Why You Should Start Using DOIs for Grants

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August 3, 2021

- What are DOIs?
- Why should we use DOIs for grants?
- How can we get started?

What are DOIs?

- DOI = Digital Object Identifier
- https://doi.org/10.37717/2020-1143

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https://doi.org/10.5555/YRFU1371

DOI resolver prefix suffix
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- JSMF Prefix: 10.37717 (assigned by Crossref)
- JSMF Suffix: 2020-1143
 - This can be alphanumeric
 - JSMF uses its internal grant numbers
- Points to a public page with the grant information
 - https://doi.org/10.37717/2020-1143 → https://www.jsmf.org/grants/2020-1143/

Digital Object Identifier System

- International DOI Foundation (IDF) launched to develop system in 1998. First applications launched 2000
- Approximately 257 million DOI names assigned to date
- Over 150,000 DOI name prefixes within the DOI System
- Over 5 billion DOI resolutions per year
- DOI names are assigned by multiple registration agencies (like Crossref) worldwide

Source: https://www.doi.org/factsheets/DOIKeyFacts.html

DOIs for Grants

New!

- 2017
 - Crossref (Ginny Hendricks), Wellcome (Robert Kiley and Nina Frentrop)
- 2019
 - Pilot and first grants assigned DOIs
- Some grants and content management systems now integrating DOI creation/assignment

Why should we use DOIs for grants?

- We already have grant IDs. Why should we create another ID?
 - Most funders already have grant identifiers, but each funder has its own scheme
 - Difficult for third parties to integrate with so many different systems.
 - Open, global, persistent and machine-actionable identifiers are key to scaling.
- Increase the utility of links between research outputs and funding information; provides more granular information about the funding.
- Would allow linking research outputs to particular programs/grants along with details related to those programs (grant durations, amounts, etc.)

I'm convinced. How can we get started?

- 1. Join Crossref https://www.crossref.org/membership/
- 2. Use an XML template or Crossref's new, upcoming form to register grants
- 3. Start generating DOIs for all new grants
 - Make plans for registering over older grants as well
- 4. Make sure DOIs point to a public (open) web page
 - Web page should be persistent
 - Update if grant data changes
- 5. Integrate DOIs into your internal processes
- 6. Communicate with researchers and grantees to start using DOIs as the preferred form of reference for citing the grant
 - Publishers are starting to accept DOI reference/acknowledgements in DOI format

```
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    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.crossref.org/grant_id/0.0.1
https://www.crossref.org/schema/grant_id0.0.1.xsd">
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    <doi_batch_id>batch_2020-1640</doi_batch_id>
<timestamp>20210611647114200</timestamp>
     <depositor>
       <depositor_name>JSMF</depositor_name>
<email_address>dolezalek@jsmf.org</email_address>
    <registrant>James S. McDonnell Foundation</registrant>
  </head>
  <br/>body>
     <grant>
       <investigators>
           <person role="lead investigator">
             <givenName>Anton</givenName>
             <familyName>Pichler</familyName>
             <affiliation>
               <institution>Complexity Science Hub Vienna</institution>
             </affiliation>
           </person>
            investigators>
         <description xml:lang="en">In support of the postdoctoral fellow's salary, fringe benefits and research plan.
</description>
         <award_amount currency="USD">200000.00</award_amount>
<funding amount="200000.00" currency="USD" funding-percentage="100" funding-type="fellowship">
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         <resource>https://www.jsmf.org/grants/2020-1640/</resource>
       </doi data>
    </grant>
  </body>
</doi bátch>
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サイトになるにはなる。

```
<?xml version="1.0" encoding="UTF-8"?>
<doi batch xmlns="http://www.crossref.org/grant id/0.0.1"</pre>
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
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    </depositor>
    <registrant>James S. McDonnell Foundation</registrant>
  </head>
  <body>
    <grant>
      ct>
        <investigators>
          <person role="lead_investigator">
            <givenName>Anton</givenName>
<familyName>Pichler</familyName>
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        <description xml:lang="en">In support of the postdoctoral fellow's salary, fringe benefits and research plan.
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           <funder-id>https://doi.org/10.13039/100000913</funder-id>
          <funding-scheme>Postdoctoral Fellowship Award</funding-scheme>
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        <award-dates start-date="2021-09-01" end-date="2023-11-30"/>
      </project>
      <award-number>2020-1640</award-number>
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        <resource>https://www.jsmf.org/grants/2020-1640/</resource>
      </doi data>
    </grant>
  </body>
</doi bátch>
```

Use an XML Template

- Craft a template for the fields appropriate for your grants (including more data fields is better)
 - You may need different templates for different programs/award types

Use for individual grants or for multiple grants

For large number of DOIs, consider a mail merge.

Use the new/upcoming Crossref web form

Avoids need to constantly edit XML code.

Will allow easier, faster registration of individual grant DOIs.

- More accessible; will help make it simpler
 - Anyone that can complete a web form will be able to register a grant DOI.

After creating, make use of the DOI

- Market it to your researchers and grantees
 - Updates, newsletters, etc.
 - Ask researchers to start using the DOI for publications immediately
 - Easier for new grants; more challenging for existing grants

Consider making it your internal grant ID

- Use it in communications, materials, and on your website
 - JSMF grant agreements, on submitted reports

University of Cambridge

Duncan Astle, Ph.D.

Embracing complexity in neurodevelopment
https://doi.org/10.37717/2020-1289

University of Michigan

Adriene Beltz, Ph.D.

Personalized Cognition in Context: An Ambulatory Assessment Study of Executive Funhttps://doi.org/10.37717/2020-1145

University of Oxford

Emma Cohen, Ph.D.

Does Social Support Buffer Fatigue? A Social-Developmental Approach

https://doi.org/10.37717/2020-1152

Washington University in St. Louis

Jeffrey Zacks, Ph.D. with collaborator Professor Simon Dennis Event Cognition in the Wild https://doi.org/10.37717/2020-1143

Yale University

Nicholas Turk-Browne, Ph.D.

Establishing ground truth about the development of episodic memory in infancy https://doi.org/10.37717/2020-1208

Funded Grants



Grantee: Washington University in St. Louis, St. Louis, MO, USA

Researcher: Jeffrey Zacks, Ph.D. with collaborator Professor Simon Dennis

Grant Title: Event Cognition in the Wild

https://doi.org/10.37717/2020-1143

Program Area: Understanding Human Cognition

Grant Type: Opportunity Awards

Amount: \$250,000 Year Awarded: 2020 Duration: 4 years

Event Cognition in the Wild

Events are the fundamental building blocks of human experience, and they are the things we remember when we look back at our lives. Over the last 20 years, the scientific field of event cognition has seen dramatic growth in explaining how the mind and brain deal with brief, simple everyday events. A major catalyst has been the ability to present complex video, text and VR stimuli while measuring behavior and brain activity. We have already seen payoffs in clinical science and information technology.

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However, event cognition research is still largely locked in the lab, where we can only study "nano-events" such as wo sentences, or at best "micro-events" such as short movies or curated interactions. To make the next qualitative jump for getting out of the lab and developing techniques that allow researchers to record what people actually do and how the

To Review

DOIs aren't just for articles, publications, and databases.

 Creating DOIs for your grants will help create better links between research outputs and funding information.

Sign up with Crossref and start registering grant DOIs today.