Initiative for Open Citations (I4OC) launches with early success

(San Francisco, California) April 6, 2017 - There is fresh momentum in the scholarly publishing world to open up data on the citations that link research publications.

Six organizations today announced the establishment of the **Initiative for Open Citations** (I4OC): OpenCitations, the Wikimedia Foundation, PLOS, eLife, DataCite, and the Centre for Culture and Technology at Curtin University.

Until recently, the vast majority of citation data were not openly available, even though all major publishers freely share their metadata through the foundational infrastructure provided by Crossref**. Before I4OC started, only about 1% of the publications with reference data deposited in Crossref made their references freely available. Now, that figure will jump to 40%.**[1] In recent months, several publishers have made the decision to release these metadata publicly, including the American Geophysical Union, Association for Computing Machinery, BMJ, Cambridge University Press, Cold Spring Harbor Laboratory Press, EMBO Press, Royal Society of Chemistry, SAGE Publishing, Springer Nature, Taylor & Francis, and Wiley. These decisions stem from discussions that have been taking place since a call-to-action to open up citations was made by Dario Taraborelli of the Wikimedia Foundation at the 2016 OASPA Conference on Open-Access Publishing. These publishers join other publishers who have been opening their references through Crossref for some time (see full list).

The purpose of I4OC is to coordinate these efforts and to promote the creation of a comprehensive, freely-available corpus of scholarly citation data. Such a corpus will be valuable for new as well as existing services, and will allow many more interested parties to explore, mine, and reuse the data for new knowledge.

The key benefits that arise from a fully open citation dataset include:

1. The establishment of a global public web of linked scholarly citation data to enhance the discoverability of published content, both subscription access and open access. This will particularly benefit individuals who are not members of academic institutions with subscriptions to commercial citation databases.
2. The ability to build new services over the open citation data, for the benefit of publishers, researchers, funding agencies, academic institutions and the general public, as well as enhancing existing services.
3. The creation of a public citation graph to explore connections between knowledge fields, and to follow the evolution of ideas and scholarly disciplines.

The Internet Archive, Mozilla, the Bill & Melinda Gates Foundation, the Wellcome Trust, and 29 other projects and organizations have formally put their names behind I4OC as stakeholders in support of openly accessible citations.

The creation of I4OC was spearheaded by Jonathan Dugan, Martin Fenner, Jan Gerlach, Catriona MacCallum, Daniel Mietchen, Cameron Neylon, Mark Patterson, Michelle Paulson, Silvio Peroni, David Shotton, and Dario Taraborelli.

Dario Taraborelli, Head of Research at the Wikimedia Foundation, said: "Citations are the foundation for how we know what we know. Today, tens of millions of scholarly citations become available to the public with no copyright restriction. We look forward to more organizations joining this initiative to release and build on this data."

Liz Ferguson, VP Publishing Development, Wiley, said: "Wiley is delighted to support I4OC by opening our citation metadata via Crossref. Collaborating with other publishers further contributes to sustainable and standardized infrastructure that will benefit the research community. We are particularly excited by the potential to expose networks of research that would otherwise lie hidden or take years to discover."

Robert Kiley, Head of Open Research at the Wellcome Trust, said: "The open availability of citation data will help all funders better evaluate the research they fund. The progress that I4OC has made is an essential first step and we encourage all publishers to publicly share this data."

Mark Patterson, Executive Director of eLife, said: "It's fantastic to see the interest that's being shown by so many publishers in making their reference list metadata publicly available. We hope that this new momentum will encourage all publishers to follow suit, and that new services and tools can be built around this open data."

David Shotton (University of Oxford) and Silvio Peroni (University of Bologna), Co-Directors of OpenCitations, said: "OpenCitations harvests scholarly citation information from Crossref and other authoritative sources, and makes it freely available for others to use and build upon. We are delighted to be a founding partner of I4OC, and encourage those remaining publishers whose journal article reference lists are still closed to embrace this sea change in attitude towards open citation data."

Catriona MacCallum Advocacy Director, PLOS, said: "Creating an open database of citations will allow researchers to perform independent analyses of how scientific ideas are communicated through article citations, and a transparent way of tracking the influence of particular articles. By opening up these metadata via Crossref, publishers are providing a vital contribution to Open Science."

Many other publishers have expressed interest in opening up their reference data. They can do this via Crossref, with a simple email to support@crossref.org requesting they turn on reference distribution for all their DOI prefixes. I4OC will provide regular updates on the growth of the public citation corpus, how the data are being used, additional stakeholders and participating publishers as they join, and as new services are developed.

Homepage: https://i4oc.org • Twitter: @i4oc_org • Media contact: info@i4oc.org

[1] percentage of publications with open references out of the total number of publications with reference metadata deposited with Crossref. As of March 2017, nearly 35 million articles with references have been registered with Crossref. Citation data from the Crossref REST API will be made available shortly after the announcement.

Appendix

Participating publishers

American Geophysical Union
Association for Computing Machinery
BMJ
Co-Action Publishing
Cambridge University Press
Cold Spring Harbor Laboratory Press
Copernicus GmbH
eLife
EMBO Press
Faculty of 1000, Ltd.
Frontiers Media SA
Geological Society of London
Hamad bin Khalifa University Press (HBKU Press)
Hindawi
International Union of Crystallography
Leibniz Institute for Psychology Information
MIT Press
PeerJ
Pensoft Publishers
Portland Press
Public Library of Science
Royal Society of Chemistry
SAGE Publishing
Springer Nature
Taylor & Francis Group
The Rockefeller University Press
The Royal Society
Ubiquity Press, Ltd.
Wiley

Stakeholders

Alfred P. Sloan Foundation
Altmetric
Association of Research Libraries
Authorea
Bill & Melinda Gates Foundation
California Digital Library
Center for Open Science
Coko Foundation
Confederation of Open Access Repositories
ContentMine
Data Carpentry
Dataverse
dblp: computer science bibliography
Department of Computer Science and
Engineering, University of Bologna
Dryad
Figshare
Hypothes.is
ImpactStory
Internet Archive
Knowledge Lab
Max Planck Digital Library
Mozilla
Open Knowledge International
OpenAIRE
Overleaf
Project Jupyter
rOpenSci
Science Sandbox
Wellcome Trust
Wiki Education Foundation
Wikimedia Deutschland
Wikimedia UK
Zotero

Founders

OpenCitations
Wikimedia Foundation
PLOS
eLife
DataCite
Centre for Culture and Technology, Curtin University