

# Love and Metadata:

## CrossRef at the Hub of Scholarly Communications

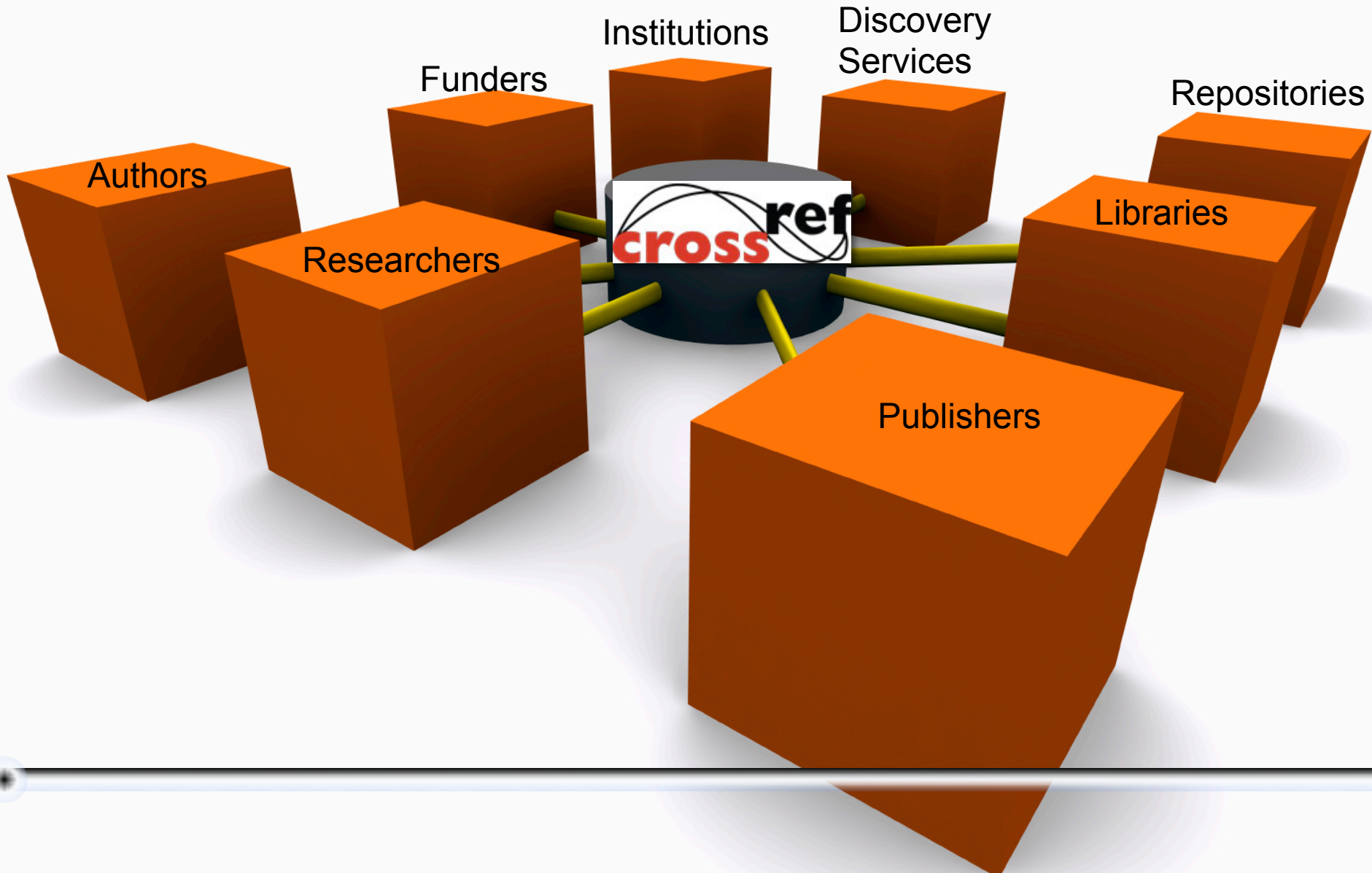
Everything is interesting for  
5 minutes. After that, things  
can get dicey.

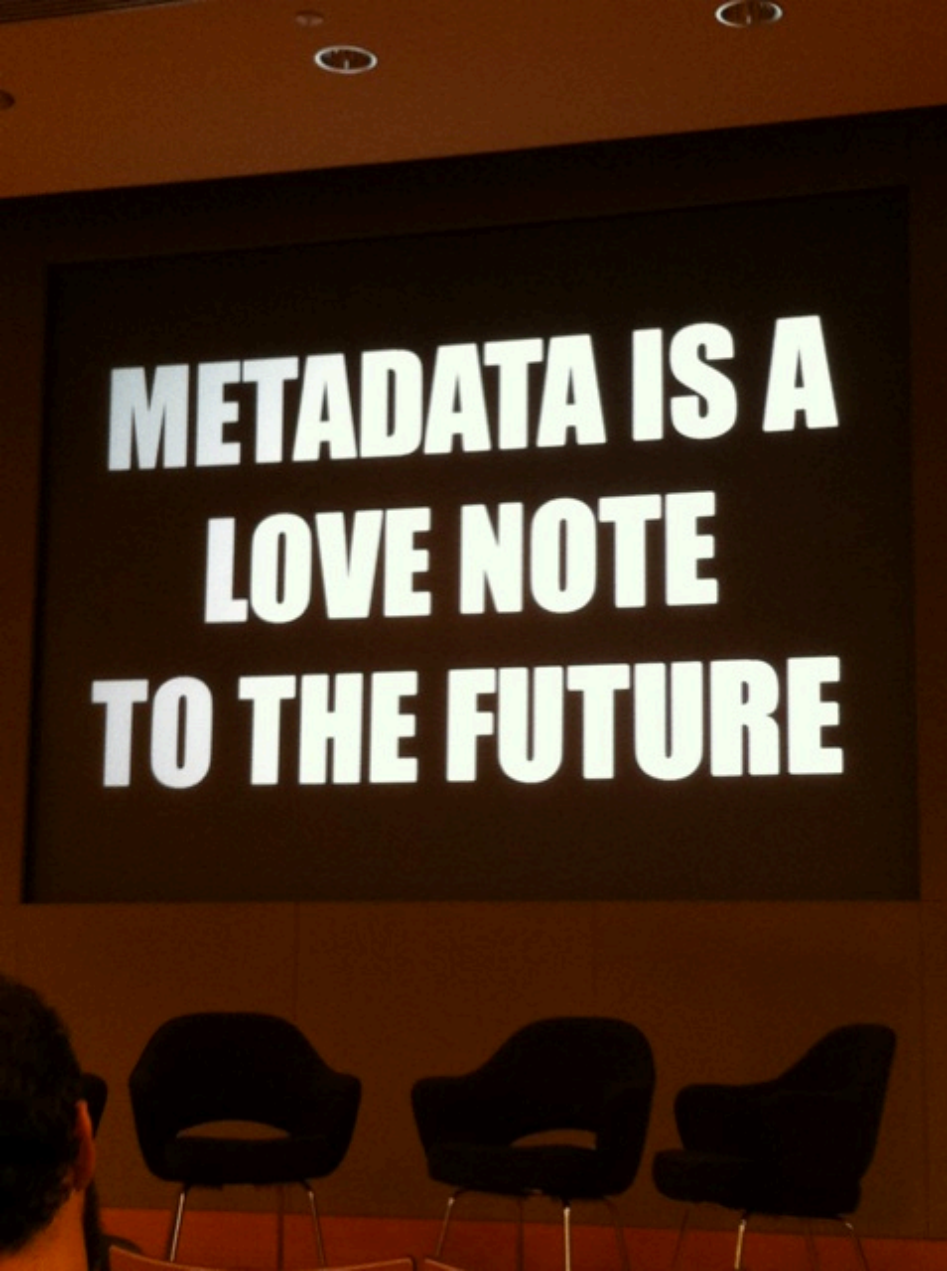
—*Bert Crenka, AS220*



*Carol Anne Meyer, CrossRef*  
STM Spring Conference  
Flash Session  
1 May 2014

# The Hub of Scholarly Communications

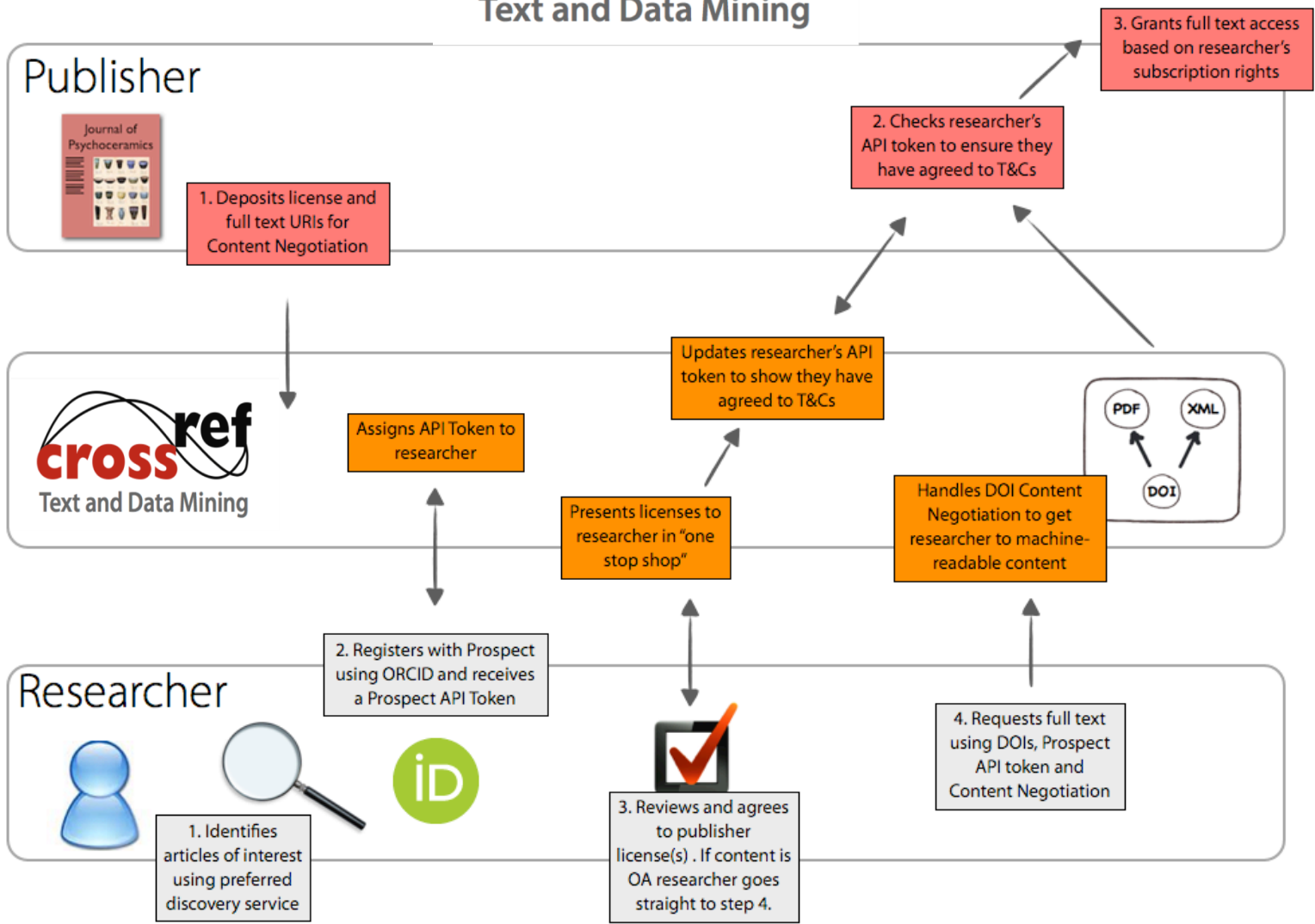


A large screen in a conference room displays the text "METADATA IS A LOVE NOTE TO THE FUTURE" in white, bold, sans-serif capital letters on a black background. In the foreground, the backs of three black chairs are visible, and the back of a person's head is partially seen on the left side of the frame.

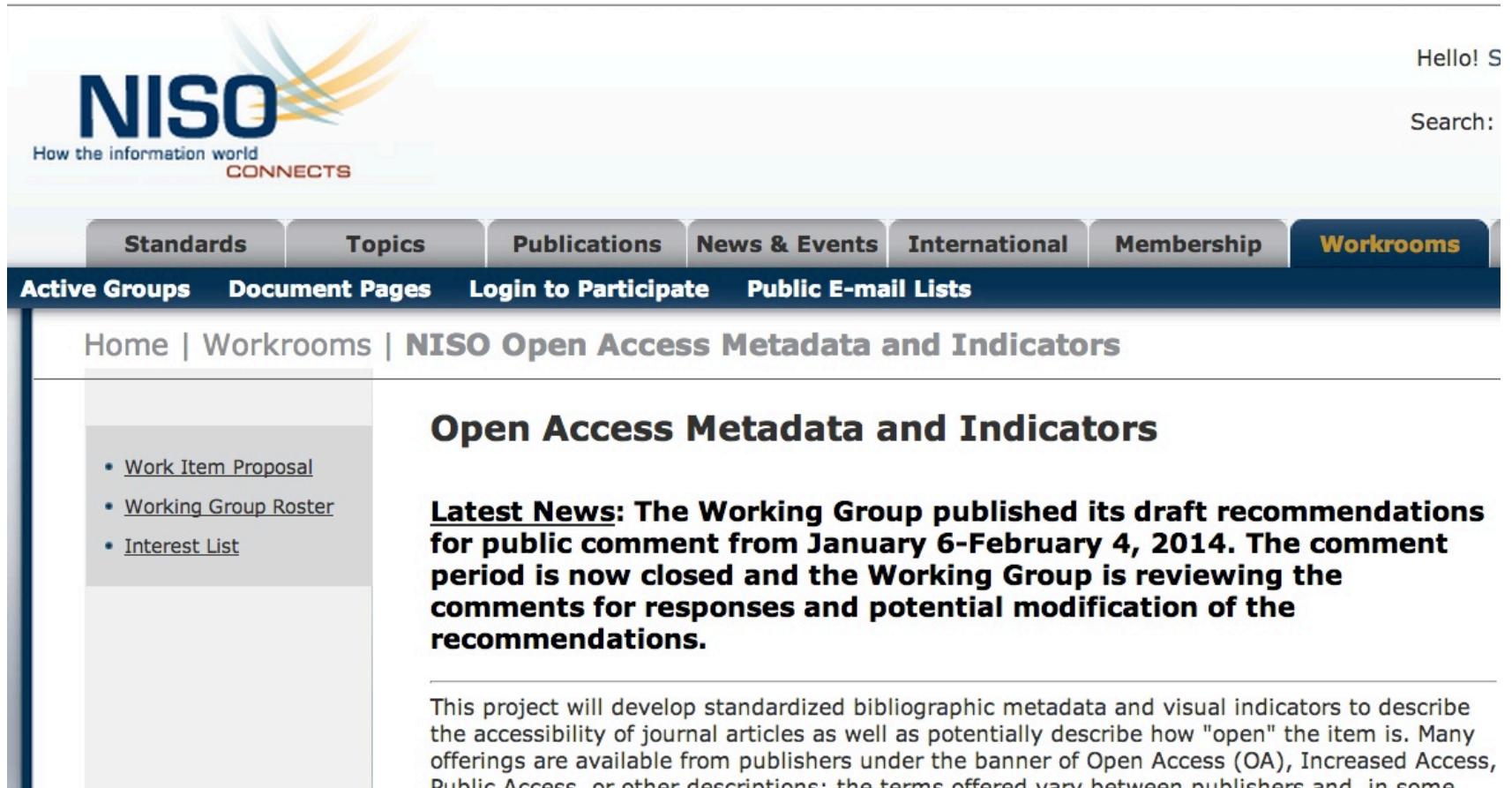
**METADATA IS A  
LOVE NOTE  
TO THE FUTURE**

- ♥ Bibliographic
- ♥ Publication Record
- ♥ Author
- ♥ Funders
- ♥ References
- ♥ Licensing
- ♥ Abstracts

# **crossref** Text and Data Mining



# Other License Data



The screenshot shows the NISO website header with the logo and tagline "How the information world CONNECTS". A navigation bar includes links for Standards, Topics, Publications, News & Events, International, Membership, and Workrooms. Below this is a dark blue bar with links for Active Groups, Document Pages, Login to Participate, and Public E-mail Lists. The main content area features a breadcrumb trail: Home | Workrooms | NISO Open Access Metadata and Indicators. A sidebar on the left contains a list of links: Work Item Proposal, Working Group Roster, and Interest List. The main text area has a section titled "Open Access Metadata and Indicators" with a bolded paragraph of latest news and a descriptive paragraph below it.

NISO  
How the information world  
CONNECTS

Hello! S  
Search:

Standards Topics Publications News & Events International Membership **Workrooms**

Active Groups Document Pages Login to Participate Public E-mail Lists

Home | Workrooms | **NISO Open Access Metadata and Indicators**

- [Work Item Proposal](#)
- [Working Group Roster](#)
- [Interest List](#)

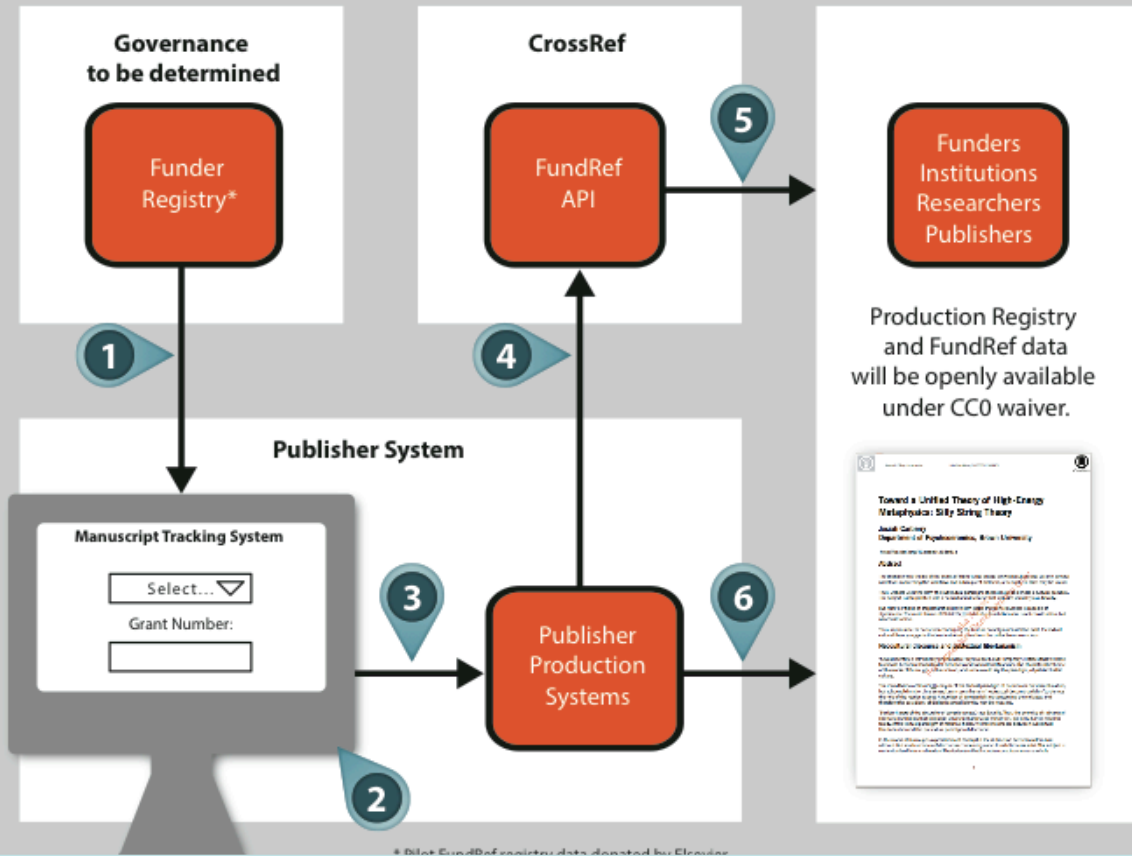
## Open Access Metadata and Indicators

**Latest News: The Working Group published its draft recommendations for public comment from January 6-February 4, 2014. The comment period is now closed and the Working Group is reviewing the comments for responses and potential modification of the recommendations.**

This project will develop standardized bibliographic metadata and visual indicators to describe the accessibility of journal articles as well as potentially describe how "open" the item is. Many offerings are available from publishers under the banner of Open Access (OA), Increased Access, Public Access, or other descriptions; the terms offered vary between publishers and in some

# The Workflow

- 1 FundRef Registry provides standard funder names to publisher manuscript tracking systems.
- 2 Publishers ask authors to select correct funders and provide grant numbers upon manuscript submission.
- 3 Funder information transferred to publisher production systems.
- 4 Publishers send collected funder information in their CrossRef deposits.
- 5 Funders and other stakeholders query FundRef API:
  - A: Given funder & grant number, return DOIs of publications funded
  - B: Given DOI, return funder identifiers and grant numbers associated with DOI
- 6 Funding information displayed on publisher PDFs and websites using standard CrossMark UI.



\* Data FundRef registry data deposited by Elsevier

# fundref<sup>beta</sup> search

Q NIH

- National Institutes of Health United States
- NIHR Health Services and Delivery Research
- NIH Office of the Director United States
- National Institute of Mental Health United States
- NIH Blueprint for Neuroscience Research Unit
- NIH Clinical Center United States
- National Institute for Health Research Trainee

fundref<sup>beta</sup>  
search

Include funding from sub-organizations

**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES**

- Administration for Children and Families
- Centers for Disease Control and Prevention +
- Office of Public Health and Science
- The Office of the National Coordinator for Health Information Technology
- U.S. Administration on Aging
- Agency for Healthcare Research and Quality
- Centers for Medicare & Medicaid Services

**National Institutes of Health**

- Office of AIDS Research
- Office of Disease Prevention
- Office of Strategic Coordination
- National Institute of Biomedical Imaging and Bioengineering
- U.S. National Library of Medicine
- National Institute of Child Health and Human Development

Q National Institutes of Health

Metadata Search  Sign in with ORCID

SORT BY: **RELEVANCE** PUBLICATION YEAR

[DOWNLOAD AS CSV](#)

PAGE 1 OF 269 RESULTS

Heat-Shock Proteins in Autoimmunity

Journal Article published 2013 in *Autoimmune Diseases* volume 2013 on pages 1 to 3

Research funded by National Institutes of Health

Authors: Kamal D. Moudgil, Stephen J. Thompson, Fabiana Geraci, Boel De Paepe, Yehuda Shoenfeld

<http://dx.doi.org/10.1155/2013/621417> [Actions](#)

Force-dependent mobility and entropic rectification in tubes of periodically varying geometry

Journal Article published 2012 in *The Journal of Chemical Physics* volume 136 issue 21 on page 214110

Research funded by National Institutes of Health (10-03-00393)

Authors: Leonardo Dagdug, Alexander M. Berezhkovskii, Yurii A. Makhnovskii, Vladimir Yu. Zitserman, Sergey M. Bezrukov

<http://dx.doi.org/10.1063/1.4726193> [Actions](#)

Elastic network normal modes provide a basis for protein structure refinement

Journal Article published 2012 in *The Journal of Chemical Physics* volume 136 issue 19 on page 195101

Research funded by National Institutes of Health (R01GM072014, R01GM073095, R01GM081680, R01GM081680-S1)

Authors: Pawel Gniewek, Andrzej Kolinski, Robert L. Jernigan, Andrzej Kloczkowski

<http://dx.doi.org/10.1063/1.4710986> [Actions](#)

Tunable optical tweezers for wavelength-dependent measurements



♪ Researchers just wanna have funds ♪



[photo credit](#)

### Summary

You can use a new CrossRef [API](#) to query all sorts of interesting things about who funded the research behind the content CrossRef members publish.

# CrossRef APIs for machines and integration





# The Neutral Corner



SHared Access Research Ecosystem (SHARE)  
a joint project of ARL, AAU, APLU



# CHORUS

Clearinghouse for the **Open Research** of the United States




# CrossRef Metadata Search

[FundRef](#) [Status](#) [API](#) [Help](#)  [Sign in with ORCID](#)

## CrossRef<sup>beta</sup> metadata search

[Help! - Example Queries](#)

 Sign in with ORCID

## TYPE

 Journal Article (1)

## YEAR

 2013 (1)

## OA STATUS

 Other (1)

## PUBLICATION

 Annals of  
Psychoceramics B (1) Annals of  
Psychoceramics B (1)

## CATEGORY

## FUNDER NAME

 Basic Energy  
Sciences, Office of  
Science, U.S.  
Department of Energy (1) National Science  
Foundation (1)

## SOURCE

 CrossRef (1)

Showing results for ORCID matching 0000-0002-1825-0097

SORT BY: **RELEVANCE** PUBLICATION YEAR

PAGE 1 OF 1 RESULTS


Journal Article The Global State of Psychoceramics Research

Published **3 Feb 2013** in *Annals of Psychoceramics B* Volume 2013 on pages 1 to 8

Research funded by National Science Foundation | Basic Energy Sciences, Office of Science, U.S.

Department of Energy

Authors: Joseph Carberry

<http://dx.doi.org/10.5555/515151>  More

Q R21CA132075

API H

Search by grant number

TYPE

Journal Article (1)

YEAR

2012 (1)

OA STATUS

Other (1)

PUBLICATION

Appl. Phys. Lett. (1)

Applied Physics Letters (1)

CATEGORY

Physics and Astronomy (miscellaneous) (1)

FUNDER NAME

National Institutes of Health (1)

SORT BY: RELEVANCE PUBLICATION YEAR

PAGE 1 OF 1 RESULTS

Journal Article Near-field enhanced ultraviolet resonance Raman spectroscopy using aluminum bow-tie nano-antenna


Published 2012 in **Applied Physics Letters** volume 101 issue 11 on page 113116

Research funded by National Institutes of Health (R21CA132075)

Q 10.1063/1.4744984

API

Help

 Sign in with ORCID

Search by CrossRef DOI

TYPE

Journal Article (1)

YEAR

2012 (1)

OA STATUS

Other (1)

PUBLICATION

Phys. Fluids (1)

Physics of Fluids (1)

CATEGORY

Condensed Matter Physics (1)

FUNDER NAME

National Institutes of Health (1)

SORT BY: RELEVANCE PUBLICATION YEAR

PAGE 1 OF 1 RESULTS

Showing DOI matching 10.1063/1.4744984

Journal Article Characterization of the transport topology in patient-specific abdominal aortic aneurysm models

Published 2012 in **Physics of Fluids** volume 24 issue 8 on page 081501

Research funded by National Institutes of Health (5R21HL108272)

Authors: Amirmoslem Azari, Shawn C. Shadden

<http://dx.doi.org/10.1063/1.4744984>  More



# CrossMark



Citation: *Cellular Therapy and Transplantation*, Vol. 1, No. 1, 26 May 2008, p. 18-24,  
doi: 10.3205/ctt2008-05-26-001-en



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Creative Commons Attribution-Share Alike 2.0 Germany, <http://creativecommons.org/licenses/by-sa/2.0/de/deed.en>  
Submitted: 4 February 2008, accepted: 20 March 2008, published: 26 May 2008

## Optimization of the indications for allogeneic stem cell transplantation in Acute Myeloid Leukemia based on interactive diagnostic strategies

Maite Hartwig<sup>1</sup>, Axel Roloff<sup>2</sup>,  
Boris Fehse<sup>1,3</sup>, Nicolau

<sup>1</sup>Interdisciplinary Clinic for Stem Cell Transplantation  
<sup>2</sup>MLL, Munich Leukemia Laboratory  
<sup>3</sup>Experimental Pediatric Oncology  
Johann Wolfgang Goethe-University  
Correspondence: \*Dr. med. Ulrike Bacher, MD,  
University Medical Center Hamburg-  
Germany, Tel. 00494428034154, Fax.

### Summary

The indications for allogeneic stem cell transplantation  
challenge due to the clinical and genetic heterogeneity

PDF

RESEARCH ARTICLE



## The Chilling Effect: How Do Research

Related Content | Comments

of Sociology and Institute for Health, Health  
ck, New Jersey, United States of America



CrossMark

STATUS

RECORD



### Updates are available for this document.

Correction dated 2006-12-1:

<http://dx.doi.org/10.1107/S0907444906044246>

This document is maintained by the publisher.

**Document:** Application of the use of high-throughput technologies to the de...

**Publication:** Acta Crystallographica Section D Biological Crystallography

HTML



# CrossMark



CrossMark

STATUS

RECORD

CrossMark



Funding for this research was provided by:

**U.S. Department of Energy**

DE-AC05-06OR23100, DEFC02-08ER54969, DEAC02-09CH11466

## Publication History

**Received**

2012-05-25

**Accepted**

2012-08-06

# CrossRef Cited-by Linking



The screenshot shows the Cambridge Journals Online interface. At the top, there is a navigation bar with 'CAMBRIDGE JOURNALS' and a search bar. Below this, there are tabs for 'About Us', 'News', 'Browse Journals', 'Authors', 'Societies', 'Librarians', 'Agents', and 'Users'. A 'Quick Search' box is visible. On the left side, there is a sidebar with 'Africa' highlighted. Below this, there is a 'Welcome to Cambridge Journals Online' message and a 'Register for an Account' button. Further down, there are sections for 'ARTICLE AUTHOR QUERY' (with a search for 'kelsall t' and a '[Google Scholar]' link), 'JOURNALS', 'JOURNAL MENU', 'SPECIAL SALES', 'ACCESS INFORMATION', and 'ARTICLE MENU'. At the bottom of the sidebar, there is an 'Options' section with links for 'Export Citation', 'Citation Alert', 'Save This Article', and 'Request Permissions'. Below the options, there is a 'Cited By Articles' section with a 'CrossRef' link circled in red. An arrow points from this 'CrossRef' link to the main content area.

## Cited By

### Cited by CrossRef

- Tim Kelsall. Going with the Grain in African Development?. *Development Policy Review* 2011; **29**: s
- Harri Englund. Pentecostalism Beyond Belief: Trust and Democracy in a Malawian Township. *Africa*
- Tim Kelsall. Going with the Grain in African Development?. *Development Policy Review* 2008; **26**: 6
- David Pratten. The Politics of Vigilance in Southeastern Nigeria. *Development and Change* 2006; **37**
- Kenneth Omeje. The state, conflict & evolving politics in the Niger Delta, Nigeria. *Review of African*





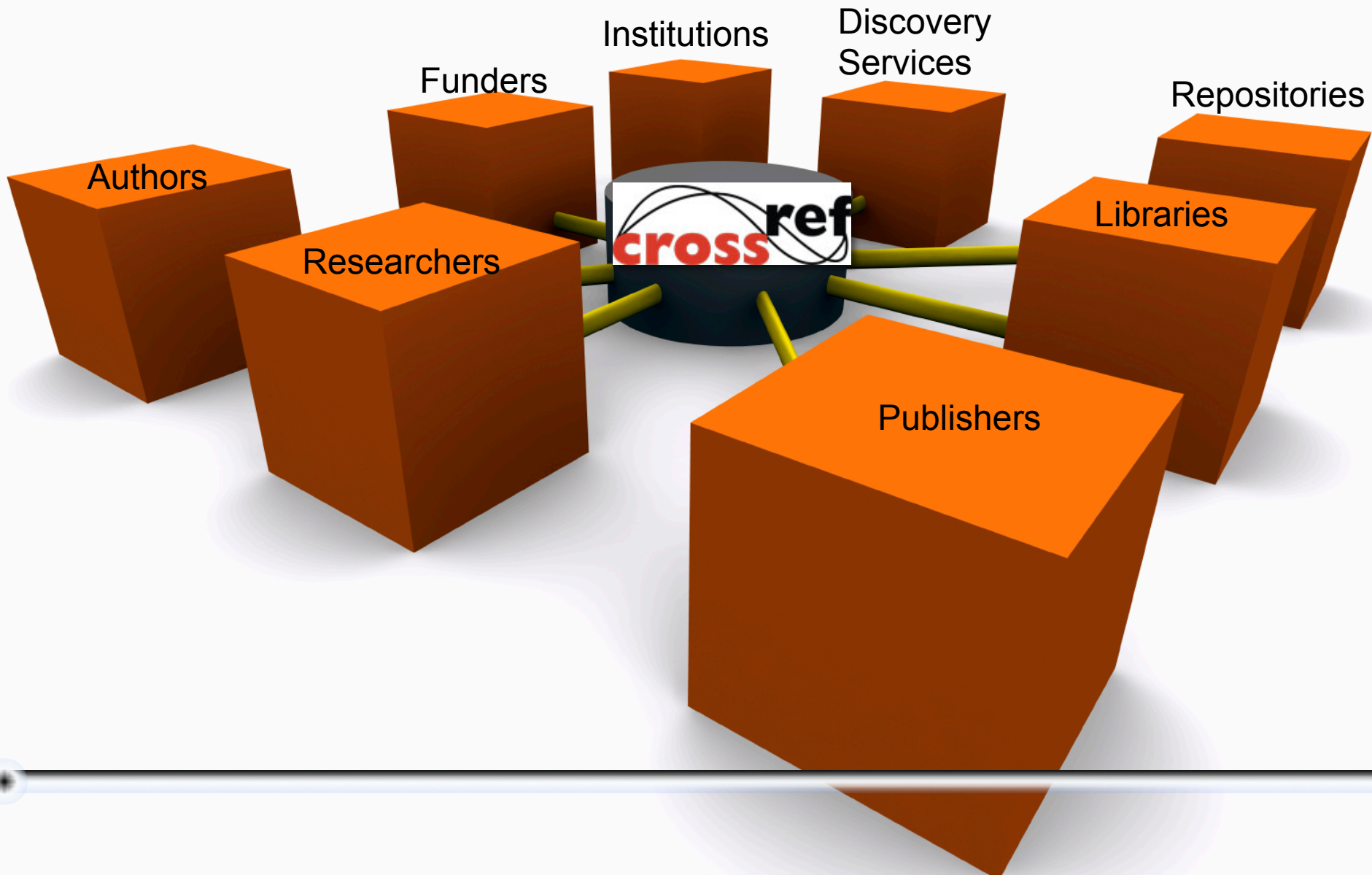
- ♥ Duplicate detection
- ♥ Helps publishers improve quality
- ♥ Made possible by, yep, CrossRef DOIs.

CrossRef Metadata Services provides all metadata to third parties like...



- ♥ EasyBib
- ♥ Ex Libris
- ♥ Microsoft Academic Search
- ♥ Mendeley
- ♥ PubGet
- ♥ Proquest
- ♥ WorldCat
- ♥ and many more

# The Hub of Scholarly Communication



# Love is a warm puppy?

<metadata>  
 <feeling>love  
 <name>Spot  
 <temperature>warm  
 <age>puppy  
 <color>brown  
 <breed>lab  
 <gender>neutered female  
 <funded\_by>Carol & Alan  
 <related\_to>  
 Black and White Spotted  
 Beagle  
 <AKC number>  
 <DNA registry>

The Joy of Tech™



by Nitrozac & Snaggy



# Time's Up!

## About your speaker:

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Social Media: **@meyercarol**

**I**   
**MetaData**