



# Navigating the Constellation of Content and Data

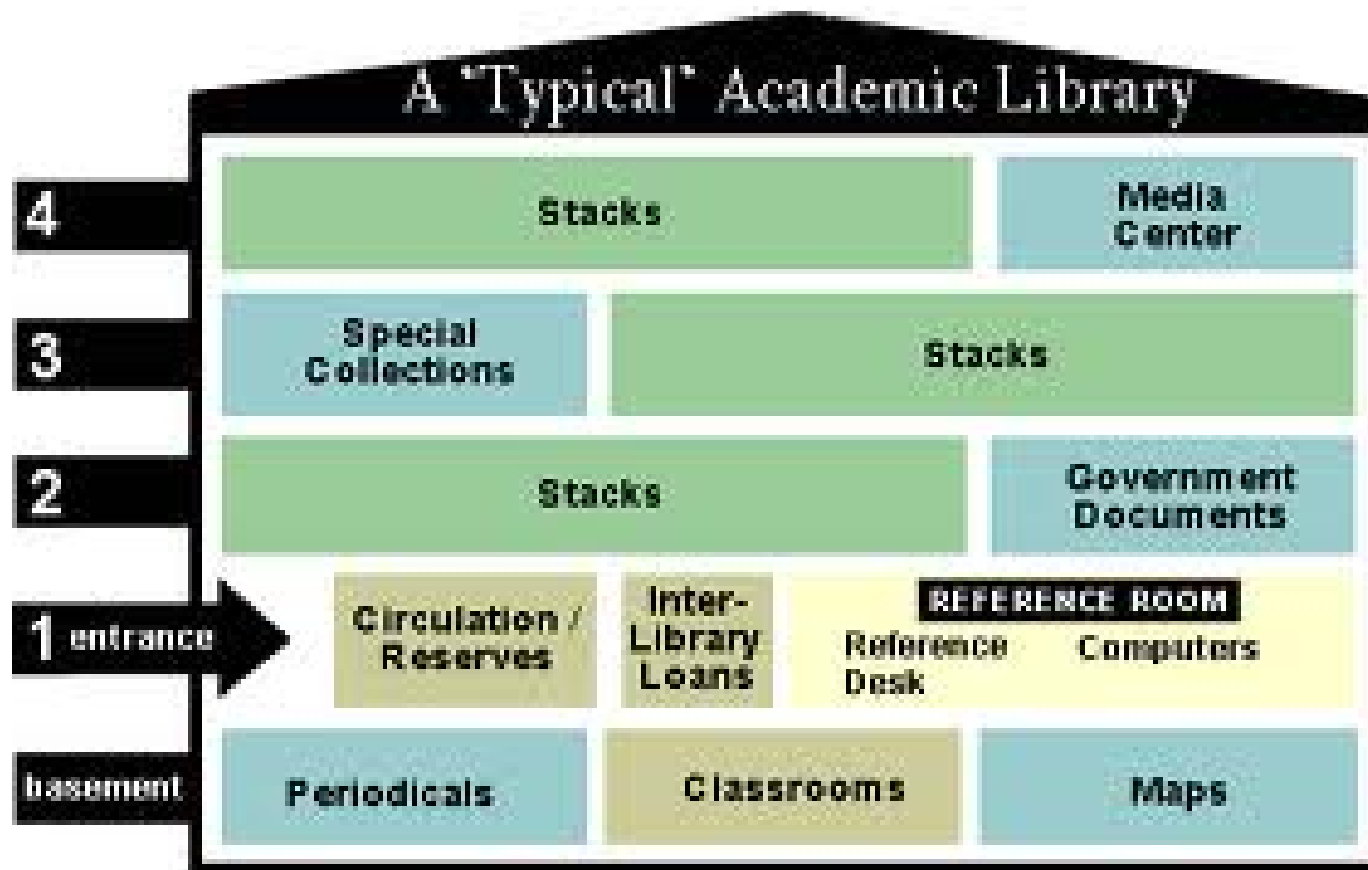
Judy Luther  
Informed Strategies LLC  
Fiesole April 2012



# LIBRARIES



# Print World





# From Silos



## Books

- Online Catalog



- eBook Collections



## Journals

- Abstract & Indexing



- Full Text



## Local Content

- OAI Harvester



- Institutional Repository





## To Metasearch



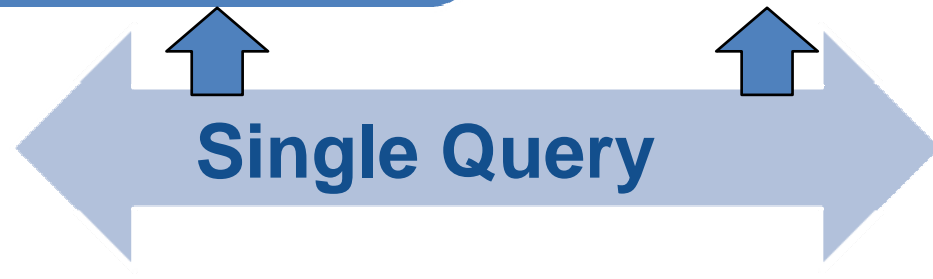
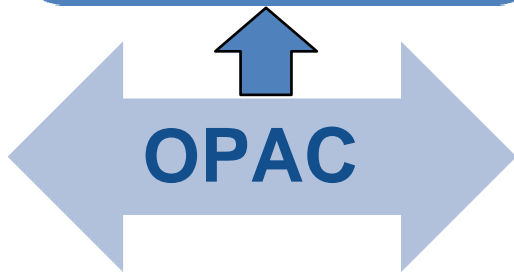
Books



Journals



Databases





## To Discovery



Books



Journals



Local  
Content



**Unified Index**



**USERS**



# Burden on the User – To Select

Quick Search - Search 50 Resources at One Time

Search

[Advanced Search](#)  
Search 170+ Resources

Selections by: [Subject](#) | [Course](#)  
[Create your own custom search](#)

Hover your mouse over a source below to see its description.

[ABI/Inform Global](#)

[Academic Search Premier](#)

[Access World News](#)

[ACM Guide to Computing Literature](#)

[ACS Publications](#)

[ADS \(Astrophysical Data System\) Abstracts Service](#)

[Aerospace & High Technology Database](#)

[America, History & Life with Full Text](#)

[Annual Reviews](#)

[AnthropologyPlus](#)

[Art Full-Text/Art Retrospective](#)

[ASFA: Aquatic Sciences & Fisheries Abstracts](#)

[Biosis Previews](#)

[Britannica Online](#)

[Business Source Complete](#)

[CAB Abstracts](#)

[COS Funding Opportunities](#)

[CRCnetBASE](#)

[ERIC](#)

[GeoRef](#)

[Highwire Press](#)

[Historical Abstracts with Full Text](#)

[History of Science, Technology, & Medicine](#)

[IEEE Xplore](#)

[INSPEC](#)

[JSTOR](#)

[Knovel](#)

[LexisNexis Academic: News](#)

[Literature Online \(LION\)](#)

[MathSciNet](#)

[MLA International Bibliography](#)

[MyLibrary](#)

[Oxford Scholarship Online](#)

[PAIS International](#)

[Periodicals Archive Online](#)

[Project Muse](#)

Which of the  
900+ databases  
should I choose?








# To Know How to Search

## Advanced Search


*Accelerate your research*

Keywords:

Title:

 Author:

Match:

 Date Range:  to   [Quick Search](#)

Selections by: [Subject](#) | [Course](#)  
[Create your own custom search](#)

### Selections by Broad Category

Open a category to select/deselect individual sources. Can search multiple categories.

- Select all sources
  - Same resources as in quick search
  - eBooks
  - Business
  - Humanities
  - International & Area Studies
  - Multi-Disciplinary
  - Reference Shelf
  - Science & Engineering
  - Social Sciences
  - A to Z



# Game Changer

Google

Google Search

I'm Feeling Lucky



# Summon at UBC

a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA
UBC LIBRARY

[LIBRARY HOME](#) | [SEARCH COLLECTIONS](#) | [HELP](#) | [SERVICES](#) | [BRANCHES](#) | [ABOUT US](#)
Ask Us!

Start Here
Books & Media
Journals
Indexes & Databases

Search Summon for articles, journals, books, theses, images...
Search

[Advanced Search](#)

Learn more about our new discovery tool: [Summon](#).

### Search

- [Books, media & more \(Catalogue\)](#)
- [Databases | Journals | Citations](#)
- [Course Materials \(Reserve/Online\)](#)
- [New Materials and Resources](#)
- [more ▾](#)

### Subject Resources

- [Research Guides](#)
- [Article indexes by subject](#)

### How To

- [Connect from home](#)
- [Borrow from other branches \(DocDel\)](#)
- [Borrow from other libraries \(ILL\)](#)
- [Access the ASRS \(Automated Storage\)](#)
- [Book group study rooms](#)
- [Get HELP | \[askaway..\]\(#\)](#)
- [more ▾](#)

### My Account

- [Renew books \(login\)](#)
- [Check DocDel/ILL requests \(login\)](#)

## Check before you copy

[copyright.ubc.ca](http://copyright.ubc.ca)

New Copyright Guidelines for copying/scanning

Stay current on copyright and UBC

⏮ ⏪ 1 / 6 ⏩ ⏭

News

**CSA Standards: Still No Access**  
Apologies to people desperately trying to access the CS [...]

Workshops & Events





# Facets for Search Results

Off Campus? Log in to access full text and more content.



UBC LIBRARY

boreal forests canada

Search

Advanced Search

Help | About | Feedback

Keep search refinements  New search

Search Results: Your search for **boreal forests canada** returned **20,591** results

## Refine your search

- Items with full text online
- Limit to articles from scholarly publications, including peer-review
- Exclude Newspaper Articles
- Items in the library catalog
- Add results beyond your library's collection

## Content Type

- Any
- Journal Article (16,709)
- Dissertation (1,451)
- Book / eBook (1,129)
- Book Chapter (411)
- Government Document (264)

## Excluded

Newspaper Article

more...

## Subject Terms

- Any

Relevance



## Statistics on the study on the **boreal forest** in **Canada**



by Canada. Parliament. Senate. Subcommittee on Boreal Forest  
1999, 64 p.

Contains statistical data in tabular and graphic form on the **boreal forest** resource in **Canada**. The data relate to such matters as harvest levels, annual...

Book: [Check Availability](#), MICROLOG 99-07087

## Multiple successional pathways of **boreal forest** stands in central **Canada**



by Taylor, Anthony R and Chen, Han Y. H  
Ecography, ISSN 0906-7590, 04/2011, Volume 34, Issue 2, pp. 208 - 219

Predicting **forest** composition change through time is a key challenge in **forest** management. While multiple successional pathways are theorized for **boreal**... **FIRE, ECOLOGY, BLACK SPRUCE, PLANT SUCCESSION, REGENERATION**

Journal Article: [Full Text Online](#)

## Aspen mixedwood silviculture in the **boreal forest** of Ontario, **Canada**



by Jeglum, J.K and Dietrichson, J  
silviculture, reviews, mixed forests, Forest Sciences, boreal forests

Web Resource: [Citation Online](#)



## Discovery Shifts the Burden

- Users do not need specialized knowledge
  - Search strategies
  - Subjects they are searching
- Users are provided context to explore
  - Can navigate the topic
  - Filter by categories



# User Expectations

Discovery  $\longrightarrow$  Delivery

Discovery  $=$  Delivery

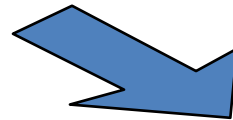
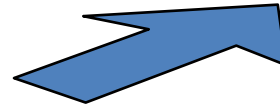


# What the User Really Wants

From Discovery



To Delivery





# Google Scholar



Search

[Advanced Scholar Search](#)  
[Scholar Preferences](#)



Articles (  include patents)  Legal opinions and journals

**Stand on the shoulders of giants**

[About Google Scholar](#) - [About Google](#) - [My Citations](#)

©2011 Google





# Google Scholar Preferences

Google scholar

## Preferences

Save your preferences when finished and return to search.

### Scholar Preferences

#### Interface Language

Display Google tips and messages in:

#### Search Language

Search for pages written in any language (Recommended).

Search only for pages written in these language(s):

- |  |                                   |                                     |                                  |
|--|-----------------------------------|-------------------------------------|----------------------------------|
| <input type="checkbox"/> Chinese (Simplified)  | <input type="checkbox"/> French   | <input type="checkbox"/> Korean     | <input type="checkbox"/> Turkish |
| <input type="checkbox"/> Chinese (Traditional) | <input type="checkbox"/> German   | <input type="checkbox"/> Polish     |                                  |
| <input type="checkbox"/> Dutch                 | <input type="checkbox"/> Italian  | <input type="checkbox"/> Portuguese |                                  |
| <input type="checkbox"/> English               | <input type="checkbox"/> Japanese | <input type="checkbox"/> Spanish    |                                  |

#### Collections

Search articles (  include patents).

Search legal opinions and journals.

#### Library Links

[\(what's this?\)](#)

e.g., *Harvard*

Show library access links for (choose up to three libraries):

- Canadian National Catalogue - Find in AMICUS
- University of Western Ontario - Get it @ Western





# Direct Links to Full Text

Google scholar

boreal forests canada

Search

[Advanced Scholar Search](#)

Scholar

Articles and patents

anytime

include citations



Create email alert

## [Cellular phenology of annual ring formation of \*Abies balsamea\* in the Quebec boreal forest \(Canada\)](#)

A Deslauriers, H Morin... - ... *Journal of Forest ...*, 2003 - NRC Research Press

Cell formation in growth rings of balsam fir (*Abies balsamea* (L.) Mill) in the boreal forest was studied to describe the timing of ring formation and the development patterns of earlywood and latewood. Wood micro-cores were extracted during the growing season from 1998 to ...

[Cited by 78](#) - [Related articles](#) - [Get at CISTI](#) - [All 11 versions](#)

[\[PDF\] from uqac.ca](#)

[Get it @ Western](#) ←

## [Dynamics of the boreal forests of the Laurentian Highlands, Canada](#)

CV Cogbill - *Canadian Journal of Forest Research*, 1985 - NRC Research Press

Analyses of species composition and tree increment cores from 145 stands in central Québec were used to determine the forest history and stand dynamics. Windspread fires, possibly synchronous, burned across central Québec in at least three periods of record ( ...

[Cited by 111](#) - [Related articles](#) - [All 5 versions](#)

[Get it @ Western](#) ←

## [Transport of boreal forest fire emissions from Canada to Europe](#)

C Forster, U Wandinger, G Wotawa... - *Journal of geophysical ...*, 2001 - agu.org

In August 1998, severe forest fires occurred in many parts of Canada, especially in the Northwest Territories. In the week from August 5 to 11, more than 1000 different fires burned  $>1 \times 10^6$  ha of boreal forest, the highest 1-week sum ever reported throughout the 1990s. In this study ...

[Cited by 186](#) - [Related articles](#) - [Get at CISTI](#) - [All 10 versions](#)

[Get it @ Western](#) ←

## [Climate change and forest fire potential in Russian and Canadian boreal forests](#)

BJ Stocks, MA Fosberg, TJ Lynham, L Mearns... - *Climatic Change*, 1998 - Springer

... Forest fires have been a natural and dominant disturbance regime in global boreal forests for millennia, and recent statistics from Canada, Alaska, and Russia illustrate that, despite reasonably successful fire management strategies in these countries, forest fires still exert a ...

[Cited by 316](#) - [Related articles](#) - [Get at CISTI](#) - [All 13 versions](#)

[\[PDF\] from utoronto.ca](#)

[Get it @ Western](#) ←



# CONTENT IN CONTEXT



# Discovery – Two Aspects

## Search

- Starts with question
- Depends on known vocabulary
- Produces results list or specific item
  - May not be relevant
  - May not be related

## Browse

- Starts with one item
- Depends on an organizing principle
- Leads to other items
  - Related to original
  - Relies on links



# NSCU OPAC – Endeca search

**NCSU LIBRARIES** ASK US | MY ACCOUNT | HOURS | FAQ | CHAT NOW

FIND GET HELP SERVICES ABOUT Search books, articles, journals, & library website **Search**

**Library Catalog**  
discovery tools Anywhere Search  
 Search within results Start Over

**Expand Your Search**  
 2659 results at Triangle research libraries  
 4200+ results at Libraries worldwide  
 Looking for articles? Try Summon beta

**Your Current Search**  
Anywhere  
'discovery tools'

**Narrow Your Search**  
 Currently available  
 Available online  
 New titles

**Subject**  
Data processing (103)  
Data mining (89)  
Artificial intelligence (89)  
Expert systems (Computer science) (78)  
Computer networks (75)  
[Show more](#)

**Genre**  
Congresses (742)  
Electronic books (541)  
Reference (36)  
Laboratory manuals (25)  
Handbooks, manuals, etc. (24)  
[Show more](#)

**Format**  
Book (1794)  
Online (919)  
Software and Multimedia (53)  
Archival Materials (5)  
Videos and DVDs (4)  
[Show more](#)

**Call Number Location**  
Q - Science (959)  
T - Technology (308)

**Results 1 - 10 of 1811** Sort By: Relevance List (0) [Ask Us chat now](#)

[Brief View](#) | [Full View](#)

- In Silico Tools for Gene Discovery [electronic resource]**  
Author: Yu, Bing.  
Published: July 2011  
Format: eBook  
**Online**  
[View resource online \(NCSU only\)](#)  
[Add to List](#)
- Cheminformatics : concepts, methods, and tools for drug discovery**  
Published: c2004.  
Format: Book  
**D.H. Hill Library**  
Stacks (8th floor) RS418 .C48 2004 Available  
[Add to List](#)
- Data mining and knowledge discovery : theory, tools, and technology VI : 12-13 April 2004, Orlando, Florida, USA**  
Published: c2004.  
Format: Book  
**D.H. Hill Library**  
Stacks (6th floor) QA76.9 .D3 D335 2004 Available  
[Add to List](#)
- Cheminformatics [electronic resource] : concepts, methods, and tools for drug discovery**  
Published: c2004.  
Format: eBook  
**Online**  
[View resource online \(NCSU only\)](#)  
[Add to List](#)
- Data mining and knowledge discovery : theory, tools, and technology V : 21-22 April, 2003, Orlando, Florida, USA**  
Published: c2003.  
Format: Book  
**D.H. Hill Library**  
[Add to List](#)



# Facets Facilitate Filtering of Results

## Facets

- ❖ Content Type
- ❖ Subject Terms
- ❖ Pub Date
- ❖ Library Location
- ❖ Language

### Refine your search

- Items with full text online
- Limit to articles from scholarly publications, including peer-review
- Exclude Newspaper Articles
- Items in the library catalog
- Add results beyond your library's collection

### Content Type

- Any
- Journal Article (16,709)
- Dissertation (1,451)
- Book / eBook (1,129)
- Book Chapter (411)
- Government Document (264)

#### Excluded

Newspaper Article

[more...](#)

### Subject Terms

- Any
- ecology (4,337)
- forestry (4,045)
- canada (2,769)
- environmental sciences (2,144)
- life sciences (1,798)
- plant sciences (1,782)

[more...](#)

### Publication Date



to

to

### Library Location

- Any
- Koerner Library (331)
- IK Barber Learning Centre (226)
- Woodward Library (187)
- Online (154)
- Okanagan Library (136)
- Rare Books and Special Collections (46)

[more...](#)

### Language

- Any
- English (20,255)
- French (208)
- Spanish (17)
- German (16)
- Russian (3)
- Arabic (2)

[more...](#)



# Visualization - Grokker

The screenshot displays the Grokker interface for a search on 'plasma'. The window title is 'plasma.gxml - Grokker'. The search bar shows 'plasma' and the Grokker logo. Below the search bar, it indicates '32 of 351 items in 78 categories'. The main visualization area is a bubble chart where the size of each bubble represents the number of items, and the color represents the source. The largest bubble is blue and labeled 'National Laboratory', containing sub-bubbles for 'Featured Documents', 'UofS PPPlasma Research Lab...', 'Theoretical Princip... Theoretical', 'MIT Plasma Science', 'Australian Fusion R...', 'Research Laboratori...', and 'Plasma Physics Laboratory'. Other significant bubbles include a purple one for 'Featured Documents' on the right, and several smaller ones for 'Plasma Physics @Amala Plasma Phy...', 'Australian Fusion...', 'Princeton Plasma Ph...', 'Plasma PhysicBla...', 'Plasma on the Australian Fu...', 'Science - Physics...', 'Research AreaPlasma Physics Info...', and 'What is plas...'. The bottom of the interface features a filter bar with fields for 'Name or Description contains', 'Rank is at most' (set to 16), 'Domain' (set to Educational), and 'Source' (set to MSN). The Windows taskbar at the bottom shows the Start button, several open applications, and the system clock at 5:53 AM.



# Sage Research Methods Map

Methods Map Recently viewed: Artistic inquiry » Participation » Action research » Mixed methods » Pragmatism » American pragmatism » Search the Methods Map

About the Methods Map

Pragmatism (9) American pragmatism

**Show content**  
Click on the Show content button below your term to reveal related content, people and term links

**Next**

**+ Show content (16)**

- Key people (9) >
- Related terms (6) >
- Contrast terms (6) >
- Books (12)
- Dictionaries (1)
- Encyclopedias (3)
- Journal Articles (0)
- Little Green Books (0)
- Videos (0)

Choose from the "Show content" menu to display related content here.

View details:

Sort by: Relevance | Title | Pub. Date

Print Save this search Share Email

- Literature review (#)
- Qualitative research (#)
- Concepts and philosophies (#)
- Writing up (#)
- Quantitative research (#)
- Mixed methods (#)







# Value Is in the Network





# CONTENT ECOSYSTEM



# Unintended Consequences

- Discovery Tools
  - Journals not covered in Discovery Tools left out
  - Opportunity for smaller journals to be visible
- Google Scholar
  - Stand alone journals lack visibility
  - Combined with “Get it @” streamlines access
- Link Resolvers
  - Connection varies by library
  - Choice can depend on the user



# Competitive Pressure for Page One

Google scholar   [Advanced](#)

**Scholar**

## [Analyzing IS research productivity: an inclusive approach to \*\*global IS scholarship\*\*](#)

MJ Gallivan, R Benbunan-Fich - *European Journal of ...*, 2007 - [palgrave-journals.com](#)

Abstract An increasing number of studies have appeared that evaluate and rank journal quality and the productivity of IS scholars and their institutions. In this paper, we describe the results of one recent study identifying the Top 30 IS Researchers, revealing many ...

[Cited by 41](#) - [Related articles](#) - [BL Direct](#) - [All 17 versions](#)

## [Haute Finance and High Theory: Recent \*\*Scholarship\*\* on \*\*Global\*\* Financial Relations<sup>1</sup>](#)

P Dombrowski - *Mershon international studies review*, 1998 - [Wiley Online Library](#)

2. Abstract In surveying the literature on **global** financial relations, this essay suggests that (1) states have not "surrendered" or "retreated" but reinterpreted their roles relative to **global** finance, (2) interstate cooperation is pervasive but fragile, and (3) capital mobility has not ...

[Cited by 39](#) - [Related articles](#) - [BL Direct](#) - [All 3 versions](#)

## [\[BOOK\] \*\*Scholarship\*\*, research libraries, and \*\*global\*\* publishing](#)

J Reed-Scott - 1999 - [books.google.com](#)

Discover how to meet the challenges of increasing your library's international publications through digital networks and large shared resource networks with other research libraries!

**Scholarship**, Research Libraries, and **Global** Publishing reveals a four-year study ...

[Cited by 30](#) - [Related articles](#) - [BL Direct](#) - [All 8 versions](#)

## [Claiming a \*\*Global\*\* Identity: Latino/a Critical \*\*Scholarship\*\* and International Human Rights](#)

C Romany - *U. Miami Inter-Am. L. Rev.*, 1996 - [HeinOnline](#)

Latino/a Critical scholars and activists have a unique opportunity to crack the provincial shell that shelters critical legal **scholarship** in this country. Today, I would like to offer suggestions for the formulation of a dual strategy to be pursued at both the international and domestic ...

[Cited by 24](#) - [Related articles](#) - [BL Direct](#) - [All 2 versions](#)



# Content Discovery

- Documents
  - Metadata assigned post publication
  - Metadata associated when created
- People
  - Social sharing
  - Network recommendations



## Intelligent Tools

- Support discovery (content)
  - Orient those new to topic
  - Provide training
  - Enable exploration
  - Highlight leading research
- Support collaboration (users)
  - Connect other researchers
  - Serve to build community



# New Rules for Content Abundance

## 4 implications of abundance for publishers

- Provide content must be that is open, accessible, interoperable
- Focus on using context to promote discovery
- Develop opportunities for broader use of content
- Offer tools using context to manage content

Collaboration is the key

Brian O'Leary at 2011 Books & Browsers Conference





# Tools to Support Interoperability

- Identity
  - Authors – ORCID <http://about.orcid.org/>
  - Documents – DOIs <http://crossref.org/>
  - Versions – CrossMark  
<http://www.crossref.org/crossmark/index.html>
- Search
  - Schema.org <http://schema.org/>
  - NISO Open Discovery Initiative  
<http://www.niso.org/workrooms/odi/>



## Context through Community

- Mendeley

<http://www.mendeley.com/features/network-and-discover/>

- Eigenfactor

<http://mas.eigenfactor.org>

- Biomed Experts

<http://www.biomedexperts.com/Portal/AboutBME.aspx>

- Microsoft Academic Research

<http://academic.research.microsoft.com/AcademicMap>



# Library Content Identification Structures

- MARC Record
  - RDA, BISAC, Schema.org
- Authority control
  - ORCID
- Controlled vocabulary
  - Taxonomies, ontologies
- Classification scheme (organizing principle)
  - Relationship between documents



## Comments & Questions

Judy Luther  
Informed Strategies LLC  
[www.informedstrategies.com](http://www.informedstrategies.com)