

Scholarly Information Practices in the Online Environment: *Implications for Shared Library Service Frameworks*

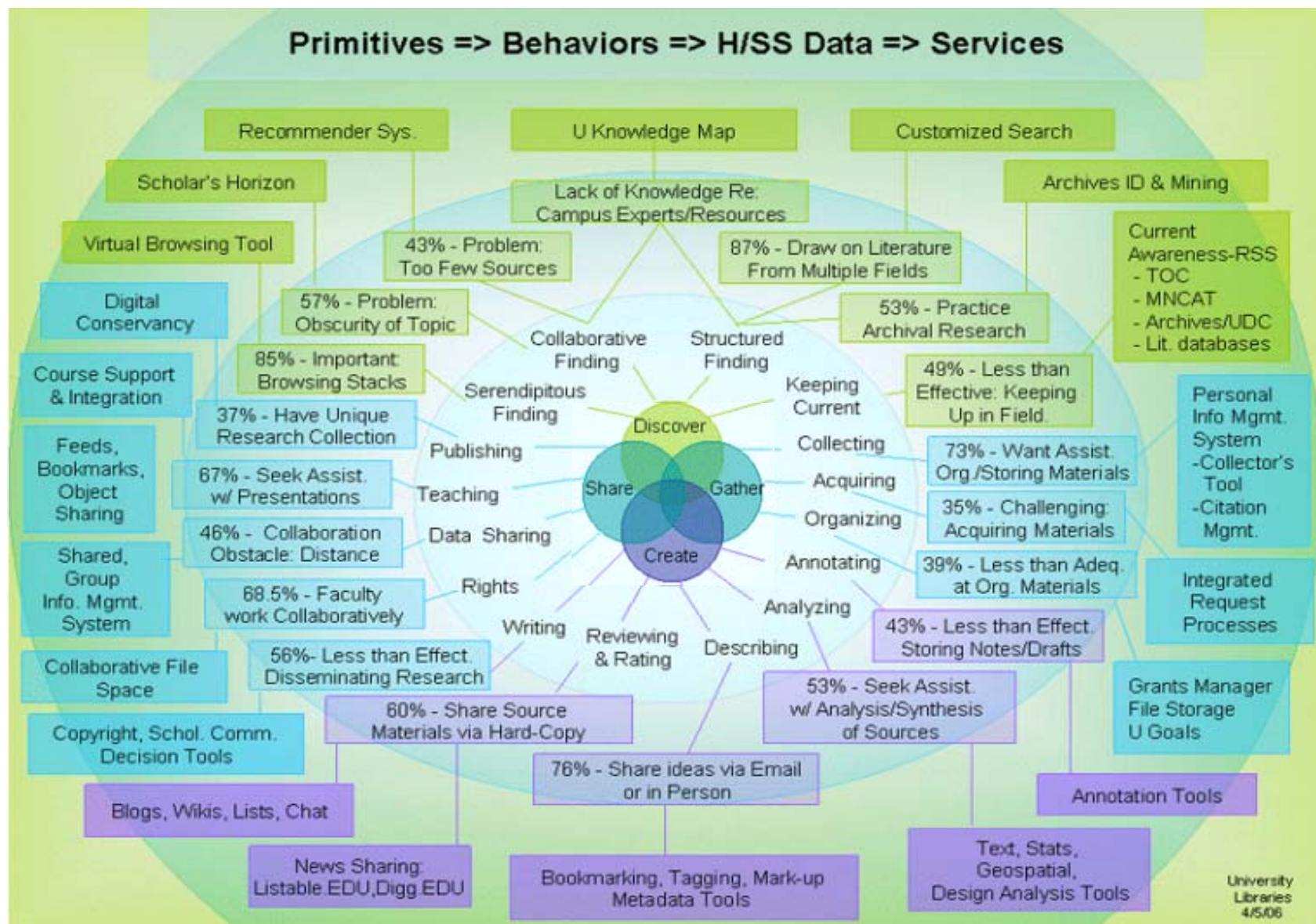
Constance Malpas
Ricky Erway

RLG Partnership Meeting
1 June 2009

First, some context . . .

- Library Services Framework - DLF, OCLC
Generic business requirements, processes, functions
- Net-workflows - Dempsey
Adapting to changed user expectations
- Virtual Research Environments - JISC (etc)
Integrated service environment tailored to research lifecycle
- Scholarly information practices - UMinn, NYU, UW (etc)
An ethnographic approach to modeling library services

. . . and some circles



Viewpoint and vision:

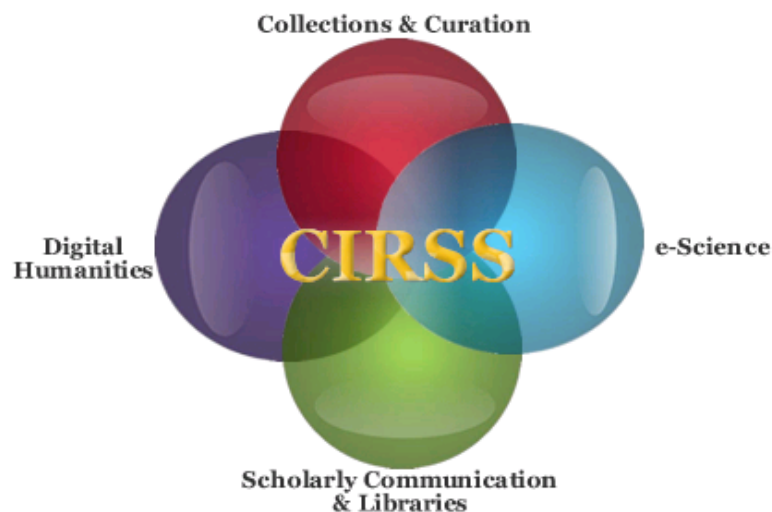
As scholarly workflows move to the network, new opportunities for research support services will emerge. Libraries lack a collective vision of their place in this changed infrastructure.

Implications:

Shared service frameworks based on core scholarly activities are needed to avoid unnecessary duplication of effort, enabling libraries to focus investment where it is most needed.

Scholarly Information Practices: Infrastructure

- Analysis and synthesis of the available evidence base
- Improved understanding for library management



Scholarly Information Practices in the Online Environment

Themes from the Literature and Implications for Library Service Development

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A publication of OCLC Research

Aim and Intent

- Identify current themes in the literature
Disciplinary differences in scholarly work; commonalities
- Reflect on how library services can support current scholarly practices
Expectations cultivated in broader online environment
- Assess 'specific gravity' of service requirements
Local, group and global solutions; intensity of demand

A literature review aimed at library managers

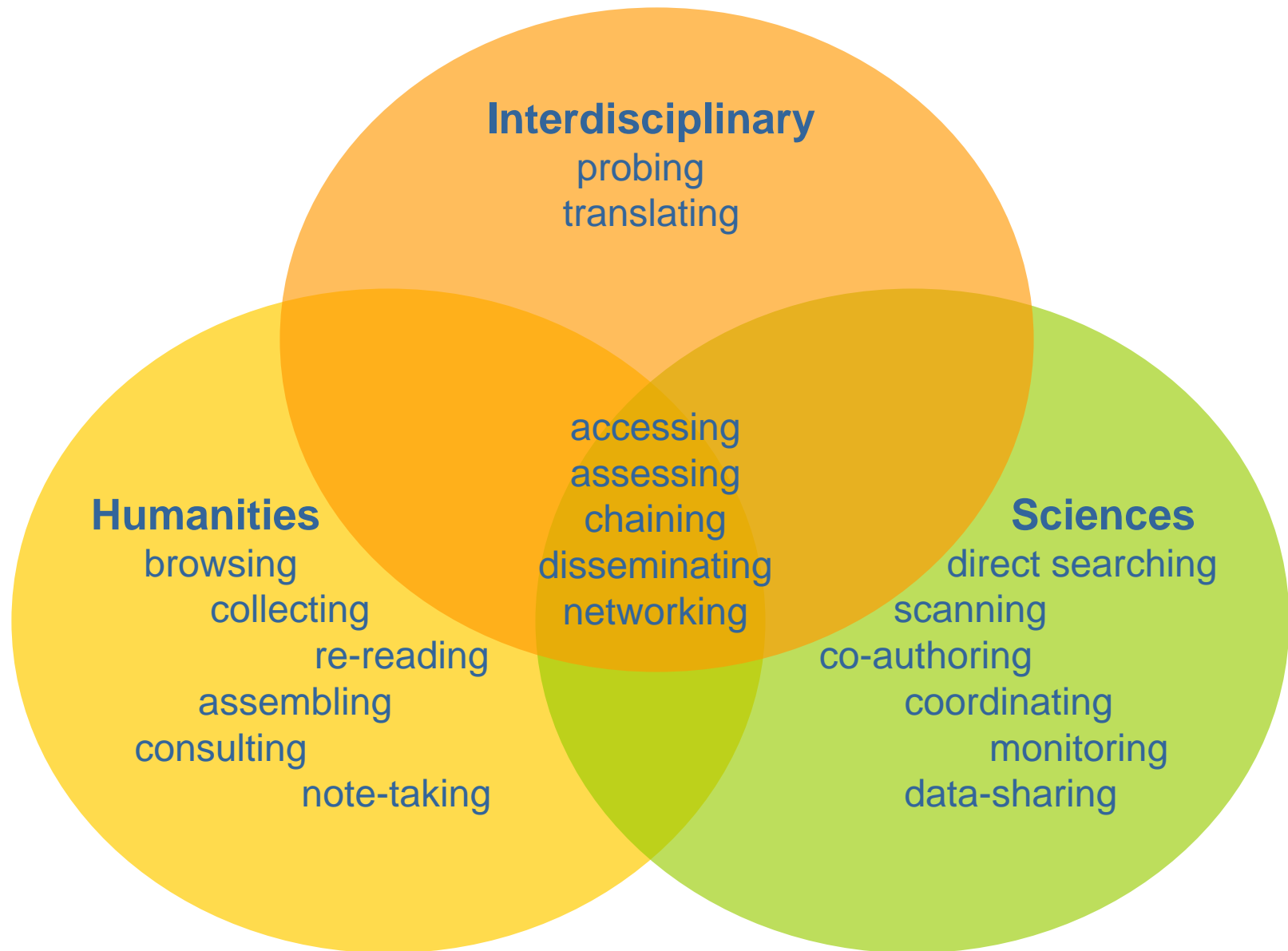
Analytic Framework & Methodology

- Scholarly 'primitives' (Unsworth, 2000)
"functions common to scholarly activity across disciplines"
- Five core activities
Searching, Collecting, Reading, Writing, Collaborating
- Disciplinary patterns, high-intensity activities
Different modalities of scholarly work
- Adaptive services within (and beyond) the library
Areas for future research and development

Key Findings

- Opportunities for shared service development are concentrated in a few areas
 - *Knowledge organization, discovery, curation*
- Operational & network 'location' of services varies
 - *Some solutions will be found (and should be sought) outside the library, or between the library and CIT*
- Significant convergence in disciplinary information practices
 - *Core service requirements can be modeled generically*

Patterns of Convergence in Scholarly Practice



Adapted from C. Palmer, L. Teffau, C. Pirmann (2009)

RLG Partnership Meeting 2009

Implications for Library Service Development

- Shared understanding of 'core requirements' for cross-disciplinary research environments
→ *a framework for assessing services*
- Increased specificity for customization
→ *supports modular development model*
- Clarified picture of where local / community investment is most needed (and where it is not)
→ *shared, network-aware service architecture*

Getting from here to there

- Insights from a variety of studies
- Examples emerging
- What role for RLG Partnership?
 - Lie of the Land
 - Research Information Management Projects
 - Your ideas

Lie of the Land

The researcher's workflow (services to support the scholar's work)

Fun d	Discover	Gather	Create	Share
finding Grant process	finding Serendipitous	Collecting	Annotating	Rights
	Keeping	Acquiring	Analyzing	Teaching
	current	Organizing	Reviewing & Rating Describing	Data sharing
	Structured		Writing	
	finding Collaborative		Archiving	
			Management	

Individual reputation management (services performed on behalf of the scholar)

Collect	Analy ze	Share	Asses s
Datamining	metadata Assembling data	Identify expertise	Inform tenure process
	Authoritative	Public database	
	Expert profiling	Increased visibility on Web Output services	

Institutional research output and assessment (services performed on behalf of the institution)

Collect	Retain	Share	Assess
Faculty deposit	Long term preservation Info asset stewardship Back-up	Open Access Bibliography	Peer review
Input	Persistent identifiers Rights	Optimize discoverability Output to other repositories Publication	Datamining
Quality control	Centers of excellence Placement of grads		Exporting statistics
Name authority control	Start-ups, spin-offs		Research output metrics Output : grant ratio
Acquire content			

Lie of the Land (detail)

The researcher's workflow (services to support the scholar's work)

Primitive		
Behavior	Activity/Example(s)	Selected services, providers, advisors
Fund		
Seeking grants	Finding funding opportunities, writing grant proposals	Grant administration office, Foundation Center
Discover		
Finding (serendipitous)	Browsing: shelves, literature, web	Libraries, bookstores, JSTOR, Google Scholar, Amazon
Finding (collaborative)	Identifying and collaboration with colleagues, Recommending/Tagging	NatureNetwork, SciSpace, ResearchGate, Videoconf, 2
Finding (structured)	Known item searching: books, journals, Searching/mining/following citations	Library catalogs and indexes, Amazon, Web of Knowledge
Keeping current	Push/pull awareness: SDI, RSS feeds; journals, eText mining, web browsing	Current Contents, NARCIS, JSTOR, Google Books, eT
Gather		
Collecting	Physical resources, lab books, eTexts, digital documents, web resources, datasets, surveys, images	The Nines, Zotero, CiteULike, ICPSR, BioLit, JISC VRE
Acquiring	Borrowing, purchasing, licensing, accessing, requesting	Library, ILL, Amazon, ICPSR, government, Archives,
Organizing	Citation Management, curating datasets	Endnote, Procite, BibTeX, CiteULike, Connotea, DANS
Create		
Annotating	Active reading, tools for notes, drafts	Zotero, Delicious
Analyzing	Scripts, code, algorithms, computational capacity, data mining, modeling, reusable tools	Source Depot, TeraGrid, DataNet, Collex, SSDA, SAS,
Describing	Annotating, tagging, ontological work, mark-up	Zotero, CiteULike, Mendeley, Technorati, eText Center,
Reviewing & rating	Social networking (Blogs, wikis, listservs, chat), formal review	Confluence, Institutional PhD panel, disciplinary peer re
Writing	Document management, citation/bibliography, collaborative authoring,	LaTeX, Word, EndNote/Procite, Connotea, Source Dep
Archiving	Storing or Self archiving	Campus IT, Google, Amazon, Atira PURE

Research Information Management Projects

- A RIM manifesto
- Testing the desirability of research services
- Role of libraries in data curation
- Changing roles of library staff

Test a list of research services

List of Research Support Services (slide 1 of 2).

We will...

- provide you dedicated **space** on a server.
- help you structure space to **organize** your notes, datasets, others' publications, presentations...
- help you **load** it if you like.
- **back up** your work.
- ensure you can access your data **remotely**, no matter where you are.
- provide tools for **group** work and **version** control at the file level.
- help you manage your research, tracking who is involved in which **grant**, which research is funded by which grant, and purchasing grant-funded equipment.
- help you negotiate publication **rights**.
- help you comply with NIH and other **requirements**. (cont.)

Test a list of research services

(Cont. 2 of 2) We will...

- see that your work is **disseminated** broadly, quickly, and openly and that you get maximum **impact** for you and your university.
- do the **authority** work to ensure you are credited for all your work, despite the various forms of your name used in indicating authorship.
- keep your personal **bibliography** up-to-date.
- provide you with a customizable personal **web page**.
- include you in the campus **expertise database** and facilitate inclusion in disciplinary expert databases.
- **preserve** your outputs in the institutional repository and facilitate inclusion in disciplinary repositories.
- see that you can take your work with you if you **leave** this institution

Data Curation

Assess library contributions related to data curation

- Big science vs. little science and humanities
- Derivative data and source data
- Data lifecycle management
- Data reuse
- Institutional vs. disciplinary approaches

Changing Roles of Library Staff

Explore changing roles of library staff:

- Increasing demands
- Role of "data librarians"
- Faculty liaison role
- Specialization in rights and open access
- Ways to work with departments to increase data management awareness and skills

Your ideas

- We're quite eager to hear any ideas, suggestions, course corrections you might have
- But first.....



CREATE AN ETHICSHARE ACCOUNT

- Organize your content with keywords.
 - Build peer networks and collaborate with others.
 - Access and create Groups to organize, share, and discuss research.
 - Receive email notifications for new content.
 - Make this message go away!
- Create an account now!

ETHICS IN THE NEWS

Books: Epidemics, Fearsome and Fascinating

05/26/09

New York Times

Free screening, clinic options put wellness within reach

05/25/09

Los Angeles Times

Kidney disease and cancer risk in men

05/25/09

Los Angeles Times

[show more...](#)

UPCOMING EVENTS

Lecture by Oliver Sacks on "The Art of Medicine"

06/01/2009 5:00pm

The New York Academy of Medicine, New York, New York

Welcome to EthicShare!

EthicShare is a research and collaboration Web site for scholars working in the field of ethics. Developed with an initial focus on bioethics, the EthicShare collection features scholarly articles, books, archival and digital objects, popular press literature, dissertations, and commission reports, as well as blogs and other sources.

Explore EthicShare

- Search
- Save and organize citations
- Review your recent activity, such as your past search history and recently viewed citations
- Tag citations, labeling them with keywords that are useful to you and to other users of the site
- Join or create groups (private or public) to share citations, discuss ideas, upload files, and work collaboratively
- Contribute content to the database
- Export citations into Endnote, RefWorks, or word documents
- Comment on literature, issues, or other aspects of the site in groups
- Find information about upcoming events and deadlines in your field and news, and more...
- Create a Free Account Now!

Full Record

Stem cell science: current ethical and policy issues.

Mauron, A, Jaconi, M E

Clinical pharmacology and therapeutics 2007 82 (3):330-333.



There is increasing support for embryonic stem (ES) cell research on both sides of the Atlantic. In the United States, the outcome is more funding from non-federal sources, despite the current administration's opposing views. In Europe, a similar pragmatic turn is in the making, but the future is still uncertain. Acceptance of ES cells is mitigated by the uncritical belief that their use is ethically more suspect than is the case for adult cells.

User Supplied Keywords:

Community Keywords I've Added:

 [ADD](#)

Example: informed consent

All Community Keywords:

ethical policy public policy stem cell stuff time United States

Discuss Citation With a Group

MY RECENT ACTIVITY

Recent Searches:

[preferences](#)

stem cells...(1279)

Recently Viewed Citations:

Stem cells--a hard s...

Stem cell science: c...

ADD RECORD TO A FOLDER

 [v](#)

Support for core scholarly activities
Accessing → OpenURL
Assessing → tags
Chaining → search history
Disseminating → forums
Networking → groups, calendar
 . . . plus browsing, collecting, consulting etc



GROUP MEMBERSHIP

- Privacy: Public Group
- [Join Group](#)

MY RECENT ACTIVITY

Recent Searches:

stem cells...(1279)

Recently Viewed Citations:

Stem cells--a hard s...

Stem cell science: c...

[preferences](#)

A shared knowledge base
and access to disciplinary
peers

Animal Ethics Home

Animal Research versus Tissue Cultures

I am interested in learning more about the conflict in research between using animals and using human embryonic tissue cultures. In some research it seems to be a decision between these two and yet there are ethical issues with using both of them. How does this get resolved in IRBs and by researchers? Are there any books or articles that people could suggest?

fbenya 2/12/09 3:31 pm

'probing' and 'consulting'

Estol

12/31/69
6:00 pm

I suggest give a glance to: The future of human embryonic stem cell research: addressing ethical conflict with responsible scientific research
<http://journals.indexcopernicus.com/fulltxt.php?ICID=11661>

Guidelines for Human Embryonic Stem Cell Research (2005)
http://www.nap.edu/openbook.php?record_id=11278&page=155

Maybe also some inf. at:
<http://research.ucsd.edu/training.html>

I hope it's help

"Polo" Estol

Search

Scholars

Partners

-A A+ Accessibility

ECONOMISTSONLINE

Example 2

Scholars > Hagedoorn, John



Maastricht University

Faculty of Economics and Business Administration

**Social scientific behaviors . . .****Direct searching** → known-item access**Scanning** → abstracts, evaluative metadata**Monitoring** → sort by currency**Data sharing** → self-archived content**Accessing** → OpenURL**Networking** → contact details

Download list as
[PDF sorted by type](#)
[RTF sorted by type](#)
[PDF sorted by year](#)
[RTF sorted by year](#)

[Hagedoorn](#), John, & [Cloudt](#), D. (2005). The role of developing countries and emerging economies in international inter-firm R&D partnering. *Transnational corporations and economic development : from internationalisation to globalisation / edited by Ludo Cuyvers and Filip De Beule* (pp. 102-121).

bookPart



[Hagedoorn](#), John, [Kranenburg](#), Hans van, & [Pennings](#), J. (2005). Past, present, and future of the telecommunications industry. *Growth and dynamics of maturing new media companies / Media Management and Transformation Centre, Jonkoping International Business School, Jonkoping University ; Cinzia Dal Zotto* (ed.) (pp. 103-123).

bookPart



[Hagedoorn](#), J. (1989). Evolutionary perspectives for the analysis of innovation and diffusion. *Ny teknologi : en utfordring for samfunnsforskning / K.H. Srensen ans T. Espeli* (eds.) (pp.).

bookPart



LIBRARY HSLING Research Information Centre

Welcome **bluser1** [Logout](#)


[Home](#)



bluser1
Expertise
bioscience... retrieval
Interests
e-science biscuits
[Edit Profile](#)

British Library for Research

A one stop solution for carrying out research studies in planned & phased manner and networking with fellow community members

- **Plan**
Search for research
Support for scientific information practices
co-authoring → wiki and apply for funding.
coordinating → grant/project mgt
monitoring → current awareness
... in addition to core activities
- **Network**
Connect with fellow researchers for sharing ideas, resources etc.
- **Experiment**
Use online tools to achieve faster results.
- **Publish**
Disseminate research outputs.



A virtual research environment dedicated to mollusc health sciences

VRE-MHL- α | [Laboratory tools](#) | [Library tools](#) | [Teaching & training](#) | [Communication suite](#) | [Groups](#)

Example 4

New nav

- [VRE-MHL- \$\alpha\$](#)
- [Laboratory tools](#)
- [Library tools](#)
- [Teaching & training](#)
- [Communication suite](#)
- [Groups](#)

Navigation

- [recent posts](#)

Active forum topics

- [Non denaturing western blots...](#)
- [Tenure track position Aquatic Animal Health Bodega Marine Lab, CA](#)
- [Congratulations](#)
- [Network for Postdoctoral Fellow and Scholars](#)
- [Important Seminar](#)

[more](#)

Home

This is not a web site!

... this is a laboratory.

VRE-MHL- α is a Virtual Research Environment based on the concept of open research space. The future of science is open and here we deliberately explore the opening of the research process and how this applies to our community. We are still in the alpha phase.



MHL offers a common, transparent, honest and shared platform to the scientific community of mollusc health. VRE users are owners of MHL; and this is quite a resizing experience of the web. You are welcome to join the venture and please register to become a user. While you can simply join as an individual, you may also wish to use MHL as a home base for your group or for a specific

project. Groups are private areas within the VRE.

The functionalities we currently work with are accessible from the navigation menu (basically the left column of your screen). Much more access unfolds once you register.

Come on in and join.

User login

Username: *

Password: *

[Log in](#)

- [Create new account](#)
- [Request new password](#)

Who's online

There are currently 0 users and 7 guests online.

Recent entries to the bibliographic database

- [First evidence of cell division in circulating haemocytes from the Manila clam *Tapes philippinarum*](#)
- [Lysozyme gene expression and hemocyte behaviour in the Mediterranean](#)

AIRS Research Environment

Advancing Interdisciplinary Research in Singing



[AIRS Workshop](#)

[About Us](#)

[Discussion Forum](#)

[How to Post Content](#)

[AIRS Start-up June 27-30](#)

User login

Username: *

Password: *

[Login](#)

- [Create new account](#)
- [Request new password](#)

Menu

- [Protocols & Proposals - SUBMIT HERE](#)
- ▶ [Proposal Deadlines](#)
- [Research Team](#)
- [Research Themes](#)
- [Documents](#)
- [Links](#)
- [Meetings](#)
- [AIRS Database](#)
- [References](#)

AIRS: Advancing Interdisciplinary Research in Singing - SSHRC MCRI

This Virtual Research Environment (VRE) supports the AIRS Major Collaborative Research Initiative that focuses on singing: both theory and applications.

A proposal to the Social Sciences and Humanities Research Council received approval in December 2008. Participants in the project are shown under Research Team in the Left Menu to whom much credit is due for their co-operation that led to the success of the proposal.

Note: *This web-site was developed primarily for the benefit of the AIRS research team. A public web-site will be developed in the months ahead so that the results of the research can be shared. AIRS Researchers welcome connections at this early stage with others committed to the importance of singing in human development, education, health and well-being. Hence we are leaving the site open at the present time. AIRS welcomes contact with individuals or groups having similar interests.*

For a general overview of the project click [here](#).

Collaborators and co-investigators who have created an account, also have access to the full .pdf and .doc files.

It's easy to create an account; you will need to wait for verification, up to 12 hours, usually less

Recent blog posts

- [Music Monday - Serena Ryder's "Sing, sing"](#)
- [SSHRC MCRI Press Release for recent round of MCRI's - March 16, 2009](#)
- [Congratulations AIRS! We did it! Dec 10/08 – SSHRC informs of positive outcome!](#)
- [Team AIRS Defends](#)
- [SMPC \(Soc. Mus Perc & Cog\) meets at U. of Indiana, August 2009 - Submission deadline February](#)
- [Amer. Psych. Assoc Ann Meeting Toronto, 2009 - Submission deadline Dec. 1](#)
- [AIRS Interview in Ottawa - week of Nov 17!](#)
- [Phenomenon of Singing - Conference St. John's Newfoundland - Submission deadline Oct. 15, 2008](#)
- [Three new reports from the Sidney De Haan Research](#)

(Other library service environments)

Enlighten

Research publications by members of the University of Glasgow

[home](#) > [services](#) > [Enlighten](#)

Enlighten

[Enlighten Home](#)

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Search

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Quick Search: Authors, Title, Keywords and Fulltext

Type the keyword(s) for published papers you want to find.

For example:

- jaagsiekte sheep retrovirus
- ancient lothian

Latest Additions

[Published Papers](#)

[Theses](#)

Latest News

[Publications policy](#)

Latest Statistics

JISC

Enrich

The overall aim of Enrich is to improve the integration of Enlighten, the University of Glasgow's institutional repository service with the institution's Research System. This project will place the role of the repository as one which is a natural part of the research management cycle rather one which is a separate and disconnected activity.

[Research Funders: Open Access Policies](#)

[Copyright Advice](#)

[Open Access Publishing](#)

[Training](#)

[Help and Advice](#)

Other Services

[Glasgow Theses Service](#)

MyEnlighten

[Login](#)

[Create Account](#)

There are many benefits to depositing your research in Enlighten [find out more ...](#)

from the beginning of the 2008/2009 academic session.

KEY INFORMATION FOR GLASGOW AUTHORS

Enlighten also provides University of Glasgow authors with advice on how to deposit papers in the service and information on related issues such as open access publishing and complying with funding body open access policies.



an eScholarship framework enables integrated services as a foundation for sustainable, innovative scholarly publishing



The University of Sydney

Sydney eScholarship



Sydney eScholarship

an initiative of the University of Sydney Library

Sydney eScholarship is a set of innovative services for the University of Sydney that integrates the management of digital content with new forms of access and scholarly publication.

Digital text collections

The Sydney Electronic Text and Image Service

introduction

SETIS provides access to a large number of networked and in-house full text databases, primarily but not exclusively, source texts within the humanities. In addition to these literary, philosophical

Project platforms



Australian Studies Resources

Welcome to the Australian Studies Resources page at the University of Sydney Library's Electronic Text and Image Service (SETIS).

Publishing services



Sydney University Press



Digital repository archive



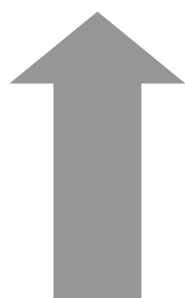
Sydney eScholarship Repository
The University of Sydney Library

eResearch support

Sydney eScholarship Digital Project Analyst



Questions,
Comments?



*Scholarly information practices
undergoing a format transition*

Further Information

- Palmer, Carole L., et al. 2009. [*Scholarly Information Practices in the Online Environment: Themes from the Literature and Implications for Library Service Development*](#) (OCLC, 2009)
- [Support for the Research Process](#) program
- [JISC Virtual Research Environments Programme](#) summary
- [EconomistsOnline](#) prototype
- [British Library Research Information Centre](#) presentation
- [UPEI Virtual Research Environment](#) demonstrators
- University of Minnesota [EthicShare](#) demonstrator
- University of Glasgow “[Enrich](#)” project
- [Sydney eScholarship](#) initiative