# Your funding infrastructure wishes Grant-ID

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# The problem





Funders cannot reliably monitor the impact of shared research facilities. It's hard to track which researchers have used those facilities, and see what publications, projects and future collaborations have emerged as a result of their investment.

Created by Cuby Design from Noun Project



# Career tracking

Funders support studentships, and provide training and career development grants, but they struggle to understand the career patterns and pathways of funded researchers as they move onwards through academia and industry.





### Understanding openness

We need to simplify the process of opening up access to research. It's surprisingly difficult for researchers to show that they have complied with funder policies for outputs.

Created by popcomarts from Noun Project



### Just knowing what has happened

A recent survey by ORCID found that "the primary challenge reported by funders is connecting grants to subsequent research activities and outputs"

https://doi.org/10.23640/07243.9149240.v1



"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."



- Launched 2012
- Taxonomy of funding bodies, each with its own DOI
- Grown from 4000 to 21,000 funders
- Donated and updated by Elsevier, CC-0
- github.com/CrossRef/open-funder-registry

# Search 21,494 funders connected to 4,372,033 published works with funding data

Q Search funders...

https://search.crossref.org/funding







- 4.1m content items have some funder info
- 2.6m have a funder DOI associated with them
- Take up is surprisingly low
- The data contains inaccuracies and mistakes
- The onus is on authors and publishers to fill in the gaps

# The solution

# We revived our Funder 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

















SWISS NATIONAL SCIENCE FOUNDATION

# The benefits



# Benefits of a global grant identifier

#### Grant IDs paint a richer picture of research support.

- Understand connections between projects and collaborators
- Identify pockets of expertise and emerging areas of activity
- Fill in gaps in the map of the research landscape with new data points and better quality information



# Benefits of a global grant identifier

#### Help to maintain a healthier research environment.

- Less duplication of effort in overlapping grants or repeated projects
- Ask "who paid?" and check for any possible conflicts of interest in review and reading
- Understand the impact of funding on career development and activities



### Benefits of a global grant identifier

#### Grant IDs offer easier, more accurate analysis

- Search for grants, or for people, projects or organizations associated with grants
- Track the impact of funding shared infrastructures and facilities
- Simplify the process of research reporting with automatic matching of outputs to grants

# The launch



### The first grant IDs!

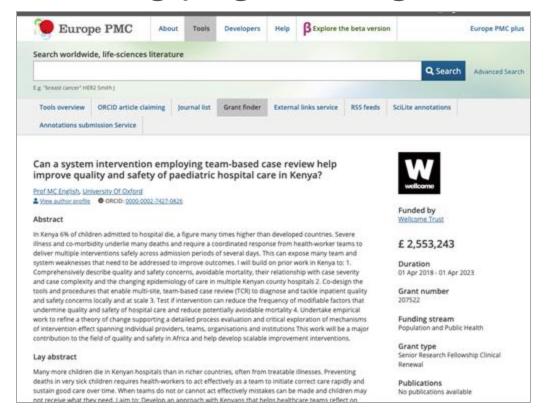
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                  durtice groups and provide high quality supervision and mentorship. Here we plan to come:
           ENTED aims to address capacity building for research through an initiative that employs a pro-
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           programming, and to act an experience and methods for the next population of researchers.
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https://doi.org/10.35802/107769

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  vvproject-title>
     Can a system intervention employing team-based case review help improve quality and safety of paediatric hospital care in Kenya?
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       <givenName>Michael</givenName>
       <familyName>English</familyName>
      w<affiliation>
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       <0RCID>https://orcid.org/0000-0002-7427-0826</0RCID>
      </person>
    </investigators>
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      Many more children die in Kenyan hospitals than in richer countries, often from treatable illnesses. Preventing deaths in very sick children requires health-workers to
      act effectively as a team to initiate correct care rapidly and sustain good care over time. When teams do not or cannot act effectively mistakes can be made and children
      may not receive what they need. I aim to: - Develop an approach with Kenyans that helps healthcare teams reflect on events surrounding a child death in hospital and
      identify what and how work needs to be changed - Test the effect of the approach developed by comparing improvements in care in hospitals that use this approach and
      those that don't and see how it is actually delivered - Develop a model that helps us think through how generating and sharing the insights from reviewing deaths might
      change how teams, local and national managers and experts in child health act to improve care - Use the findings to understand what the major problems in providing care
      to sick children are and how these might wary across patients, time and place. Work aims to enable health systems to providing continuous, safe care in countries like
      Kenya.
    </description>
   w<description xml:lang="en">
      In Kenya 6% of children admitted to hospital die, a figure many times higher than developed countries. Severe illness and co-morbidity underlie many deaths and require a
      coordinated response from health-worker teams to deliver multiple interventions safely across admission periods of several days. This can expose many team and system
      weaknesses that need to be addressed to improve outcomes. I will build on prior work in Kenya to: - Comprehensively describe quality and safety concerns, avoidable
      mortality, their relationship with case severity and case complexity and the changing epidemiology of care in multiple Kenyan county hospitals - Co-design the tools and
      procedures that enable multi-site, team-based case review (TCR) to diagnose and tackle inpatient quality and safety concerns locally and at scale - Test if intervention
      can reduce the frequency of modifiable factors that undermine quality and safety of hospital care and reduce potentially avoidable mortality - Undertake empirical work
      to refine a theory of change supporting a detailed process evaluation and critical exploration of mechanisms of intervention effect spanning individual providers, teams,
      organisations and institutions. This work will be a major contribution to the field of quality and safety in Africa and help develop scalable improvement interventions.
    </description>
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      <funding-scheme>Population and Public Bealth</funding-scheme>
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### Landing page for a grant ID







**PUBLISH** 

**ABOUT** 

BROWSE

⊕ OPEN ACCESS 
 ₱ PEER-REVIEWED
 RESEARCH ARTICLE

Evaluating the foundations that help avert antimicrobial resistance: Performance of essential water sanitation and hygiene functions in hospitals and requirements for action in Kenya

Michuki Maina a. Olga Tosas-Auguet, Jacob McKnight, Mathias Zosi, Grace Kimemia, Paul Mwaniki, Constance Schultsz,

Mike English

Published: October 9, 2019 • https://doi.org/10.1371/journal.pone.0222922

https://doi.org/10.1371/journal.pone.0222922

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### Grant ID schema: input welcome

#### Grant metadata

Each grant ID can be assigned to multiple projects. The metadata within each project includes basics like titles, descriptions, and investigator information (including affiliations) as well as funding information. Funders will supply funder information (including funder identifiers from the Crossref Funder Registry) as well as information about funding types and amounts.

Multiple grants may be included in a single XML file. Project metadata is included for each grant and multiple projects may be applied to a single grant.

#### Project description

Element / attribute	Description	Limits
project	Container for project information. Multiple projects may be assigned to a single Grant ID	required; multiple allowed
project- title	title of the project a grant is supplied for	required; multiple allowed
description	Used to capture an abstract or description of project, provide multiple descriptions in different languages	optional; multiple allowed
@xml:lang	use @xml:lang to identify language for each project-title or description. This allows you to provide multiple titles in different languages.	optional

#### **Funding types**

Types of funding are limited to the following values:

- . award: a prize, award, or other type of general funding
- · contract: agreement involving payment
- crowdfunding: funding raised via multiple sources, typically small amounts raised online
- endowment: gift of money that will provide an income
- · equipment: use of or gift of equipment
- facilities: use of location, equipment, or other resources
- · fellowship: grant given for research or study
- grant: a monetary award
- . loan: money or other resource given in anticipation of repayment
- · other: award of undefined type
- prize: an award given for achievement
- salary-award: an award given as salary, includes intramural research funding
- secondment: detachment of a person or resource for temporary assignment elsewhere
- seed-funding: an investor invests capital in exchange for equity
- · training-grant: grant given for training

Schema information at: <a href="https://github.com/CrossRef/grantID-schema/">https://github.com/CrossRef/grantID-schema/</a>

# The vision:

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

# The ask:

Get ready to implement grant IDs in your system - and to expose grant IDs in metadata.

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# Tusen takk!



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