

Embracing funder workflows (or Grant why-ds...)

Rachael Lammey

Crossref

RDA-UK/FREYA workshop



Mission

Crossref makes research outputs easy to find, cite, link, assess, and reuse.

We're a not-for-profit membership organization that exists to make scholarly communications better.

Who makes up the Crossref Community?





“Crossref is faced with bridging the perspectives and needs of publishers and funders. Crossref requires increased emphasis on funders, understanding their needs and requirements and increasingly including funders in the scholarly communication dialogue. The focus should turn to services increasingly of interest to the funding community.”

- Board strategic session report/minutes, Oslo, July 2017



Coupled with interest from funders

Funders and research institutions are increasingly involved in the scholarly publishing process. As the research landscape changes, we need to ensure our relevance by evolving in a way that better reflects these shifts.

Our overarching objective is to expand our value proposition to convince these new constituents of Crossref's relevance, getting them into our system and using this foundational community infrastructure.



Open Funder Registry

- Launched 2012
- Taxonomy of funding bodies, each with own DOI
- Grown from 4000 to 20,000 funders
- Donated and updated by Elsevier, CC-0
- github.com/CrossRef/open-funder-registry

Search **19,662** funders connected to **3,698,549** published works with funding data

🔍 Search funders...

WELLCOME TRUST

TYPE

- Journal Article (13,814)
- Dataset (110)
- Chapter (22)
- Conference Paper (9)
- Monograph (2)
- Book (2)

YEAR

- 2017 (3,342)
- 2016 (2,370)
- 2015 (2,715)
- 2014 (1,387)
- 2013 (1,210)
- 2012 (307)
- 2011 (158)
- 2010 (357)
- 2009 (22)
- 2008 (201)

PUBLICATION

- Wellcome Open Research (44)
- eLife (130)
- PLOS ONE (402)
- NeuroImage (215)
- Proceedings of the National Academy of Sciences (208)
- Frontiers in Immunology (146)
- Malaria Journal (137)
- PLOS Neglected Tropical Diseases (134)
- Journal of Biological Chemistry (106)

🔍 Wellcome Trust

Metadata Search  Sign in

Sort by: RELEVANCE PUBLICATION YEAR

📄 DOWNLOAD AS CSV

PAGE 1 OF 14 853 RESULTS

Formation of Vertebral Precursors: Past Models and Future Predictions

Journal Article published 2003 in Journal of Theoretical Medicine volume 5 issue 1 on pages 23 to 35

Research funded by Wellcome Trust (089155)

Authors: Ruth F. Baker, Santiago Schnell, Philip K. Maini

🔗 <https://doi.org/10.1080/10270960310001620265> 

Naturalistic Experimental Designs as Tools for Understanding the Role of Genes and the Environment in Prevention Research

Journal Article published Jan 2018 in Prevention Science volume 19 issue 1 on pages 58 to 78

Research funded by National Institute on Drug Abuse (R01 DA035052DA020565P50 DA035763) | National Institute of Child Health and Human Development (R56 HD042608R01 HD042803) | National Institute of General Medical Sciences (R24 GM079486-01A1P50 GM099911) | National Science Foundation (DEB 0949053IOS 102728) | Wellcome Trust (Showcase Award/Project grant) | Nutfield Foundation (Project Grant) | Economic and Social Research Council (RES-009-23-1390) | NIH Office of the Director (UG3OD023389)

Authors: Leslie D. Leve, Jenae M. Neiderhiser, Gordon T. Harold, Misaki N. Natsuaki, Drendan J. M. Dohannan, William A. Cresko

🔗 <https://doi.org/10.1007/s11121-017-0746-8> 

The human leukemia virus HTLV-1 alters the structure and transcription of host chromatin in cis

Journal Article published 26 Jun 2016 in eLife volume 7

Research funded by Wellcome Trust (WT100281MA) | Naito Foundation | Medical Research Council (MR/K019090/1) | National Institute for Health Research, Imperial Biomedical Research Centre

Authors: Anar Melamed, Hiroko Yaguchi, Michi Miura, Aviva Witkover, Tomas W Fitzgerald, Ewan Simey, Charles RM Bangham

🔗 <https://doi.org/10.7554/eLife.06243> 

Why wait? The social determinants underlying tuberculosis diagnostic delay

Journal Article published 25 Sep 2017 in PLOS ONE volume 12 issue 9 on page e0185018

Research funded by University of Michigan (2014 Wallenberg Fellowship) | Bill and Melinda Gates Foundation (OPP118543) | Wellcome Trust (201251/Z/16/Z) | Joint Global Health Trials Consortium of the Wellcome Trust, UK MHG and D-10 (MR/K027467/1) | Innovation for Health and Development | Imperial College Biomedical Research Centre and The Wellcome Trust (1057887/14/7)



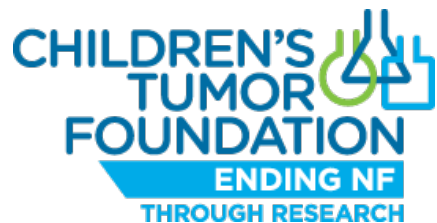
But...

- 3.6m content items have some funder info
- 2.6m have a funder DOI
- Low take up
- Inaccuracies and mistakes
- Onus on author and publisher



Revived the Funder Advisory Group

- Conversations with funders about infrastructure needs, DOIs to identify grants uniquely across funders.
- Working groups:
 - **Technical** - gathering grant metadata schema elements
 - **Membership** - information about budgets, needs, and funding activity
- Individual discussions with funders & ‘sponsors’ like Europe PMC



UK Research
and Innovation



European Research Council



SWISS NATIONAL SCIENCE FOUNDATION

Smithsonian



Benefits of a global Grant identifier

Automating workflows:

- Faculty facing increased reporting requirements
- Publishing process needs to be easy for authors
- Funders want to track outcomes
- Institutions have to analyze and summarize research output

Open, global, persistent and machine-actionable identifiers are key to scaling these activities



Benefits of a global Grant identifier

- A global grant identifier could greatly reduce the UX complexity of gathering funder information, improving the manuscript submission and tracking process.
- This, in turn, would boost the collection of funding information from researchers and ensure that the information that they provide to publishers, institutions and other funders is accurate and complete.
- A persistent identifier for grants will allow research funding to be tracked across multiple systems, from the point at which the funding is awarded through to publications and other research outputs.



Benefits of a global Grant identifier

- Increase the utility of links between research outputs and funding information
- Instead of just linking to information about the funder, a grant identifier would allow:
 - Linking research outputs to particular research programs
 - Information relating to those programs
 - grant durations, award amounts, etc.

Funder	Registrant	Local ID
The Thankyou Trust:	10.4440/	05-67-89
Moar Foundation:	10.0936/	05-67-89

Open Funder Registry would just prepend all of their grant identifiers with the short prefix provided (and use virtually any structure they wanted to after the prefix). Again, for example, the identifier might look like this **F8J23456** . This identifier would minimally allow tools to automatically determine who was responsible for issuing the grant identifier. It would not, however, have some of the other advantages of being a DOI.

But later, if the funder decided that they wanted to use DOIs, register grant metadata and provide information to which the DOI could resolve, they could convert their identifiers to DOIs by prepending them with a DOI prefix. Again, in the above example, the identifier would become

10.19747/F8J23456 . Both forms of identifiers would continue to work.

Try the following in the form below.

- **F8J23456**

Please enter your grant ID below

Grant ID:

Funder: **National Institutes of Health**

Grant info: *** looked up using DOI ***

“Currently, researchers are typically asked to manually disclose what outputs have arisen from their funding. In the future, such disclosures would be fully automated. If a global ID system for grants was developed, publishers and repositories could require these to be disclosed on submission, and this data could then programmatically be passed to researcher assessment platforms.”

- Robert Kiley and Nina Frentrop, Wellcome



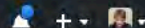
A schema for grants

- Sample data from funders on the tech WG
- Identified minimum set of elements common to all
- Completely new schema (not adapting existing Crossref publication schemas)
- Need to represent elements that change over time



Search or jump to...

[Pull requests](#) [Issues](#) [Marketplace](#) [Explore](#)



CrossRef / [grantID-schema](#)

Unwatch 14 Star 1 Fork 0

Code Issues 1 Pull requests 0 Projects 0 Wiki Insights Settings

No description, website, or topics provided.

Edit

[Manage topics](#)

16 commits 1 branch 0 releases 2 contributors

Branch: master New pull request

Create new file Upload files Find File Clone or download

pdfeeney Update README.md	Latest commit 7f956b1 27 days ago
README.md	Update README.md 27 days ago
grantID-example.xml	Create grantID-example.xml 2 months ago
grantID.xsd	Update grantID.xsd 27 days ago
relations.xsd	Create relations.xsd 2 months ago

README.md

Grant Identifier Metadata Schema

This [schema](#) will be used to register persistent identifiers (DOIs) for grants and other funding through Crossref. For the purposes of this documentation, the item being identified is a 'grant' but the identifier may be applied to other types of funding, such as equipment and facility use.



Next steps - technology

- Development work to accept grant metadata
- First grants registered early summer by Wellcome and Europe PMC



Membership

- New pricing model for funders signed off by Crossref board November 2018
- First funder member joined July 2018
- Lower annual fee, higher per-deposit fee

Imagine the connections you could
make:

Grants tied to the articles tied to the
data/software (DataCite) tied to
researchers (ORCID) tied to the
institutions (ROR).

Thanks!

rlammey@crossref.org
@rachaellammey

