

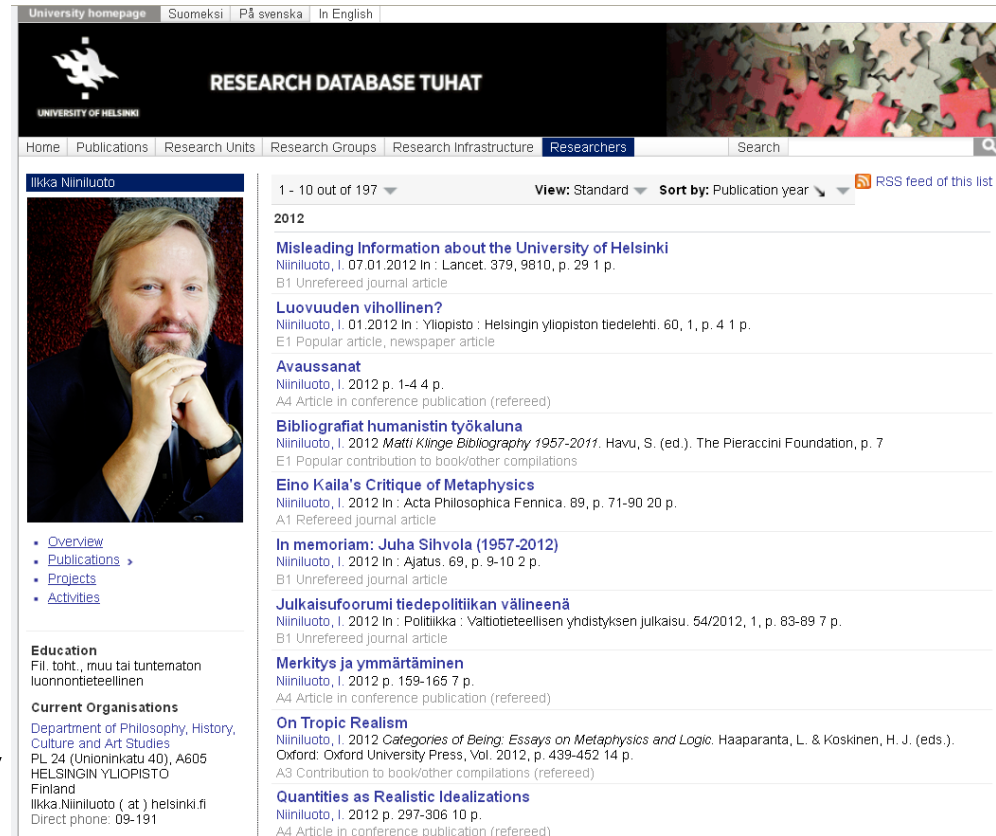
Integrating CRIS and repository – an overview of the situation in Finland and in three other Nordic countries

Open Repositories, Helsinki, June 11, 2014

Jyrki Ilva (jyrki.ilva@helsinki.fi)

CRIS – Current research information system

- A system designed to serve the needs of research administration and research evaluation
 - Publications a key criteria in evaluation
 - Often provides public profile pages for researchers as well
- Basic difference: CRIS contains information on all research publications (and other stuff), IR contains mostly full-text publications



The screenshot displays the 'RESEARCH DATABASE TUHAT' interface for the University of Helsinki. It features a navigation bar with options like 'Home', 'Publications', 'Research Units', 'Research Groups', 'Research Infrastructure', and 'Researchers'. The main content area shows a profile for Ilkka Niiniluoto, including a photo, a list of publications, and contact information. The publications list includes titles such as 'Misleading Information about the University of Helsinki', 'Luovuuden vihollinen?', 'Avausanat', 'Bibliografiat humanistin työkaluna', 'Eino Kaila's Critique of Metaphysics', 'In memoriam: Juha Sihvola (1957-2012)', 'Julkaisuforumti tiedepolitiikan välineenä', and 'Merkitys ja ymmärtäminen'. The interface also includes a search bar, a view selector, and a sort-by dropdown menu.

CERIF, data model and exchange format

- CERIF = Common European Research Information Format
 - Originally launched in the 1990s
 - Developed and maintained by EuroCRIS (<http://www.eurocris.org>)
- Currently a rich relational data model and XML-based format encompassing researchers, organizational units, projects, and research outputs
- Designed for the exchange of research information
- The new generation of proprietary CRIS platforms is based on or is compliant with CERIF

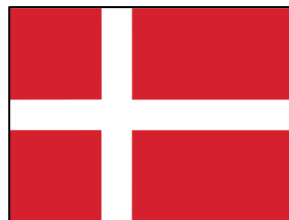
```
<!-- A publication (output) record -->
-<cfResPubl>
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  <cfResPublDate>2009-10-31</cfResPublDate>
  <cfVol>10</cfVol>
  <cfIssue>1</cfIssue>
  <cfStartPage>324</cfStartPage>
  <cfISSN>1471-2105</cfISSN>
  <cfURI>http://www.biomedcentral.com/1471-2105/10/324</cfURI>
-<cfTitle cfLangCode="EN" cfTrans="o">
  KEGGconverter: a tool for the in-silico modelling of metabolic
  networks of the KEGG Pathways database
</cfTitle>
-<cfKeyw cfLangCode="EN" cfTrans="o">
  Software; Web-based applications; Metabolic pathway maps; KEGG
  Markup Language; Biomechanics
</cfKeyw>
-<cfAbstr cfLangCode="EN" cfTrans="o">
  The KEGG Pathway database is a valuable collection of metabolic
  pathway maps. Nevertheless, the production of simulation capable
  metabolic networks from KEGG Pathway data is a challenging
  complicated work, regardless the already developed tools for this
  scope. Originally used for illustration purposes, KEGG Pathways
  through KGML (KEGG Markup Language) files, can provide
  complete reaction sets and introduce species versioning, which offers
  advantages for the scope of cellular metabolism simulation modelling.
```

CRIS + repository?

- Although the mission of CRIS differs from that of IR, a lot of effort spent on integrating these systems and their workflows
 - Obvious question: **Do we really need two different systems?**
- Three different options for integration
 - Separate CRIS and IR which are connected to each other via APIs and may share some processes (currently the most common option)
 - Some of the CRIS platforms have started to provide IR-like functionalities – can be used as a repository as well
 - Repository as a CRIS - Cineca's DSpace-CRIS module the latest example, DSpace extended with support for CERIF entities

Finland, Denmark, Norway and Sweden

- Four Nordic countries with a population of similar size, Sweden being slightly bigger than the others
 - Fairly similar on a cultural and political level
 - A long history of co-operation between the countries
- The motivating factors in each country have been fairly similar
 - The role of state funding important in all of the countries
 - Publication data used for research evaluation
 - All of the countries have their own Open Access policies and have been working on these issues for many years



Finland (1): A new funding model



- A new funding model for the universities (2013)
 - 13% of total state funding for the universities distributed according to the number and quality of research publications
 - Lots of money involved, ca. 200 million euros / year
 - For comparison, the same organizations are spending "only" 20 million / year on the site licenses of digital content
- Not surprisingly, the universities have suddenly become very interested in acquiring a new CRIS or investing on the development of an existing one
 - On the other hand, repositories have been for the most part a relatively marginal issue ("a library system") for the university administration

Finland (2): CRIS + repository



- In Finland CRISs and repositories are two separate system infrastructures
 - There has been some integration done on a local level, with publications going from CRIS to repository
- For repositories, many organizations are using the DSpace platform provided by the National Library
- Some universities develop their own repository platforms

Turun yliopisto
University of Turku

Suomeksi • På svenska • In English

Doria home > Turku University > Annales Universitatis Turkuensis serial > B. Humaniora > View Item

Search instructions

This Collection Search Doria

School Bullies' Quest for Power: Implications for Group Dynamics and Intervention
Garandeanu, Claire F. (2014-05-16)

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The permanent address of the publication is <http://urn.fi/URN:ISBN:978-951-29-5727-9>

 Name: AnnalesB384Garand ...
Size: 478.5Kb
Format: PDF
Downloads: 98
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Doctoral thesis (article-based)
Department of Behavioral Sciences and Philosophy, Psychology.

Annales Universitatis Turkuensis B 384
2014-05-16

Abstract:
Bullying is characterized by an inequality of power between perpetrator and target. Findings that bullies can be highly popular have helped redefine the old conception of the maladjusted school bully into a powerful individual exerting influence on his peers from the top of the peer status hierarchy. Study I is a conceptual paper that explores the conditions under which a skillful, socially powerful bully can use the peer group as a means of aggression and suggests that low cohesion and low quality of friendships make groups easier to manipulate. School bullies' high popularity should be a major obstacle for antibullying efforts, as bullies are unlikely to cease negative actions that are

Finland (3): National integration



- A national portal for research publications, www.juuli.fi, was launched in 2013
 - Based on VuFind
- The data is collected annually from the universities for the Ministry of Education and Culture
- There are plans to move to automated harvesting
- Data collected from organizational CRIS, repositories currently not involved

JUULI Finnish Research Publications Suomi Svenska English

open access All Fields [Advanced](#)

Search: open access

Showing 1 - 20 of 34 for search: 'open access', query time: 0.07s Sort Publication Forum Class

The hybrid model for open access publication of scholarly articles - a failed experiment?
Author(s): Björk, Bo-Christer
Journal of the American Society for Information Science and Technology, 2012
A1 Journal article (refereed), original research

A study of Open Access Journals using article processing charges
Author(s): Solomon, David; Björk, Bo-Christer
Journal of the American Society for Information Science and Technology, 2012
A1 Journal article (refereed), original research

Publication Fees in Open Access Publishing
Author(s): Solomon, David; Björk, Bo-Christer
Journal of the American Society for Information Science and Technology, 2012
A1 Journal article (refereed), original research

A Study of Innovative Features in Scholarly Open Access Journals. The determinants of Line...
Author(s): Björk, Bo-Christer
Journal of Medical Internet Research, 2011
A1 Journal article (refereed), original research

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The Development of Open Access Journal Publishing from 1993 to 2009. En analys av för- och...
Author(s): Laakso, Mikael; Welling, Patrik; Bukvova, Helena; Nyman, Linus; Björk, Bo-Christer; Hedlund, Turid
PL o S One, 2011
A1 Journal article (refereed), original research

Narrow Search

Institution

- Hanken School of Economics (15)
- University of Helsinki (10)
- University of Jyväskylä (3)
- University of Tampere (3)
- Aalto University (2)
- more ...

Author

- Björk, Bo-Christer (12)
- Laakso, Mikael (3)
- Harjuniemi, Marja-Leena (2)
- Hedlund, Turid (2)
- Mäki, Kati (2)
- more ...

Field of Education

- Economics (16)
- Social sciences (7)
- Engineering (5)
- Natural sciences (4)
- Humanities (3)
- more ...

Field of Science

- Computer and information sciences (14)
- Media and communications (5)
- Business and management (3)

Denmark (1): Adoption of Pure



- One of the major CRIS platforms, Pure, was developed in Denmark
 - Originally a local project for the Aalborg University
- The adoption of Pure in universities was supported by the state administration with project funding
 - By 2010 all Danish universities had implemented Pure both as a CRIS and IR
- In some cases, Pure replaced the existing institutional repositories based on the international open source platforms

The screenshot shows the Aalborg University VBN - PUBLICATION page for a feature article by Johannes Andersen. The article title is "10 + 10 + 10 = 24?". The page includes a share button, a link to the full article, and a "View graph of relations" button. The article text discusses the 8+8+8-modellen and the work-life balance of Johannes Andersen. The page also features a sidebar with navigation links and a list of related publications from the same journal and authors.

AALBORG UNIVERSITY

VBN - PUBLICATION

Search VBN

Overview Citationformats

10 + 10 + 10 = 24? Share

Communication > Feature article

Johannes Andersen

The Faculty of Social Sciences
Department of Political Science
Center for Opinion og Analyse
Politisk kommunikation, identitet og deltagelse

[AUB Link](#)

[View graph of relations](#)

I 1919 blev danskerne første gang præsenteret for 8+8+8-modellen. Formlen fordeler døgnet 24 timer: otte timer til arbejde, otte timer til frihed og otte timer til hvile. I dag gør socialdemokraterne meget ud af den gamle, traditionelle tankegang, men den holder ikke længere. Nu går de nærmere efter en 10+10+10 timers model. Ifølge lektor og samfundsforsker Johannes Andersen ved Institut for statskundskab på Aalborg Universitet, er antallet af stress ramte danskere steget fra 5 procent i 1989 til mere end 12 procent i 2010. Således tyder noget på, at danskerne ikke får den fornødne hvile.

| | |
|-------------------|-------------|
| Original language | Danish |
| Journal | Information |
| Publication date | 13 Feb 2014 |
| Pages | 14-15 |
| Number of pages | 2 |
| ISSN | 1602-2572 |
| State | Published |

Links

<http://www.infomedia.dk/mo/ShowArticle.aspx?Duid=e4421UrlID=6b1166c7-0a52-4fb3-bb32-3c88e33110fe&Link=http://www.infomedia.dk/mo/ShowArticle.aspx?Duid=e4421UrlID=6b1166c7-0a52-4fb3-bb32-3c88e33110fe&Link=>

From the same journal

- Etik pr. autopilot
Feature article
- Bedre råd om uddannelse
Comment/debate
- Blind tro på rationelt marked ...
Feature article
- Da velfærdsstatens hellige k...
Feature article
- Fra 1. januar er vi alle stærke
Feature article

By the same authors

- Førstegangsvælgere på vej i...
Book chapter
- Fremtidens udfordringer for o...
Book chapter
- Genveje til et kryds : Vælger...
Anthology

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RESEARCH UNITS
STATISTICS
ABOUT VBN

Denmark (2): National portal



- The publication data is harvested automatically into a national research database, <http://www.forskningsdatabasen.dk>
 - The use of XML-based DDF-MXD format is required
- There are plans to implement a new national research publication portal based on Blacklight

The screenshot displays the website **forskningsdatabasen.dk** (Danish National Research Database). The search results are filtered for "open access" and show 793 records. The interface includes a search bar, navigation links, and a list of search results. Each result entry includes the title, authors, publication details, and options to view the full text or share the record.

Filter 793 records

Author (last name, first name) [input field]

Host publication [input field]

Publication year from [input field] to [input field]

Data provider: Choose [dropdown]

Document type: Choose [dropdown]

Full-text: Choose [dropdown]

Add filter

Selected records (0)

Export: RIS, RIS (Zotero - UTF-8)

1 - 10 of 793 records Next Selected records (0) Select all

- ▶ **Magnetic characterization of synthetic titanomagnetites: Quantifying the recording fidelity of ideal synthetic analogs** Published
Almeida, Trevor P.; Muxworthy, Adrian R. et al.
G3: *Geochemistry, Geophysics, Geosystems*, 15, 2014 (1) p. 161-175
Data provider: Technical University of Denmark
Document type: Journal article
Full text in Institutional Repository [Publisher version] [application/pdf] [1939 KB]
PDF in institutional repository
- ▶ **The Relationship between Mechanical Hyperalgesia Assessed by Manual Tender Point Examination and Disease Severity in Patients with Chronic Widespread Pain: A Cross-Sectional Study** Published
Amris, Kirstine; WÃrhrens, Eva Ejlersen et al.
International Journal Of Rheumatology, 2014, 2014
Data provider: Technical University of Denmark
Document type: Journal article
Full text in Institutional Repository [Publisher version] [application/pdf] [23 KB]
PDF in institutional repository
- ▶ **Combining Experiments and Simulations Using the Maximum Entropy Principle** Published
Boomsma, Wouter; Ferkinghoff-Borg, Jesper et al.
P L O S Computational Biology, 10, 2014 (2)
Data provider: Technical University of Denmark
Document type: Journal article
Full text in Institutional Repository [Publisher version] [application/pdf] [1422 KB]
PDF in institutional repository
- ▶ **An Internet of Things Resource for Rehabilitation** Published
Brooks, Anthony Lewis; Petersson, Eva
2014 *International Conference on Collaboration Technologies and Systems (CTS 2014) to be held May 19-23, 2014, at the Commons Hotel, Minneapolis, Minnesota, USA* p. 461-467, IEEE Computer Society Press, 2014

Norway (1): CRIStin and Nora



- The Norwegian system architecture for both repositories and CRIS is based on integration on a national level
- The metadata of the research publications and the full-text files are both ingested into the national system run by CRIStin (<http://www.cristin.no/english/>)
- The full-text records and files are moved from the national system to local repositories, which are DSpace instances often hosted by BIBSYS
- There's a separate national search interface for all Norwegian repositories, NORA (<http://www.ub.uio.no/nora/search.html>)

Norway (2): Development plans



- CRISTin is currently developing a new interface which will replace both CRISTin's and Nora's current interfaces
 - Like in Finland and Denmark, will be built on technology based on Solr
- The integration of CRIS and IR and various outside systems (DOAJ, Sherpa/Romeo) makes it easier to keep track of what is available and what should be available open access (but is not)
- CERIF compatibility one of the long-term goals

Sweden (1): DiVA and the others



- The DiVA platform (<http://www.diva-portal.org/>), a centralized service provided by the University of Uppsala, is widely used in Swedish universities
 - Uses Fedora as a storage layer
 - Used both as a repository and research publications database
- However, a number of Swedish universities use other platforms (incl. DSpace)
- International CRIS platforms have not been widely adopted in Sweden

The screenshot shows the Uppsala University DiVA portal interface. At the top left is the Uppsala University logo and name. To the right is the word 'Publications' and a decorative graphic. Below this is a navigation bar with buttons for 'Simple search', 'Advanced search - research publications', 'Advanced search - student theses', and 'Statistics'. A '<< Back' link is on the left, and 'English Svenska Norsk' language options are on the right. The main content area displays a publication record with the following details:

| | | | | | | | |
|--------------------------|--|-------------------|---------|----------------|-----------------|---------------------------------------|--|
| Download: | fulltext > | File size: | 1198 kb | Format: | application/pdf | Create reference > | |
| Author: | Andersson, Stefan (Uppsala University, University Library) Klosa, Uwe (Uppsala University, University Library) Sundin, Mimmi (Uppsala University, University Library) Svensson, Aina (Uppsala University, University Library) | | | | | | |
| Title: | DiVA: A Well Rooted and Growing Platform | | | | | | |
| Department: | Uppsala University, University Library | | | | | | |
| Publication type: | Conference paper, Poster (Other academic) | | | | | | |
| Language: | English | | | | | | |
| Conference: | LIBER 42nd Annual Conference, 26 - 29 June 2013, Munich, Germany | | | | | | |
| Place of publ.: | Uppsala | | | | | | |
| Publisher: | Uppsala universitetsbibliotek | | | | | | |
| Year of publ.: | 2013 | | | | | | |
| URI: | urn:nbn:se:uu:diva-200551 | | | | | | |
| Permanent link: | http://urn.kb.se/resolve?urn=urn:nbn:se:uu:diva-200551 | | | | | | |
| Subject category: | Information Studies Computer and Information Science | | | | | | |
| Keywords(en): | DiVA, open access, open archive, research information | | | | | | |
| Available from: | 2013-05-30 | | | | | | |

Sweden (2): SwePub



- National portal for Swedish research publications (<http://swepub.kb.se/>)
- Run by the National Library of Sweden, repository community involved
- Content harvested in MODS format from the local repositories
- Will be used for research evaluation purposes by the Swedish Research Council
- SweCris?

SwePub

ABOUT SWEPUB | PÅ SVENSKA | SEARCH HISTORY/MY RECORDS | CLEAR HISTORY

open access [Extended search](#)

Search: open access

Refine your search

Availability
free online (6149)

Type of publication
doctoral thesis (3982)
journal article (1155)
conference paper (571)
reports (304)
licentiate thesis (204)
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Type of content
other academic (5295)
peer-reviewed (1246)
pop. science, debate, etc. (113)

Author/Editor
Jönsson, Per (75)
Björngren Cuadra, Ca ... (38)
Gaigalas, Gediminas (34)
Malmberg, Claes (32)
Wedegé, Tine (31)
Ideland, Malin (27)
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⊞ **University**

⊞ **Language**

Result 1-10 of 6654 [1] 2 3 4 5 6 Z ... 666 ▶

Sort by: relevancy Hits per page: 10

| | |
|---|---------------------------|
| 1. Fathli, Margareta, et al. (author) <input type="checkbox"/> Open Access-publicering vid svenska lärosäten : 2014 Reports (other academic) ▶ abstract | Read full |
| 2. Katsaros, K. V., et al. (author) <input type="checkbox"/> Design challenges of open spectrum access 2008 In: IEEE International Symposium on Personal, Indoor and Mobile Radio Communications. - 9781424426447 Conference paper (peer-reviewed) ▶ abstract | |
| 3. Carlsson, Ulla, 1950- (author) <input type="checkbox"/> Open Access and Journal Publication 2005 In: ScieCom Info. ; 2005:2 Journal article (other academic) ▶ abstract | |
| 4. Andersson, Jacob (author) <input type="checkbox"/> Monitoring the open access policy compliance at Malmö University 2013 Conference paper (other academic) ▶ abstract | Read full |
| 5. Lindholm, Jessica, et al. (author) <input type="checkbox"/> A new open access policy for Malmö University 2011 In: ScieCom Info;1. - Svenskt resurscentrum för vetenskaplig kommunikation. - | Read full |

Similarities

- Similar motivations and policies
- Each of the countries has built a national interface for the research publications
 - In Finland, Norway and Sweden used for research evaluation purposes as well
- None of the countries is (currently) using CERIF as a national data exchange format

Differences

- System architecture on a national level different in all of the countries
 - Finland has two mostly separate system infrastructures
 - Danish universities use a proprietary CRIS platform for repository as well
 - Norway: A national CRIS; repository processes integrated with CRIS on a national level
 - Sweden: Repositories currently the dominant infrastructure
- Why?
 - The timing of the choices that have been made
 - Specific circumstances in each country

Big business taking over?

- Major changes in the CRIS platform market
 - The main CRIS platforms originally developed by small start-up companies
 - Elsevier bought Atira (Pure) in 2012
 - Thomson Reuters bought Avedas (Converis) in 2013
- Interests of the customer organizations vs. the strategies of the big companies dominating the research information market?
 - The big companies have the resources needed for expansion
 - Consolidation with the vendors' other products?
 - What does this mean for repositories and open access?

A changing landscape

- The landscape is changing and we should be prepared to deal with that
 - Different motivations and constituencies
 - Benefits of open source vs. proprietary platforms – whatever gets the job done?
 - CRIS mostly a Europe-centric phenomenon so far – has not been a primary concern for much of the repository community
- Competition vs. co-operation?
 - There may be some concerns, but both sides would obviously benefit from co-operation and integration
 - We should be prepared to adjust and re-define the concept of institutional repository - to some extent at least
 - However, we must not lose sight of OUR mission

Thanks!

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