto field
- 5. Add a funder organization to the query field
- 6. Click Execute



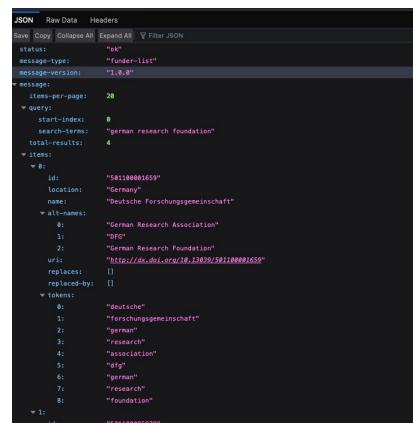
Funder to article relationships You try it

```
curl -X 'GET' \
   'https://api.crossref.org/funders?query=german%20research%20foundation&mailto=lmontilla%40crossref.org'
  -H 'accept: application/json'
Request URL
https://api.crossref.org/funders?querv=qerman%20research%20foundation&mailto=lmontilla%40crossref.org
Server response
Code
           Details
200
           Response body
               "status": "ok",
               "message-type": "funder-list",
               "message-version": "1.0.0",
               "message": {
                 "items-per-page": 20,
                 "query": {
                   "start-index": 0.
                  "search-terms": "german research foundation"
                 "total-results": 4,
                 "items": Γ
                     "id": "501100001659",
                     "location": "Germany",
                     "name": "Deutsche Forschungsgemeinschaft",
                     "alt-names": [
                       "German Research Association",
                       "German Research Foundation"
                    ],
"uri": "http://dx.doi.org/10.13039/501100001659",
                     "replaces": □,
                     "replaced-by": [],
```

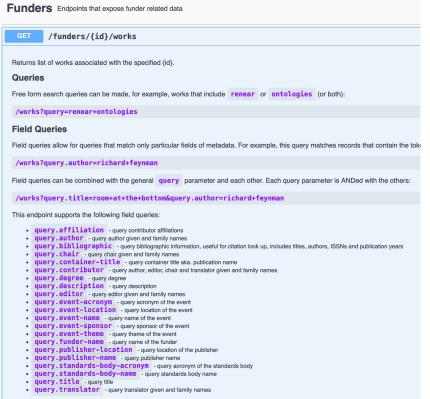


Funder to article relationships

You try it









Article to funder relationships How many are openly available?

GET https://api.crossref.org/v1/funders/50	1100001659/works?mailto=your.name@org.org&filter=h	as-full-text:false,type:journal-article	Send v		
Params • Authorization Headers (6) Body Pr	e-request Script Tests Settings		Cookies		
Query Params					
Key	Value	Description	••• Bulk Edit		
✓ mailto	your.name@org.org				
✓ filter	has-full-text:false,type:journal-article				
Кеу	Value	Description			



Try it out!

https://api.crossref.org/v1/funders/501100001659/works?mailto=your.name@org.org&filter=has-full-text:false,type:journal-article

ID of interest

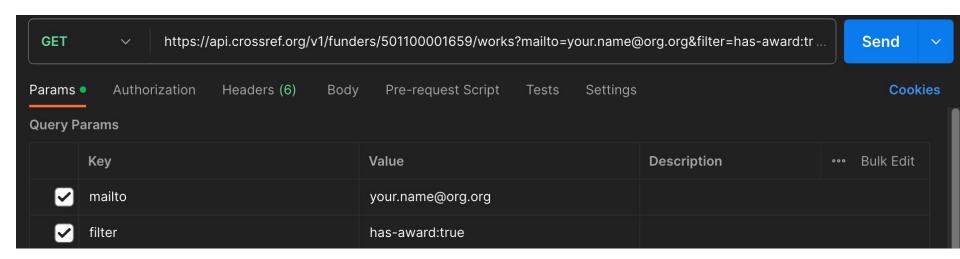
email

Filter 1

Filter 2

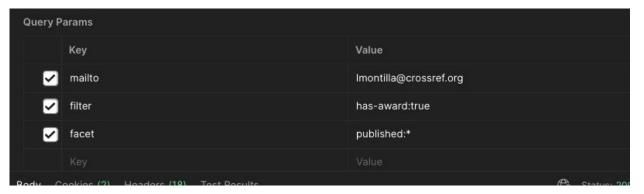


Article to funder relationships Which specific grant(s) were awarded?





Article to funder relationships Which specific grant(s) were awarded?



```
"message-type": "work-list",
"message-version": "1.0.0",
"message": {
        "published": {
            "value-count": 51.
            "values": {
                "2022": 22652,
                "2020": 22416.
                "2019": 20302,
                "2018": 18040,
                "2016": 12593.
                "2015": 9247,
                "2014": 4535.
                "2013": 1302.
                "2011": 989,
                "2012": 984,
                "2010": 668.
                "2009": 383,
                "2008": 278,
```



Works related to authors

https://api.crossref.org/v1/funders/501100001659/works?mailto=your.name@org.org&filter=has-full-text:false,type:journal-article

https://api.crossref.org/works?mailto=Imontilla@crossref.org&filter=orcid:0000-0002-7079-6775

- Building the Research Nexus
 - Viewing and using Retraction Watch data via the Crossref Labs API
 - Martin Eve, Rachael Lammey, Crossref

Retraction Watch & Crossref

12th September 2023 — The Center for Scientific Integrity, the organisation behind the Retraction Watch blog and database, and Crossref, the global infrastructure underpinning research communications, both not-for-profits, announced today that the Retraction Watch database has been acquired by Crossref and made a public resource. An agreement between the two organisations will allow Retraction Watch to keep the data populated on an ongoing basis and always open, alongside publishers registering their retraction notices directly with Crossref.

https://doi.org/10.13003/c23rw1d9

What kind of things can I do with the data?

updates

- Build interfaces, tools and services or add functionality existing tools
- Notify: streamline existing workflows and build new ones
- Research the research

The use cases above can only be enabled with comprehensive, high quality, open data on retractions.

Retraction Watch & Crossref

- The full dataset has been released through Crossref's
 Labs API, initially as a .csv file to download directly:
 https://api.labs.crossref.org/data/retractionwatch?name@email.org (add your 'mailto').
- The Crossref Labs API also displays information about retractions in the /works/ route when metadata is available, such as https://api.labs.crossref.org/works/10.2147/CMAR.S3249
 20?name@email.org (add your 'mailto'). We'd recommend using a .json viewer to look at the information using a browser.

```
status: "ok".
message-type: "work",
message-version: "1.0.0",
 - cr-labs-retractions: [
              source: "This work has a retraction record associated with it, asserted by Retract.
              source_url: "https://retractionwatch.com",
              stability: "The keys used in this API block are unstable and subject to change at
          asserted-by: "https://ror.org/005b4k264",
          retraction-doi: "https://doi.org/10.2147/CMAR.S358886",
              "Concerns/Issues About Image",
              "Duplication of Image",
              "Original Data not Provided".
              "Unreliable Data"
          retraction-nature: "Retraction",
          notes: "",
         - urls: [
          1,
          retraction-date: "2022-01-20 00:00:00'
  - indexed: {
     - date-parts: [
       date-time: "2023-04-04T05:41:28Z",
       timestamp: 1680586888401
   reference-count: 37,
   publisher: "Informa UK Limited",
  - license:
```

```
"message": {
   "cr-labs-updates": [
         "about": {
            "source": "This work has an update record associated with it, asserted
            by Retraction Watch.",
            "source url": "https://retractionwatch.com",
            "stability": "The keys used in this API block are unstable and subject
            to change at any future time."
         },
         "asserted-by": "https://ror.org/005b4k264",
         "target-doi": "https://doi.org/10.2147/CMAR.S358886",
         "reasons": [
            "Concerns/Issues About Image",
            "Duplication of Image",
            "Original Data not Provided",
            "Unreliable Data"
         ],
         "update-nature": "Retraction",
         "notes": "",
         "urls": [
            11 11
         ],
         "update-date": "2022-01-20 00:00:00"
```

- Building the Research Nexus
 - What does preservation look like for Crossref members and how can we support it?
 - Martin Eve, Crossref

- Building the Research Nexus
 - Introducing a tool for registering DOIs for static site generators
 - Esha Datta, Crossref
- Repository
 (https://gitlab.com/crossref/labs/static-page-id-generator/)

- 1. Track files in a static site git repository specified by the user
- 2. Generates unique id for tracked files which are turned into DOIs
- For Crossref members
 - Features 1 & 2
 - Generates xml deposit files
 - Deposits the xml to Crossref
 - Registers the DOIs,
 - Adds DOIs back to the tracked files in question
- For non-Crossref members
 - Only Feature 1 & 2
 - Plugin functionality will be in development soon
- Demo video

THANKS



GOOD TO KNOW

- Review the Crossref code of conduct: crossref.org/code-of-conduct
- Join the discussion on Mastodon and X: #Crossref2023
- Please use the Q&A box for your questions
- The slides and recordings will be shared afterwards

WHAT DO WE STILL NEED TO BUILD A ROBUST RESEARCH NEXUS?

GOOD TO KNOW

- Review the Crossref code of conduct: crossref.org/code-of-conduct
- Join the discussion on Mastodon and X: #Crossref2023
- 🔼 Please use the Q&A box for your questions or 🤚
- The slides and recordings will be shared afterwards



Like others... we envision

"a rich and reusable open network of relationships connecting research organizations, people, things, and actions; a scholarly record that the global community can build on forever, for the benefit of society."

'RESEARCH NEXUS' PANEL

- Matt Buys, DataCite
- Ran Dang, Atlantis Press
- Patricia Feeney, Crossref
- Ginny Hendricks, Crossref
- Mercury Shitindo, St. Paul's University, Kenya
- Kevin Stranack, PKP
- Ludo Waltman, CWTS Leiden University

ANNUAL MEETING



GOOD TO KNOW

- Review the Crossref code of conduct: crossref.org/code-of-conduct
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CROSSREF STRATEGY



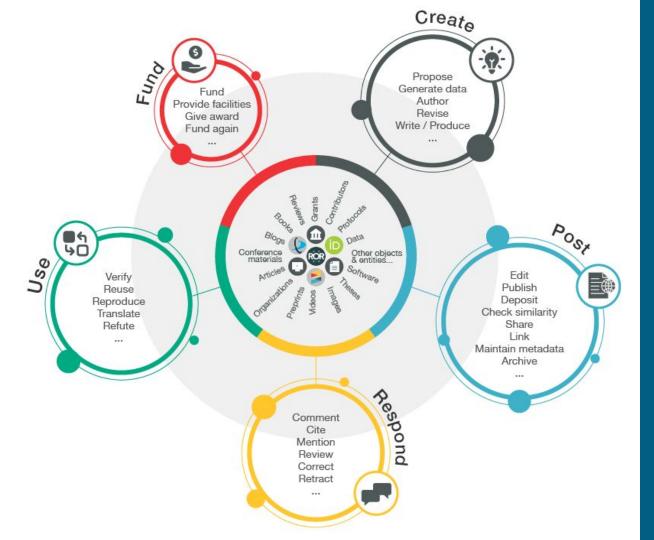


Like others... we envision

"a rich and reusable open network of relationships connecting research organizations, people, things, and actions; a scholarly record that the global community can build on forever, for the benefit of society."

MISSION

Crossref makes research objects easy to find, cite, link, assess, and reuse.
We're a not-for-profit membership organization that exists to make scholarly communications better.



WHAT WE'RE AIMING FOR

- Bringing together the disparate parts of the scholarly record
- Better view of relationships (beyond PIDs)
- Exposing internal stuff publicly
- Enabling multi-party assertions
- Evidence. Provenance. Persistence.
- 60% of this is possible, the rest is aspirational

Records	As of Oct 2018	As of Oct 2023	% change	Growth slowing gradually
Total records registered	100,774,749	151,255,483	50%	over the years from 13% 7-8
Number of Journals	62,226	123,336	98%	years ago, to 10% 3-4 years ago, to now under 8% from
Number of Journal articles	73,957,459	102,775,406	105%	2022-23
Number of Books	1,285,818	1,913,683	49%	
Number of Book-related records	14,288,511	24,576,712	72%	
Number of Conference proceedings	62,190	105,077	69%	Preprints still growing,
Number of Conference papers	5,477,054	8,125,166	48%	particularly from American Association for Cancer
Number of Preprints	79,084	1,637,103	1970%	Research (AACR)
Number of Reports	586,195	746,921	27%	
Number of Peer reviews	13,456	421,782	3035%	Peer review reports also growing, this is typical
Number of Standards	257,470	378,946	47%	growth the last few years
Number of Components	3,454,155	7,865,443	128%	
Number of Databases	21,806	63,926	193%	
Number of Database-related records	1,704,946	2,919,950	71%	
Number of Dissertations	240,407	618,951	157%	Grant records have more than doubled, thanks to the
Number of Grants	6	87,259	1454217%	European Commission

Research Nexus connections	As of Oct 2018	As of Oct 2023	% change	
Records with references	41,516,410	66,508,539	60%	
Number of Cited-by matches	758,372,968	1,542,481,107	103%	
Number of Preprint-to-article links	17,883	555,134	3004%	
Number of unique records with Funder IDs	2,431,939	8,099,744	233%	
Records with one or more authors with ORCID iDs	1,950,216	12,114,204	521%	
Total unique ORCID iDs	1,293,649	6,093,373	371%	
Total works auto-pushed to ORCID	1,363,337	16,256,452	1092%	4
Records with abstracts	2,707,893	26,814,551	890%	
Records with ROR IDs	n/a	73,560	n/a	
Records with Crossmark	7,747,598	25,013,338	223%	_
Crossmark status updates	93,223	267,583	187%	
Crossmark retractions	4,477	14,004	213%	4
Crossmark popup displays (av. per month)				
Research Nexus adoption	As of Oct 2018	As of Oct 2023	% change	
Members registering references	4,636	10,158	119%	
Members registering abstracts	3,645	22,312	512%	
Members participating in Crossmark	324	516	59%	
Members registering ORCID iDs	3,645	15,154	316%	
Members registering ROR IDs	n/a	290	n/a	
Members registering Funder IDs	746	2,161	190%	

Preprint to article links rising

ORCID Auto-update going well. And we reached 3 million authors granting us permission

No. retractions still very small (compared to RW) and No. members using Crossmark still small

The I4OA message is starting to get traction. Wiley!







Contribute to an environment where the community identifies and co-creates solutions for broad benefit



A sustainable source of complete, open, and global scholarly metadata and relationships



Publicly accountable to the Principles of Open Scholarly Infrastructure (POSI) practices of sustainability, insurance, and governance



Foster a strong team—because reliable infrastructure needs committed people who contribute to and realise the vision, and thrive doing it



Recently completed

- New form for funders to register grant records
- Confirmed plans for <u>merging Funder Registry into ROR</u>
- Launched <u>Global Equitable Membership (GEM)</u> program
- Acquired and opened Retraction Watch database;
 entered an agreement to grow the service together
 with Center for Scientific Integrity
- Reached our 12-month contingency fund goal
- Agreed and published our new <u>travel and events</u> policy



In focus

- Move from data center to cloud
- Identify <u>patterns in and match metadata</u>
- Adoption activities top metadata priorities: references; abstracts; grants; ROR
- Deliver data citation via the relationships <u>API</u> endpoint
- 2022/3 POSI self-assessment update
- Project to assess how our resourcing supports sustainability
- Reviewing governance processes and board diversity



Up next

- Community consultation regarding Crossmark
- Labs to redevelop participation reports
- 2024 all staff retreat
- Reviewing recruitment and compensation practices



Under consideration

- How do we best gather changes and notify changes to metadata?
- Monitoring research integrity community developments and tools
- Evaluate Al detection functionality

source: crossref.org/strategy

AFFILIATIONS

"The Research Organization Registry (ROR) is a global, community-led registry of open persistent identifiers for research organizations. ROR makes it easy for anyone or any system to disambiguate institution names and connect research organizations to researchers and research outputs."







ABOUT

REGISTRY

COMMUNITY

BLOG

DOCUMENTATION [2]

Record status



Active

 □ Inactive ☐ Withdrawn





R https://ror.org/04jsz6e67

Dutch Research Council

ORGANIZATION TYPE

Government

OTHER NAMES

Netherlands Organisation for Scientific Research, NWO, Nederlandse Organisatie voor Wetenschappelijk Onderzoek

WEBSITE

http://www.nwo.nl/

RELATIONSHIPS (14)

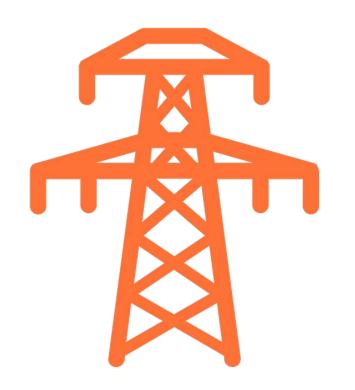
View details

LOCATION

The Hague (GeoNames ID 2747373) Netherlands

OTHER IDENTIFIERS

GRID grid.420488.2 ISNI 0000 0001 1092 7772 Crossref Funder ID 501100003246 Wikidata Q129724



The Principles of Open Scholarly Infrastructure

Trust must run strongly across each of the following areas: running the infrastructure (governance), funding it (sustainability), and preserving community ownership of it (insurance). In this spirit, we have drafted a set of design principles we think could support the creation of successful shared infrastructures.

Bilder G, Lin J, Neylon C (2015) Principles for Open Scholarly Infrastructure-v1 http://dx.doi.org/10.6084/m9.figshare.1314859

Supporting Open Research

Openscholarlyinfrastructure.org















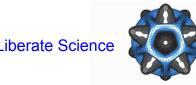






















LIVING UP TO POSI (IN PRACTICE)

- Review of governance: broadening our board: <u>Call for nominations</u>
- Sustainability: 12 month reserve fund; publishing more about our operations
- Open and available data: Open APIs & Search; releasing public metadata files; open references
- Open source: support, code, issues, bug-fixing
- Partnership plan: closer alliances with several other open infrastructure organisations

OUR PEOPLE - THANK YOU!



THANKS TO PARTNERS AND ADVOCATES

GOOD TO KNOW

- Review the Crossref code of conduct: crossref.org/code-of-conduct
- Join the discussion on Mastodon and X: #Crossref2023
- Please use the Q&A box for your questions
- The slides and recordings will be shared afterwards



crossref_ambassadors + 22 • 20d

Crossref Ambassadors

Our Crossref Ambassador map on Padlet helps us visualise our distribution, get to know each other from the context of our countries and find opportunities for regional collaboration.

Samarinda, East Kalimantan

Samarinda, East Kalimantan



China

China



587MRM6Q+62

Bruna Erlandsson



Nigeria Nigeria



대한민국

대한민국



Yaoundé, Cameroon

Yaoundé, Cameroon



Bogotá

Nicolás Mejía-Torres





Highlights



















Plugins OJS Crossref:

Configuração e utilização









Webinar



An Introduction to Crossref **Tanzania**



September 26, 2023 5:00 PM (EAT)

CROSSREF.ORG/EVENTS







COMMUNITY GROUPS

Advisory Groups

- Similarity Check
- Funders
- Preprints

Interest Groups

- Books
- Metadata practitioners

Committees (board-based)

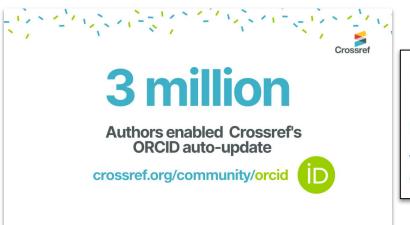
- Executive
- Audit
- Nominating
- Membership & Fees



DOAJ & CROSSREF
SIGN AGREEMENT
TO REMOVE BARRIERS
TO SCHOLARLY
PUBLISHING FOR ALL
Cro



DOAJ and Crossref sign agreement to remove barriers to scholarly publishing for all, June 2021



Crossref | OJS 3.2+ Manual

PKP and Crossref are continuing to collaborate to help publishers and journals using Open

Journal Systems take better advantage of Crossref services. PKP is also a Sponsoring

Organization for Crossref.

Crossref OJS 3.2+ Manual

The PLACE

The Publishers Learning And Community Exchange (PLACE) is an online public forum for organisations who wish to adopt best practices in scholarly publishing. Publishers can access information from multiple agencies in one place, ask questions of the experts and join conversations with each other.

https://theplace.discourse.group/















COMMUNITY FORUM

Growth since October 2022

Community forum page views 2022 (2022-January-01 to 2022-October-24): 634,827 Community forum page views 2023 (2023-January-01 to 2023-October-24): 733,816

17.16% increase in total posts in 2023 compared to 2022

Join us in the forum for open, community, many-to-many support! Our <u>tickets of the month</u> are a great place to start!

Top 10 most active community contributors

- edamasio 1.6K
- BrunaErlandsson 695
- Anjum 672
- hdogan 470
- AlexeySkalaban 400

- cybermon 395
- michaelolson 393

15.59%

- mccurley 376
- rhiannon-ppl 360
- abec 358

community.crossref.org

MEMBER GOVERNANCE & **BOARD** ELECTION

GOOD TO KNOW

- Review the Crossref code of conduct: crossref.org/code-of-conduct
- Join the discussion on Mastodon and X: #Crossref2023
- Please use the Q&A box for your questions
- The slides and recordings will be shared afterwards

Crossref fir	inancial performance	Year end	Year end	Actual	Actual	Forecast	Change	
2019-2023		12/31/2019	12/31/2020	2021 Total	12/312022	12/31/2023	23 v '22	
amounts s	shown in US dollar)	Actual	Actual	Actual	Actual	Forecast (9+3)	Variance	
Earned Reve	online.							
Annual	T. 1. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.							Membership
	Membership Fees	2,419,550	2,654,482	2,893,999	3,059,335	3,155,252	3% <	revenue growing,
	Subscriber Fees	800.254	821,692	926,759	1,010,800	1,033,680	2%	but at a slower rate
	imilarity Check Fees	177,407	185,384	192,959	196,929	204,410	4%	
	Annual Fees	3,397,211	3,661,558	4,013,717	4,267,064	4,393,342	3%	
Service		-,,	3,000,000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,,	.,,		Content registratio
Co	Content Registration Fees	5,901,455	6,033,219	6,467,340	6,586,139	7,030,744	7% <	up again after slowing last year
	Content Registration Fees - Donated	(61,715)	(46,554)	(47,647)	(143,013)	(182,141)	27% <	Increase from GEN
Sir	similiarty Check Usage (net)	94,758	467,489	693,006	785,795	703,807	-10%	program
Total S	Service Fees	5,934,498	6,454,155	7,112,699	7,228,921	7,552,411	4%	
Total Su	subcontract Revenue	0	0	171,447	170,170	289,193		
Total Earned	Revenue	9,331,709	10,115,713	11,297,863	11,666,156	12,234,946	5%	
								Expenses are still
Operating Ex	xpenses							bouncing back fro Covid, inflation
Personr	inel	5,740,359	5,589,782	6,367,184	6,533,962	7,381,242	13%	
Non-per	ersonnel	2,664,091	2,151,213	2,127,977	2,614,178	3,387,278	30% <	Increased hosting
Total Operation	ting Expenses	8,404,449	7,740,995	8,495,162	9,148,140	10,768,520	18%	fees (AWS) and resumed travel
Other Income	ne & Expense	199,240	100,090	58,560	(389,729)	225,015		
Net income/	Aloss	1,126,499	2,474,808	2,861,262	2,128,287	1,691,440	-21%	

OVERVIEW OF CROSSREF GOVERNANCE

- 501(c)6 organization, a trade association
- To be eligible for the Board, a Director must be an employee or officer of a member organization. Once a Director is elected, the member organization can appoint an alternate for such Director. Board seat belongs to the organization, not the individual.
- Board members serve 3-year terms and are eligible for reelection with no term limits
- Corporate officers (Chair and Treasurer) are elected by the board to serve one-year terms, for up to to three consecutive years
- All board members agree to a whistleblower policy and a conflicts of interest disclosure policy

OVERVIEW OF CROSSREF GOVERNANCE

The role of the board at Crossref is to provide strategic and financial oversight of the organization, as well as guidance to the Executive Director and the staff leadership team, with the key responsibilities being:

- Setting the strategic direction for the organization;
- Providing financial oversight; and
- Approving new policies and services.

ANNUAL MEETING ELECTION

- Notice of Annual meeting sent September 27th, 2023
- Review of Nominating Procedure

2023 BOARD NOMINATIONS

2023 Nominating committee

- Aaron Wood, APA, chair*
- Oscar Donde, Pan Africa Science Journal*
- David Haber, American Society for Microbiology
- Rose L'Huillier, Elsevier*
- Marie Soulière, Frontiers

^{*} indicates Crossref board member

NOMINATION PROCESS

- Board composition review
- Public call for nominations
- 87 respondents
- Committee reviews and discussed candidates

Interested in next year? Stay tuned for the call for expressions of interest in April/May 2024

2023 Board slate

Tier 1 candidates (electing five seats):

- Beilstein-Institut, Wendy Patterson
- Korean Council of Science Editors, Kihong Kim
- Lujosh Ventures Limited, Olu Joshua
- NISC Ltd, Mike Schramm
- OpenEdition, Marin Dacos
- Universidad Autónoma de Chile, Dr. Ivan Suazo
- Vilnius University, Vincas Grigas

Tier 2 candidates (electing two seats):

- Association for Computing Machinery (ACM), Scott Delman
- Oxford University Press, James Phillpotts
- Public Library of Science (PLOS), Dan Shanahan
- University of Chicago Press, Ashley Towne

2023 Board election final results

Tier 1 candidates (electing five seats):

- Beilstein-Institut, Wendy Patterson
- Korean Council of Science Editors, Kihong Kim
- OpenEdition, Marin Dacos
- Universidad Autónoma de Chile, Dr. Ivan Suazo
- Vilnius University, Vincas Grigas

Tier 2 candidates (electing two seats):

- Oxford University Press, James Phillpotts
- University of Chicago Press, Ashley Towne

ANY OTHER BUSINES?



SPOTLIGHT ON COMMUNITY INITIATIVES

GOOD TO KNOW

- Review the Crossref code of conduct: crossref.org/code-of-conduct
- Join the discussion on Mastodon and X: #Crossref2023
- Please use the Q&A box for your questions
- The slides and recordings will be shared afterwards

FLASH TALKS

- Kristina Vrouwenvelder, AGU
- Engjellushe Zenelaj, Reald University College
- Edilson Damasio, Maringá State University / Crossref Ambassador
- Joann Fogleson, American Society of Civil Engineers
- Amanda French New ROR / Funder overlap tool

FLASH TALKS

Kristina Vrouwenvelder, AGU

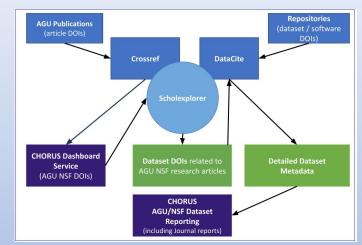
Enhancing Research Connections through Metadata: A Case Study with AGU and CHORUS

by Tara Packer (CHORUS), Sara Girard (CHORUS), Shelley Stall (AGU), Kristina Vrouwenvelder (AGU)

Through the use of open APIs CHORUS and AGU were able to discover and facilitate linkages between papers and related grants and datasets.

- Methods: We utilized ScholeXplorer, DataCite, and Crossref as the primary sources for identifying and capturing datasets and software linked to papers and grants.
- Deliverables: CHORUS reports identified linked articles and associated metadata. AGU provided journal level reporting on data citations.
- Results: 91.73% increase in the number of datasets identified for AGU published content reporting on funded research, including NSF, since the project kicked off September 2020.
- Conclusions: Without proper linkages between papers and related grants and datasets, credit for dataset generation can't be achieved.

CHURUS





FLASH TALKS

• Engjellushe Zenelaj, Reald University College

INDEX CROSS REF, INTEGRITY, PROFESSIONAL AND INSTITUTIONAL DEVELOPMENT



PhD. Engjellushe Zenelaj

Reald University College, Chief Editor of "Buletini Shkencor Reald" Albania

Our Profile

Allow me to briefly describe the Cross Ref experience, which for a long time seemed impossible to me, but we have now resolved it. We are a small institution, a university college and moreover from a small country like Albania, and therefore our scientific publications are limited in number. However, this does not mean that we should not walk alongside new developments.



Kolegii Universitar REALD Adresa: Rruga "Zahir Pajaziti", Telefon: (+355) 6820-32298 E-mail:



Cross Ref indexing has made it possible for published works to be protected, safer, and more visible to other researchers. Also, this is very important for the progress of our scientific journal, as well as for its

growth and internationalization.

Where we are now, and where we want to be

We are at Copernicus: arch/details?id=125201

We want to be at DOAJ And we are working for it... Our Case scientific jown **Buletini Shkencor Real** ISSN: 2411-5592

The index in cross Ref has been an institutional objective which has already been achieved and fulfilled. **Collaboration and indexing has** brought several benefits both at the institutional level and at the individual level for the academic staff.

Results

Increased the standards, integrity

indexed at Copernicus

Has been registered at Web of Sciences, is undervaluation

Has been increased the interest of authors for publication

Our iournal is

FLASH TALKS

Edilson Damasio, Maringá State University / Crossref Ambassador



Ambassador Brazilian retractions in the Retraction Watch Database-RWDB



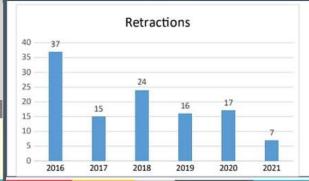
Crossref EDILSON DAMASIO, Ph.D. / Maringá, Paraná, Brazil / UEM/Crossref Ambassador

Presented: Crossref Annual Meeting 2023 Formerly presented WCRI2022

edamasio@uem.br

- RWDB platform acquired by Crossref, information all retractions 47k registers
- Methods: Search Oct. 2021 Brazil / Retraction (2016-2021) - 116 articles Brazilian authors (coauthors).
- Results: The main publications area is Medicine, Biochemistry, Biology, Medicine-Diabetes, Dentistry, Microbiology, Psychology, Religion, and others.

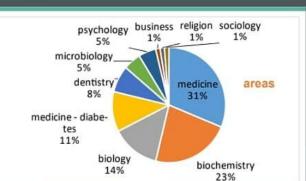


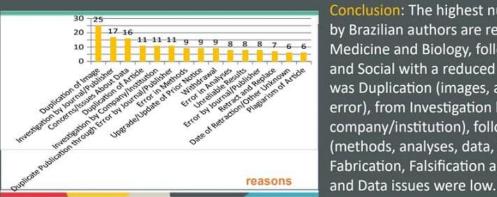




A number of 276 reasons distributed at the top 5. 'Duplication of Image', 'Investigation by Journal/Publisher', 'Concerns/Issues About Data', 'Duplication of Article', 'Duplicate Publication through Error by Journal/Publisher', 'Investigation by Company/Institution'.







Conclusion: The highest number of retractions by Brazilian authors are related areas of Medicine and Biology, followed by Humanities and Social with a reduced number. The reasons was Duplication (images, articles, and journal error), from Investigation by (journal/publisher, company/institution), followed by Error in (methods, analyses, data, images, results). Fabrication, Falsification and Plagiarism (FFP)

FLASH TALKS

Joann Fogleson, American Society of Civil Engineers

Now that you've published, what do you do with Metadata?

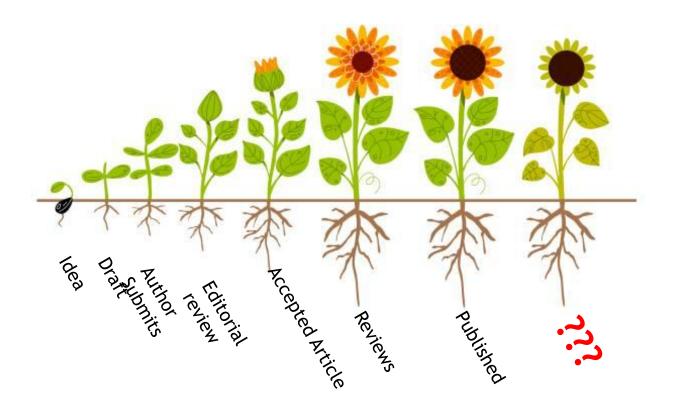


Joann Fogleson Director, Publishing Technologies American Society of Civil Engineers ifogleson@asce.org

Abstract

Like a flower, metadata serves as a supporting structure or framework for the data. It provides additional context, description, and information about the data it accompanies, much like the petals and leaves of a flower enhance and complement its central part, the bloom. By sharing metadata, different stakeholders can gain a better understanding of the data and its context. This enables efficient data integration, analysis, and decision-making processes. Just as sharing a flower can spread its fragrance and beauty, sharing metadata helps spread knowledge and insights derived from the data. When metadata is shared, it becomes a valuable resource for others to discover and access relevant data. Sharing metadata can foster the discovery of related or interconnected data sets, enabling further exploration and understanding. Data governance and management, sharing metadata promotes transparency and accountability. It allows for tracking the origin, lineage, and usage of data, facilitating compliance, auditability, and data quality assurance. Like sharing a flower, sharing metadata fosters trust and collaboration among individuals and organizations.









Bee Bountiful. Plant big

patches of each plant species

(better foraging efficiency.)

Go Native. Pollinators are "best" adapted to local, native plants, which often need less water than ornamentals.

Bee Showy. Flowers should bloom in your garden throughout the growing season. Plant notion, surrant, and Oregon grape for spring and arter, rabbit brush and goldenrod garden for fall flowers.

Bee Patient. It takes time for native plants to grow and for pollonators to find your garden, especially if you live far from wild leads. Bee Gentle. Most bees will avoid stinging and use that behavier only in self-defense. Male bees do not sting.



Bee Homey. Make small piles of branches to attach chrysalis or occouns. Provide hollow buigs, ratten logs with mood-boring beetle holes and bunchgrasses and leave stumps, old rodent burrows, and fallen plant material for nesting bees. Leave dead or dying treat for woodpeckers.

Bee Aware, Observe

pollinators when you walk

autside in nature. Notice

which flowers attract

butterflies.

bumble bees or solitary

bees, and which attract

Bee a little messy, Most of our native bee species (70%) nest underground so avoid using weed cloth or heavy mulch.

ad Bee Friendly.

Bee Sunny. Provide areas with

manrey, bare soil that's

dry and well-drained.

preferably with

with-facing slopes.

Create pollinatorfriendly gardens both at hume, at schools and in public parks. Help people learn more about pollinators and native plants.

Bee Diverse. Plant a diversity of flowering species with abundant pollen and nector and specific plants for feeding butterfly and moth caterpillars.



How a publisher pollinates with metadata

- Registering DOIs
- MAI Taxonomy
- Metadata deposits
- Allowing search engine (such as Google Scholar) to crawl site
- MARC record creations
- KBART
- Excel Sheets
- Marketing campaigns and advertising
- Social media
- Review copies
- Book tours
- Press Releases

- Keep metadata current
- Citations
- SEO
- PID (persistent identifier)
- XML
- BITS/JATS/STS
- CRediT taxonomy
- In-house depository
- Platform reporting
- Accessible metadata
- Portico
- CLOCKSS



Search Engine Optimization (SEO) is important for scholarly publication metadata for several reasons:

- 1. Increased Discoverability
- 2. Relevance in Academic Databases
- 3. Citation Impact
- 4. International Reach
- 5. Promotion of Open Access
- 6. Enhanced User Experience
- 7. Funding and Collaboration Opportunities
- 8. Tracking and Analytics

SEO for scholarly publication metadata helps by increasing visibility, citations, and the impact of research.



The Dublin Core™ Metadata Initiative, or "DCMI",

Dublin Core is an international metadata standard that consists of 15 terms for describing digital or physical resources.

These terms include creator, title, date, subject, and publisher.

Dublin Core is used to describe a variety of digital materials, such as video, sound, image, text, and web pages.

It is one of the most widely used metadata standards.

The Dublin Core Metadata Initiative (DCMI) is responsible for formulating Dublin Core.

The first Dublin Core properties were defined in 1995 at the Metadata Workshop in Dublin, Ohio.

Dublin Core is defined by ISO in 2003 ISO Standard 15836, and NISO Standard 239, 85-2007.

Dublin Core is a basic, domain-agnostic standard that can be easily understood and implemented. It is used to expand cataloging information and improve document indexing for search engine programs

https://www.dublincore.org/specifications/dublin-core/dces/



PID

A persistent identifier (PID) is a long-lasting reference to a digital object, such as a document, file, web page, or other digital object.

Most PIDs have a unique identifier that's linked to the current address of the metadata or content.

PIDs can eliminate name ambiguity and point persistently to the location of a digital object.



Examples of PIDs:

International Standard Serial Number (ISSN) is among the most well-known PIDs, ISSNs are unique identifiers for serial publications, including scholarly journals and magazines, managed by The International Centre for the registration of serial publications (CIEPS).

DOI (Digital Object Identifier) is a persistent identifier that's used to locate specific digital objects, often a journal article.

Permalinks are URLs that are intended to remain the same, limiting the amount of URL changes that can render objects unfindable. These links are often short and easy for people to type. These URLs need to be actively maintained to continue to be persistent. See the links below for more information about each service.

ORCID provides a persistent digital identifier for researchers that distinguishes you from every other researcher and supports automated linkages between you and your professional activities ensuring that your work is recognized.

GrantID is an identity management solution that adds security to apps with single sign on, multiple authentication factors, and analytics. It's fully compliant with the OAuth 2.0 and OpenId connect specifications.

A **funder ID** is an identifier for an organization that funds research in the Crossref registry. FundRef, facilitated by CrossRef, is a collaborative project of publishers and funding agencies that supports a way of reporting funding for research.



Examples of PIDs continued:

ROR "Research Organization Registry" is a global, community-led registry of open persistent identifiers for research organizations. Crossref and ROR are working together to make it easier for members to integrate identifiers, register metadata, and connect research outputs to funders.

A Ringgold Identifier (Ringgold ID or RIN) is a unique numeric identifier for organizations in the publishing industry supply chain. It's a persistent identifier (PID) applied to organizations in the scholarly communications sector National Library of Medicine's Medical Subject Headings (MeSH), is a controlled vocabulary thesaurus created and updated by the United States National Library of Medicine (NLM) Ringgold is a subsidiary of Copyright Clearance Center (CCC)

DataCite is a global, non-profit organization that provides digital object identifiers (DOIs) for research data and other research outputs. DataCite's mission is to make data and scholarly content more accessible and citable. DataCite was founded in 2009 to make research data citable in the literature using DOIs



List of academic databases and search

engines

711911100		_		
Name	Discipline	Description	Access cost	Provider
				United States Department of
ERIC: Educational Resource Information	1111	100 100	111	Education (available by
Center	Education	Education literature and res	Free & Subscription	subscription from OCLC, CSA)
Book Review Index Online	Book reviews	Reviews of periodicals and	Subscription	Thomson Gale
Books in Print	Books	Reviews covering over 2.5 r	Subscription	R. R. Bowker
Crossref[28]	Multidisciplinary	An official Digital Object Id	Free	Crossref
DeepDyve	Multidisciplinary	Commercial website that se	Free & Subscription	DeepDyve
				Digital Science & Research
Dimensions[29]	Multidisciplinary	Publications, books and boo	Free & Subscription	Solutions Ltd
Directory of Open Access				Infrastructure Services for Open
Journals (DOAJ)[30]	Multidisciplinary	Articles from 18,652 open a	Free	Access (IS4OA)
Google Scholar[1]	Multidisciplinary	The biggest academic data	Free	Google
	Biomedical, life	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
PubMed[42]	sciences	A database primarily of refe	Free	NIH, NLM
ScienceOpen	Multidisciplinary	Natural and physical science	Free	ScienceOpen Inc.
Scopus[43]	Multidisciplinary	Records from over 20,500 t	Subscription	Elsevier
Web of Science[43]	Multidisciplinary	Includes other products, su	Subscription	Clarivate Analytics
ASCE Library	Civil Engineering	All civil engineering discipli	Free & Subscription	ASCE
11D 40 000		100 to 60		American Society of Civil
Civil engineering database	Civil engineering	A bibliographic database co	Free	Engineers
ORCID	Multidisciplinary	An open and independent re	Free	ORCID Inc.
Publons[59]	Multidisciplinary	Service for academics to tra	Free	Clarivate Analytics
WorldCat[62]	Multidisciplinary	Unified catalog of member	Free & Subscription	OCLC Inc.
	Computer			
	Science, Engineer			
IEEE Xplore	ing, Electronics	Over 5 million records.	Subscription	IEEE
IngentaConnect	Multidisciplinary	Covers articles from 13,000	Free & Subscription	Ingenta



https://en.wikipedia.org/wiki/List_of_academic_databases_and_search_engine

Persistent archive

Portico or CLOCKSS, both of which are dark archives meaning the content submitted to them will only release in the case of a "trigger event," such as confirmation that a journal is no longer in publication. Archiving will ensure your journal content remains available in perpetuity, even if you have to cease publishing, and it enables Crossref to work with archives to ensure your DOIs continue to resolve to your content,



Metadata Management Plan

- Verify PIDs when possible
- Data inventory
- Data enrichment
- Data lineage (a historical record of the data and its origins)
- Collaborative workflows
- Metadata exchange with third-party tools
- Security and privacy
- GDPR (General Data Protection Regulation)



Accessible metadata

Accessible metadata helps users understand how to represent machine-readable metadata in a user-friendly User Interface / User Experience (UI/UX).

How do we create editorial process

https://www.w3.org/2021/09/UX-Guide-metadata-1.0
/principles/
https://handbook.floeproject.org/techniques/accessib
ility-metadata/



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Alt Text



How would you describe this object and its context to someone who is blind or low vision?

- The subject(s) in detail
- The setting
- The actions or interactions
- Other relevant information

(1-2 detailed sentences recommended)

A spiral bound notebook with black text

Description automatically generated

- Approve alt text
- ☐ Mark as decorative ①



Interesting reads:

Common Scholarly Communication Infrastructure Landscape Review Oya Y. Rieger, Roger C. Schonfeld DOI: https://doi.org/10.18665/sr.318775

Metadata 2020 is a global collaboration that advocates for richer, reusable, and open metadata for all research outputs. The goal of Metadata 2020 is to improve access to scholarly pursuits for the benefit of society. The program is organized by CrossRef in partnership with ORCIhttps://metadata2020.org/

Why PID Strategies Are Having A Moment — And Why You Should Care By ALICE MEADOWS https://scholarlykitchen.sspnet.org/2023/01/25/why-pid-strategies-are-having-a-moment-and-why-you-should-care/

There's A PID For That By Frank Manista https://scholarlycommunications.jiscinvolve.org/wp/2020/10/12/theres-a-pid-for-that-part-1-grants/

State of Metadata. Copyright.com https://www.copyright.com/stateofmetadata/map.php

Lettie Y. Conrad, PhD, & Michelle Urberg, PhD. (2023). With or Without: Measuring Impacts of Books Metadata. Zenodo. https://doi.org/10.5281/zenodo.8145260

Managing researcher identity and name changes using ORCID https://ukorcidsupport.jisc.ac.uk/2022/01/managing-researcher-identity-and-name-changes-using-orcid-uk-orcid-jisc-consortium-event-report

JATS4R is a NISO Working Group https://jats4r.org/

NISO Standards: https://www.niso.org/standards-committees





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Director, Publishing Technologies
American Society of Civil Engineers
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FLASH TALKS

Amanda French - New ROR / Funder overlap tool







The Open Funder Registry and ROR are merging!



Home > Blog > Open Funder Registry to transition into Research Organization Registry (ROR)

2 9 minute read.

Open Funder Registry to transition into Research Organization Registry (ROR)



Amanda French, Ginny Hendricks, Rachael Lammey, Fabienne Michaud, Maria Gould – 2023 September 07 In Open Funder Registry, ROR, Identifiers, Metadata, Research Funders

Today, we are announcing a long-term plan to deprecate the Open Funder Registry. For some time, we have understood that there is significant overlap between the Funder Registry and the Research Organization Registry (ROR), and funders and publishers have been asking us whether they should use Funder IDs or ROR IDs to identify funders. It has therefore become clear that merging the two registries will make workflows more efficient and less confusing for all concerned.



R https://ror.org/02e463172 ← ROR ID

Funder ID

American Cancer Society

ORGANIZATION TYPE

Nonprofit

OTHER NAMES

American Society for the Control of Cancer, ACS, ASCC

WEBSITE

http://www.cancer.org/

LOCATION

Atlanta (GeoNames ID 4180439)

United States

OTHER IDENTIFIERS

GRID grid.422418.9

ISNI 0000 0004 0371 6485

Crossref Funder ID 10000048

Wikidata Q463665









Funder ID

Metadata Search Funding Data

Q American Cancer Society

Works that assert ACS as funder

SORT BY: RELEVANCE PUBLICATION YEAR

▲ DOWNLOAD AS CSV

PAGE 1 OF 9,153 RESULTS

Targeting Host Glycolysis as a Strategy for Antimalarial Development

JOURNAL ARTICLE published 16 September 2021 in Frontiers in Cellular and Infection Microbiology

Research funded by National Institutes of Health (R01-Al103280, P21-Al120202, R21-Al130584, T32GM007067) | Burroughs Wellcome Fund (PATH) | Boettcher Foundation (Webb-Waring Early Career Award) (American Cancer Society (DSG-15-145-01-CDD)

Authors: Andrew J. Jezewski | Yu-Hsi Lin | Julie A. Reisz | Rachel Culp-Hill | Yasaman Barekatain | Victoria C. Yan | Angelo D'Alessandro | Florian L. Muller | Audrey R. Odom John

Ion-Pairing with Triethylammonium Acetate Improves Solid-Phase Extraction of ADP-Ribosylated Peptides

JOURNAL ARTICLE published 7 February 2020 in Journal of Proteome Research

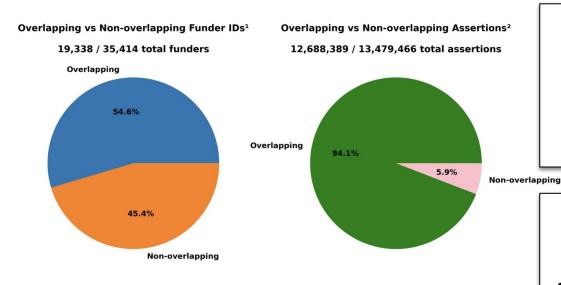
Research funded by American Cancer Society (RSG-16-062-01-RMC) | National Institutes of Health (R01AR065459,R01GM104155,S10CD621502,T32CA009110)

Authors: Robert Lyle McPherson | Shao-En Ong | Anthony K. L. Leung

https://doi.org/10.1021/acs.jproteome.9b00696



Crossref - Aggregrate ROR/Funder Registry Overlap



Crossref Overlap Analysis

ROR has been working to reconcile the two registries since mid-2022.

- .. Total number of Funder IDs that have been mapped to ROR IDs.
- 2. Total number of assertions where the Funder ID is mapped to a ROR ID.

Download unmapped funders as CSV

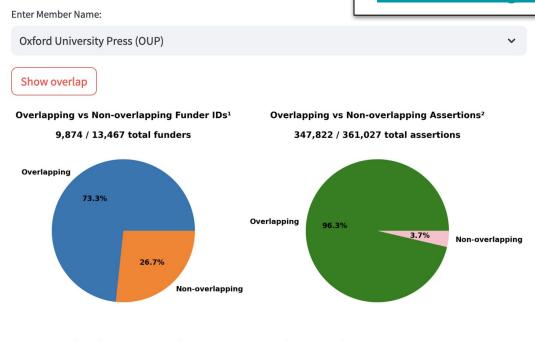
Download mapped funders as CSV

There is a corresponding ROR ID for **over 94%** of Funder ID assertions in Crossref DOI records.



Crossref Member - ROR/Funder Registry Overlap

rorfunderregistryoverlap.streamlit.app



ROR has built a tool to compare the overlap in the two registries.

You can use the tool to look up the funding assertion overlap of Crossref members such as OUP.

1. Number of Funder IDs used in member assertions that have been mapped to ROR IDs.

2. Number of assertions by member where the Funder ID is mapped to a ROR ID

Download unmapped funders as CSV

Download mapped funders as CSV



Funder Mapping Lookup

Enter Funder name:

Australian Research Council

Search

You can also use the tool to look up individual funders and find both the Crossref Funder ID and the ROR ID.

Funder ID	Funder Name	ROR ID	ROR Name
http://dx.doi.org/10.13039	Australian	https://ror.org	Australian
/501100000923	Research Council	/05mmh0f86	Research Council

Request correction?

rorfunderregistryoverlap.streamlit.app



ROR is ready!

Explainers

How ROR and the Open Funder Registry Overlap: A Closer Look at the Data

By Amanda French, Adam Buttrick

October 12, 2023

Following on the announcement that Crossref's Open Funder Registry will be merging with ROR after 2024, we'd like to do a deep dive into the specifics of the evidence that ROR is ready to take on the important work that the Open Funder Registry has been doing: identifying research funders in a clean, consistent, comprehensive, and interoperable way.

It's never been more important to be able to clearly identify which organizations have funded which research.

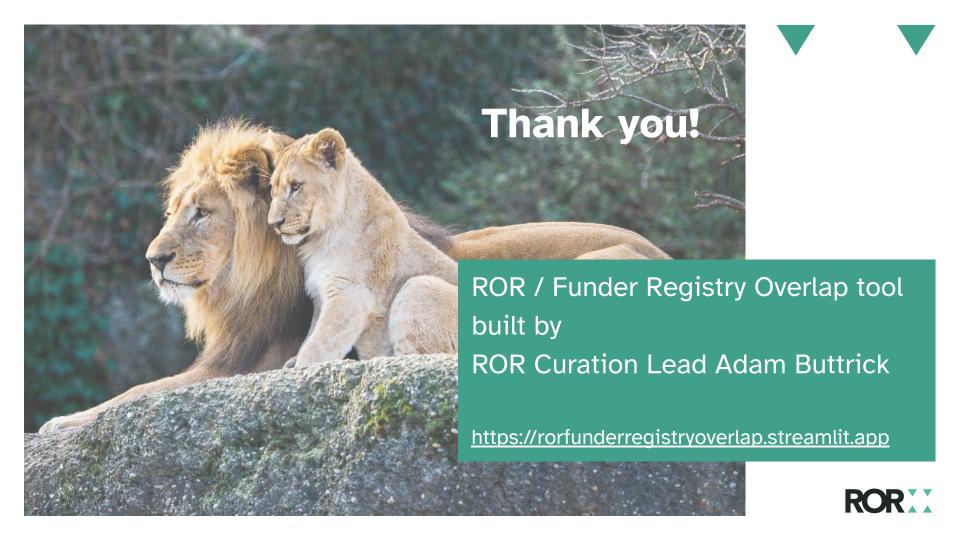
ROR is ready to take on the work of identifying research funders.

Read more at

https://ror.org/blog/2023-10-12-ror-funder-registry-overlap/

Continue reading







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https://app.spatial.chat/s/crossref2023