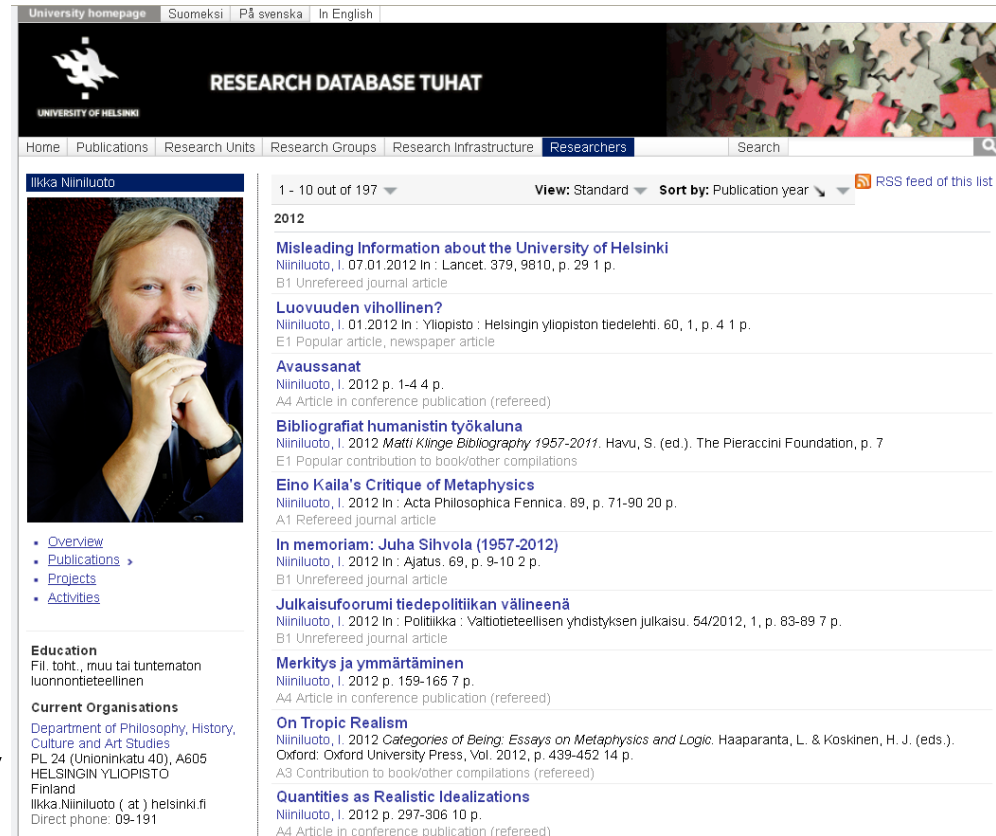# Integrating CRIS and repository – an overview of the situation in Finland and in three other Nordic countries

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 evalution
    - 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

CERIF, data model and exhange 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

```xml
<!-- A publication (output) record -->
- <cfResPubl>
    <cfResPublId>2123451</cfResPublId>
    <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">
```
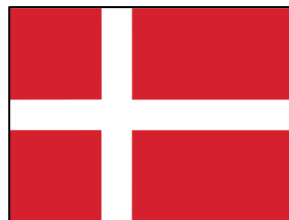
The KEGG Pathway database is a valuable collection of metabolic pathway maps. Nevertheless, the production of simulation capable metabolic networks from KEGG Pathway data is a challenging complicated work, regardless the already developed tools for this scope. Originally used for illustration purposes, 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

[   ] Go Search instructions

◉ This Collection ○ Search Doria

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

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

PDF

Name: AnnalesB384Garand ...
Size: 478.5Kb
Format: PDF
Downloads: 98
  View/Open

Show full item record

Doctoral thesis (article-based)
Department of Behavioral Sciences and Philosophy. Psychology.

Annales Universitatis Turkuensis B 384
2014-05-16

This Collection
Titles
Authors
By Issue Date
Subjects
By Submit Date
Communities & Collections

My Account
Login
Register

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 ▾ | Find 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

Get full text »

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

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

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 ingest 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

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?

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 landspace

- 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
- Competítion 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!

jyrki.ilva@helsinki.fi