

Linking research information in the Web (and the role of academic libraries in it)

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About me (standard version)

- Education:
 - Computer Science Eng. – Pontifical Univ. of Salamanca / PhD Computer Science – Carlos III Univ.
 - MsC Library & Information Science – Univ. of Alcalá
- Work experience:
 - Till 2002: mix of industry (soft. eng., e-commerce) and part-time lecturing.
 - Technical coordinator of LUISA (FP6), coord. of **VOA3R** (ICT PSP), agINFRA (FP7), SEMAGROW (FP7)
 - Now full professor, University of Alcalá
- Service:
 - Board member & TG LOD leader, EuroCRIS
 - EIC Emerald's Program journal and Inderscience's IJMSO.
 - EB member Interactive Learning Environments, The Electronic Library, IJSWIS and others.

About me (bibliometric version)



Miguel-Angel Sicilia

Professor of Computer Science, University of Alcalá

Semantic Web - Learning Technology - Information Systems - Artificial

Google académico



Miguel-Angel Sicilia



Advanced Search

Co-authors (127)

Elena Garcia-Bar...

Salvador S'anchez-Alonso

Elena Oliver Garcia

Miltiadis D. Lytras

Sinuhe Arroyo (Sinuhé Arroyo)



Conferences (22)

WSKS

ITHET

IADIS

ICALT

SPDECE

Journals (47)

Procedia Computer Science

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Miguel-angel Sicilia (Miguel-ángel Sicilia) Universidad de Alcalá

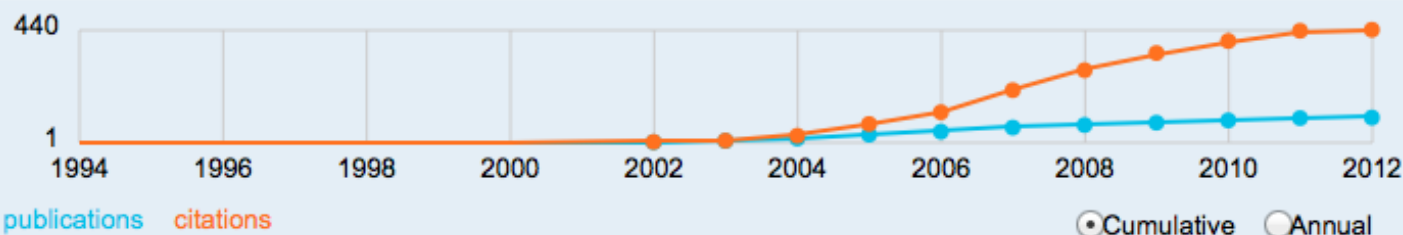
Edit

Publications: 149 | Citations: 667 | G-Index: 20 | H-Index: 13

Interests: Software Engineering, Artificial Intelligence, Computer Education

Collaborated with 127 co-authors from 2002 to 2012; Cited by 772 authors

Homepage Bing



Publications (149) Export

Order by: Year

[Applying Ontology-Based Models for Supporting Integrated Software Development and IT Service Management Processes](#)

María-Cruz Valiente, Elena García-Barriocanal, Miguel-Ángel Sicilia

Journal: IEEE Transactions on Systems, Man, and Cybernetics - TSMC vol. 42, no. 1, pp. 61-74, 2012

Outline

- What is research information (RI)?
- Current Research Information Systems (CRIS) and CERIF
- Institutional repositories
- ...and combining both of them
- Linked Open Data and RI
- Outlook

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Research information

- Wikipedia: “Research [...] is formal work undertaken systematically to **increase the stock of knowledge**, [...], and the use of this stock of knowledge to devise new **applications**”
 - Need of **indicators** and information about research as a driver of economic growth.
 - Need of **accessing** the outcomes of research.

Who needs RI?

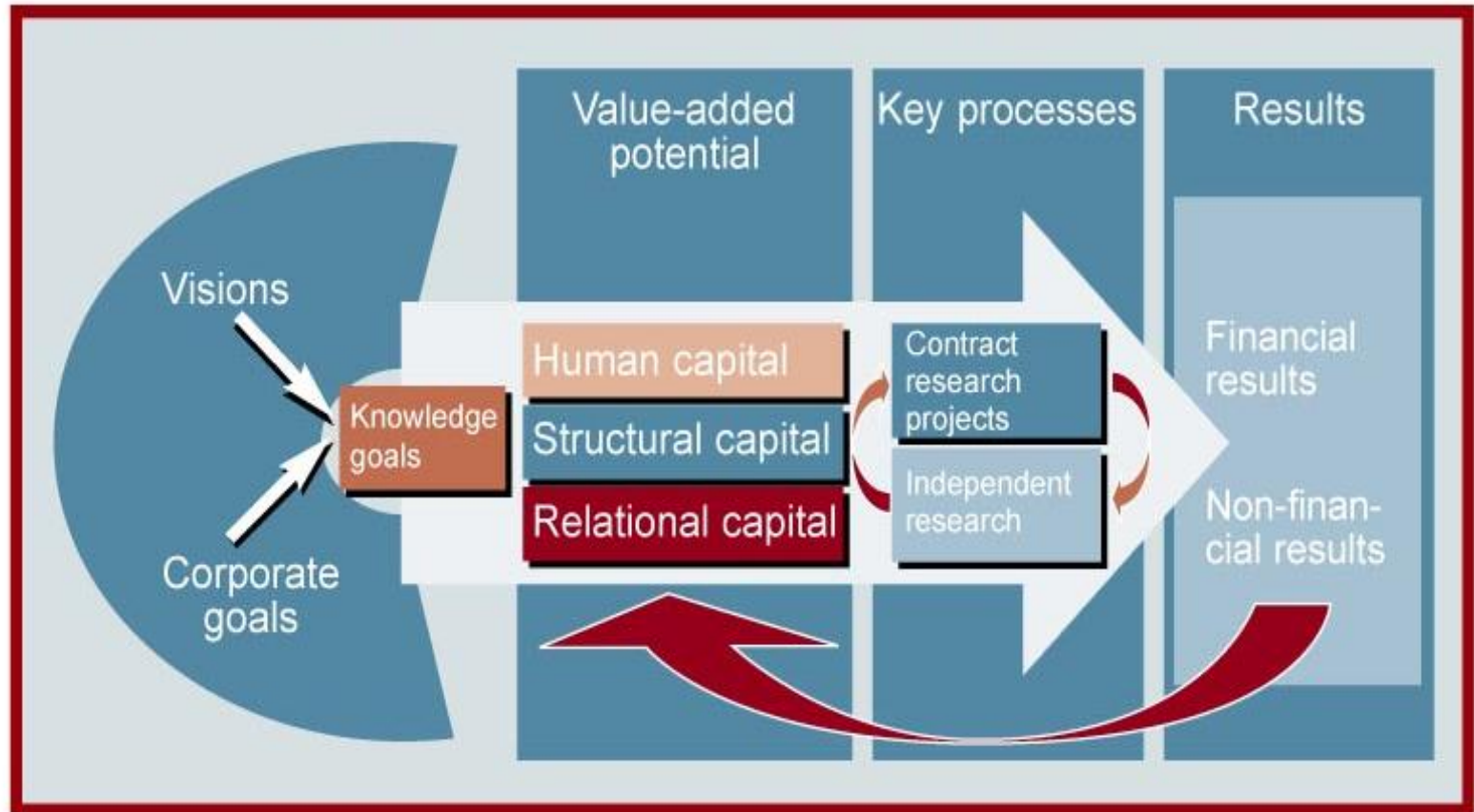


From RI to intellectual capital reporting

- The missions of Universities: produce knowledge (research), and disseminate it (teaching).
- Wilhelm von Humboldt: *“Just as primary instruction makes the teacher possible[...]. The university teacher is thus no longer a teacher and the student is no longer a pupil. Instead the student conducts research on his own behalf and the professor supervises his research and supports him in it.”*
- Third mission: transfer (entrepreneurial Universities)



The ARC IC model



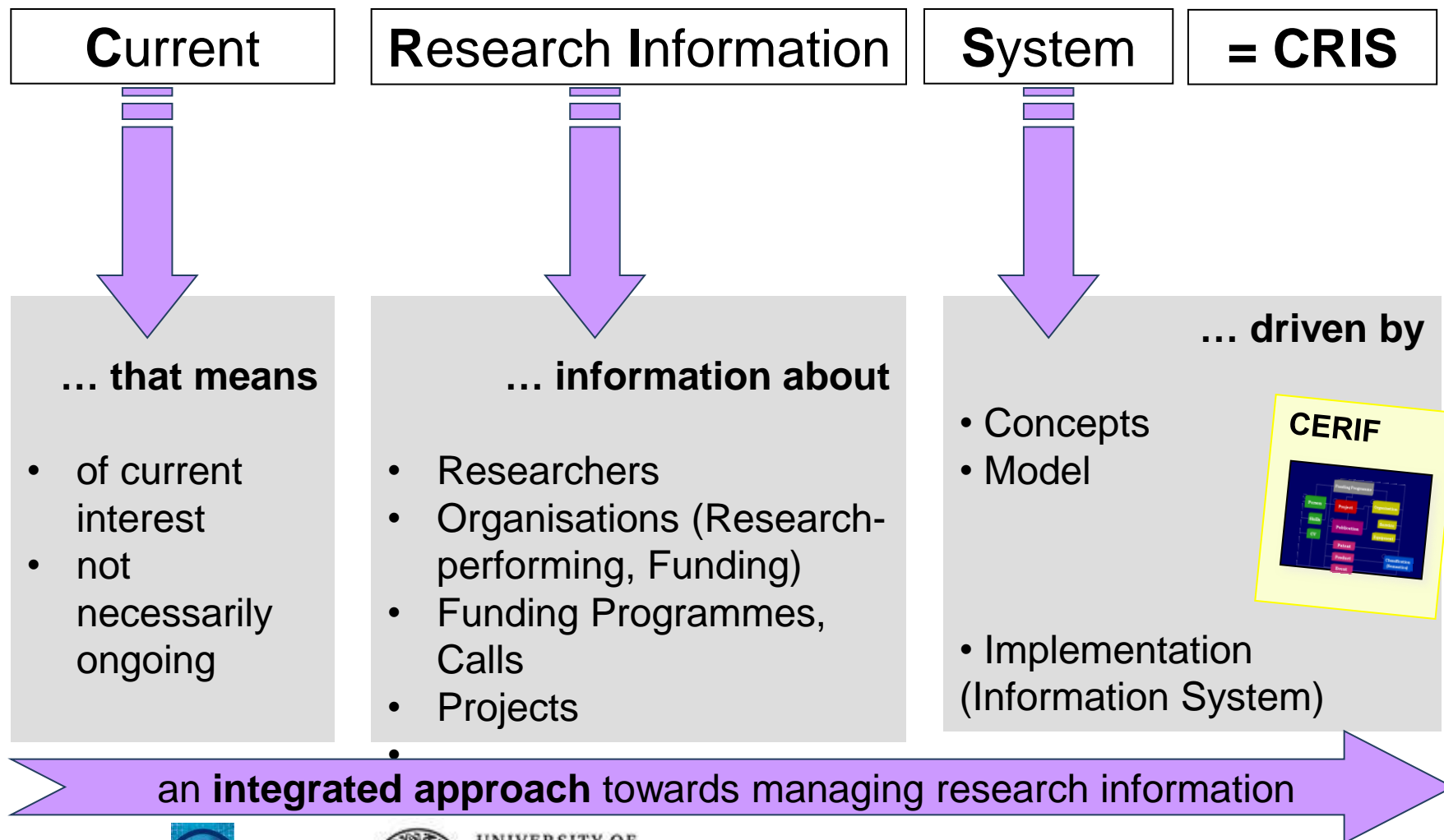
IC and libraries

- Kostagiolas (2012): “in the maturing knowledge-based library management era, the **knowledge assets/resources** should be considered as **more important than the actual physical capital**”
- Sheng and Sun (2007) suggest that **trust and cooperation among library professionals** contribute to an “*improvement of the library’s intellectual capital and staff capacity of solving problems and doing knowledge creation*”
- Garnes (2007) suggested that the library (should?) **manage the institution’s entire intellectual capital**.

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What is a CRIS?

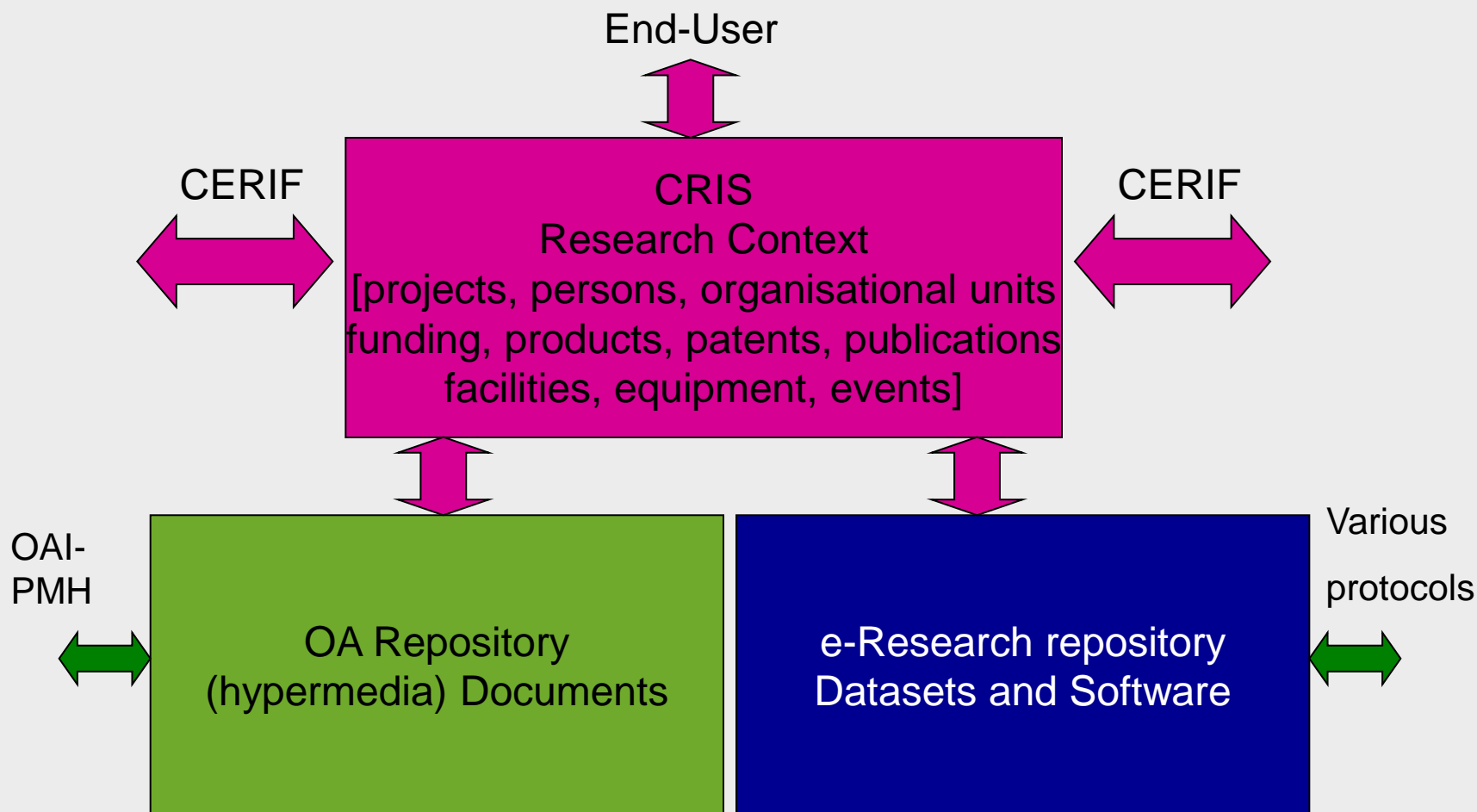


Example questions supported by a CRIS

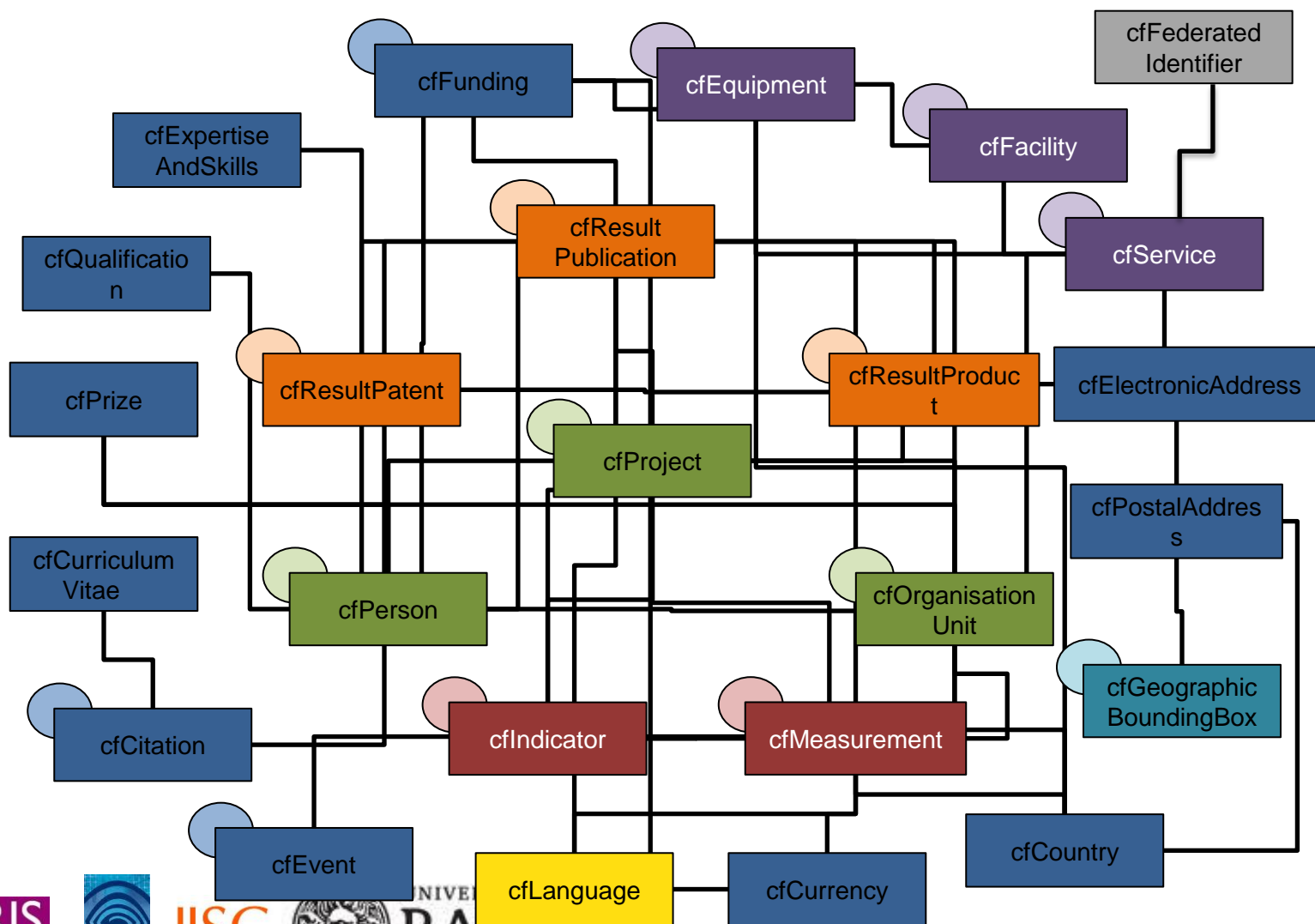
- How many articles has author X published in 2011 as a first author?
- How many times have articles by author X been cited by the end of the previous year? -> JCR/Scopus business!
- Did author X publish with institutionally external authors?
- In how many FP7 projects does/did organisation Z participate?
- How many publications have resulted from project Y?
- How many people have been employed in the course of FP7 projects from the 1st call in the New Member States?
- How many PhD students have participated projects in country C? In which countries masters degrees?
- How many women have been involved in FP7 projects?
- How often have articles in journal A been requested in 2010?
- How many articles have been published in field B?

Are all of these RI needs that should be answered by a librarian (in the future)?

CRIS and Repositories at an institution (slide by Keith Jeffery)

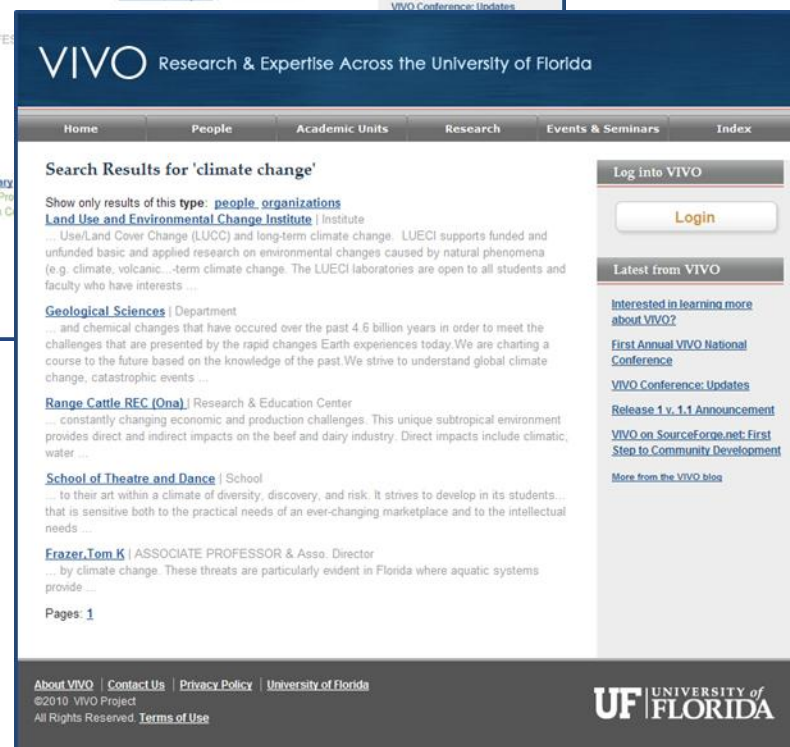


CERIF 1.5



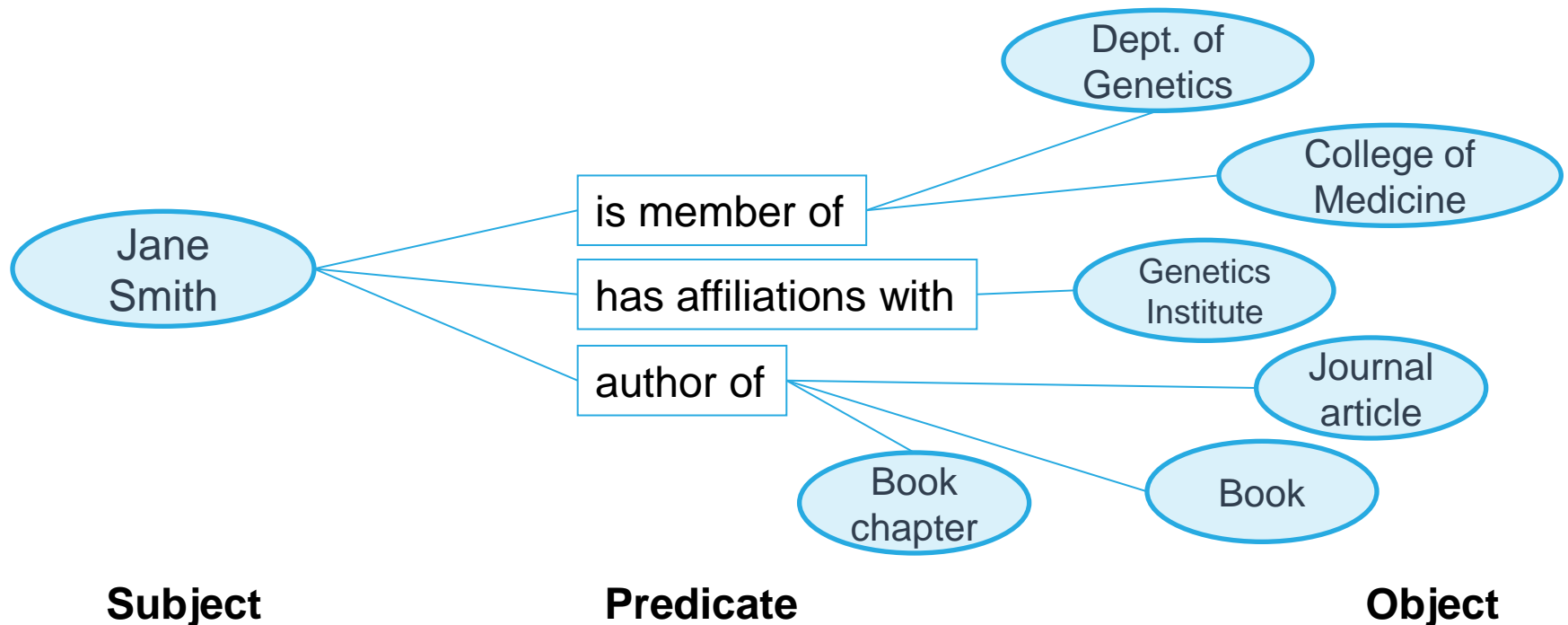
VIVO

- Originated at Cornell University
- Expanded for national use through a \$12.2 million NIH grant
- Seven founding members of VIVO Collaboration – Cornell University, University of Florida, Weill Cornell Medical College, Indiana University, Washington University in St. Louis School of Medicine, The Scripps Research Institute, Ponce School of Medicine

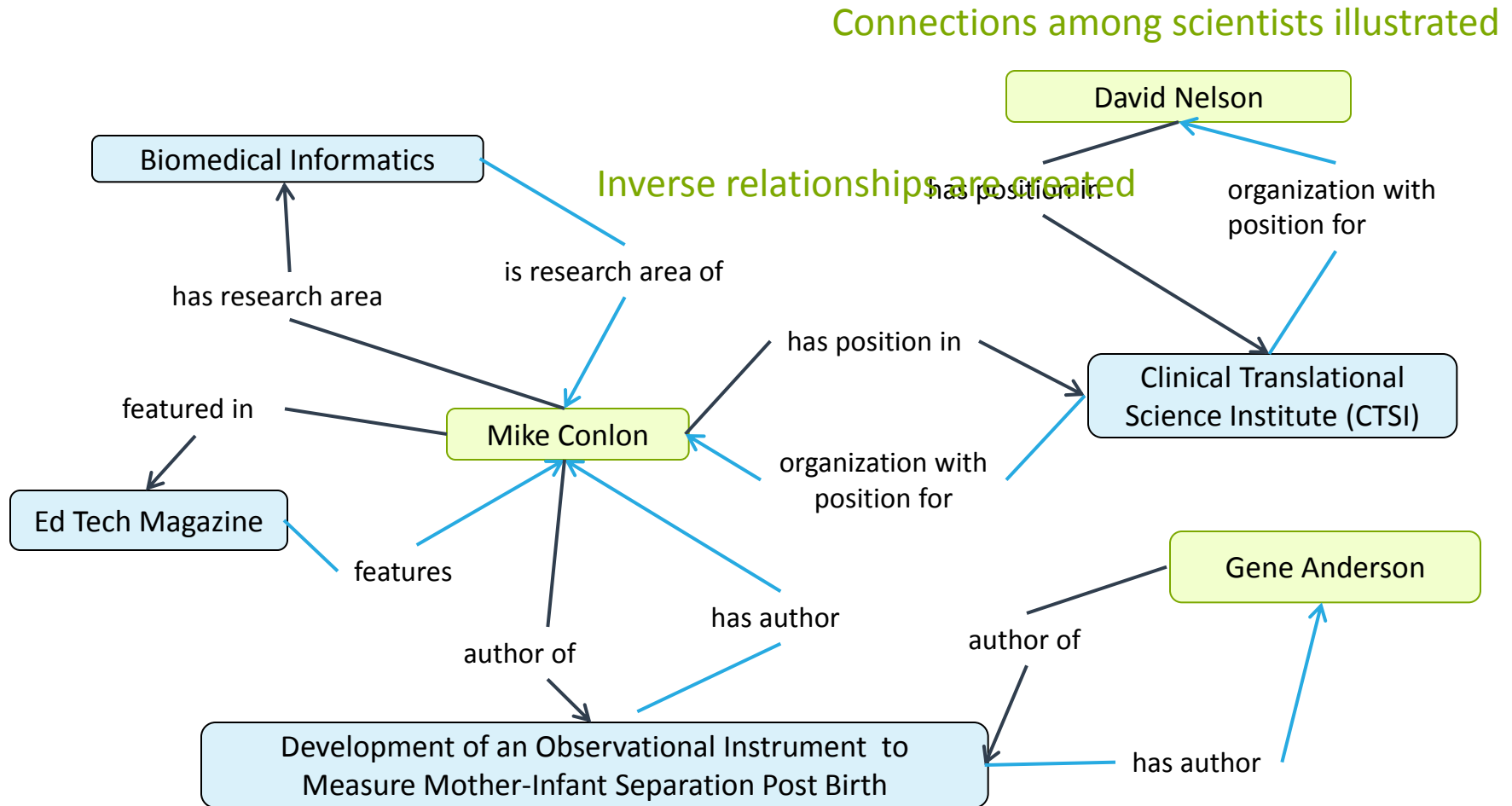


How does VIVO/CERIF publish data?

- Information is published using the Resource Description Framework (RDF) .
- Data is structured in the form of “triples” as subject-predicate-object.
- Concepts and their relationships use a shared ontology to facilitate the harvesting of data from multiple sources.
- In CERIF, the storage is relational, but still the exposure is RDF as in VIVO.
- EuroCRIS and VIVO are creating official mapping and translation tools



Example relationships



Current and accurate data revealed

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- **Institutional repositories**
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Institutional repositories

- Preserve the production of researchers and groups of them in digital form.
- Currently expanding to datasets

Loughborough University
Institutional Repository



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[University Research Centres](#) >
[Centre for Renewable Energy Systems Technology \(CREST\)](#) >
[Data Sets and Software \(CREST\)](#) >

Browsing "Data Sets and Software (CREST)" by Issue Date

Jump to a point in the index: (Choose year) (Choose month)

Or type in a year:

Sort by: In order: Results/Page Authors/Record:

Showing results 1 to 4 of 4

Issue Date	Title	Author(s)
2008	Domestic active occupancy model - simulation example	Richardson, Ian ; Thomson, Murray
16-Dec-2008	Domestic lighting demand model - simulation example	Richardson, Ian ; Thomson, Murray

From IR to open data: issues

- Datasets considered opaque BLOBs with file type.
- Datasets as static entities.
- No shared semantics for computing with data.
 - Making the syntax homogeneous: the example of SDMX
 - Second level: unambiguously identifying the entities measured via ontologies/terminologies.

From open data to open science?

- Storing and curating the datasets is the first step only:
 - Experiments can be made public as artefacts.
 - Hypotheses can be made executable!.
 - “Take data from the temperature streams at the main Lakes of Australia and check continuously trends in warming (or freezing)”

Executable experiments: a first step

The screenshot displays the myexperiment website interface. At the top, the logo 'myexperiment' is in red and green. Navigation links include 'About | Mailing List | Publications', 'Log in', and 'Register'. A secondary navigation bar contains 'Home', 'Users', 'Groups', 'Workflows', 'Files', 'Packs', 'Services', and 'Topics'. A search bar at the top right contains the text 'gene' and a dropdown menu set to 'All'. Below this, a blue banner reads 'Search results for "gene"'. The main content area shows 'Showing 942 results. Use the filters on the left and the search box below to refine the results.' with a search box containing 'gene' and a 'Search' button. On the left, there are two filter sections: 'Filter by category' and 'Filter by type'. The 'Filter by category' section lists: Workflow (551), Service (263), User (121), File (96), Group (32), and Pack (17). The 'Filter by type' section lists: Taverna 2 (264), Taverna 1 (195), Adobe PDF (40), RapidMiner (38), LONI Pipeline (15), Plain text (13), XML (10), Trident (Pack...) (9), BioExtract Ser... (7), and Excel workbook (6). The 'Filter by tag' section at the bottom lists: pathway (60). The main result area features a 'Taverna 2' workflow titled 'Pathways and Gene annotations for QTL region (v7)'. It includes a 'View' link, a 'Download (v7)' link, and a 'Credits' section for Paul Fisher. A license section states 'Creative Commons Attribution-Share Alike 3.0 Unported License'. A description box explains that the workflow searches for genes in a QTL region in the mouse, Mus musculus, and requires input of chromosome name/number, QTL start/end base pair positions, and data extracted from BioMart. It also mentions the use of Entrez and UniProt identifiers to obtain KEGG gene identifiers for pathway search. Below the description, the workflow has a rating of 4.6 / 5 (10 ratings), 7 versions, 1 review, 7 comments, and 1 citation. It has been viewed 6078 times and downloaded 1010 times. A 'Tags' section lists 22 tags: adasd, chromosome, data-driven, disease, ensembl, entrez, gene, genes, genotype, kegg, mouse, nbiconworkflows, pathway, pathway-

myexperiment

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gene All Search

Home

Search results for "gene"

Search filter terms

« previous 1 2 3 ... 95 next »

Sort by: Rank

Showing 942 results. Use the filters on the left and the search box below to refine the results.

gene Search

Filter by category

- ☐ Workflow 551
- ☐ Service 263
- ☐ User 121
- ☐ File 96
- ☐ Group 32
- ☐ Pack 17

Filter by type

- ☐ Taverna 2 264
- ☐ Taverna 1 195
- ☐ Adobe PDF 40
- ☐ RapidMiner 38
- ☐ LONI Pipeline 15
- ☐ Plain text 13
- ☐ XML 10
- ☐ Trident (Pack...) 9
- ☐ BioExtract Ser... 7
- ☐ Excel workbook 6

Filter by tag

- ☐ pathway 60

Taverna 2

Pathways and Gene annotations for QTL region (v7)

View

Download (v7)

Created: 19/11/09 @ 18:18:52 | Last updated: 07/09/12 @ 18:23:36

Credits: Paul Fisher

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Original Uploader

Paul Fisher

This workflow searches for genes which reside in a QTL (Quantitative Trait Loci) region in the mouse, *Mus musculus*. The workflow requires an input of: a chromosome name or number; a QTL start base pair position; QTL end base pair position. Data is then extracted from BioMart to annotate each of the genes found in this region. The Entrez and UniProt identifiers are then sent to KEGG to obtain KEGG gene identifiers. The KEGG gene identifiers are then used to search for pathways in the KEGG path...

Rating: 4.6 / 5 (10 ratings) | Versions: 7 | Reviews: 1 | Comments: 7 | Citations: 1

Viewed: 6078 times | Downloaded: 1010 times

Tags (22):

adasd | chromosome | data-driven | disease | ensembl | entrez | gene | genes | genotype | kegg | mouse | nbiconworkflows | pathway | pathway-

Combining IR and CRIS

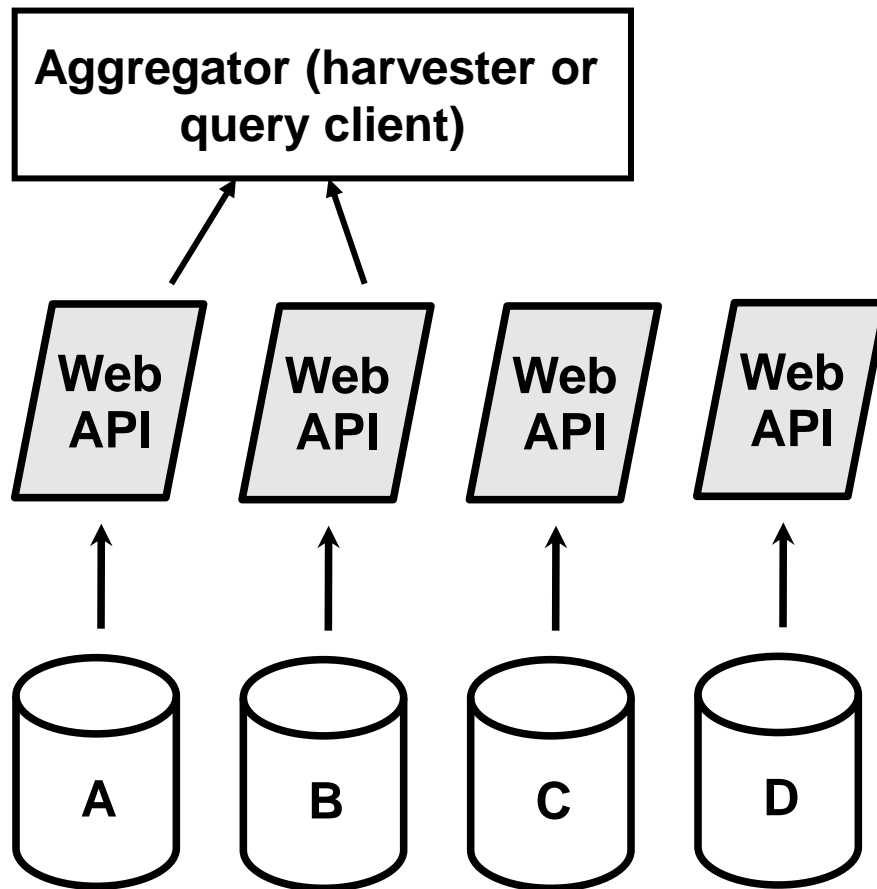
- Publications are “claimed” by their authors in the CRIS.
 - No re-typing publications in both places.
- Coexistence rather than competition.
 - The CRIS offers “the context” of research, useful to know the users and to identify potential relational capital.
- Linking CRIS to IR and viceversa.
- Identifiers used for linking when possible.
 - But remember that identifiers are artefacts inside sustainable managed systems (e.g. ISBN, ISSN, DOI, Orcid), not simple URLs.

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Limitations of current systems (from a linked data perspective)

Adapted from: Christian Bizer: The Web of Linked Data (26/07/2009)



Shortcomings

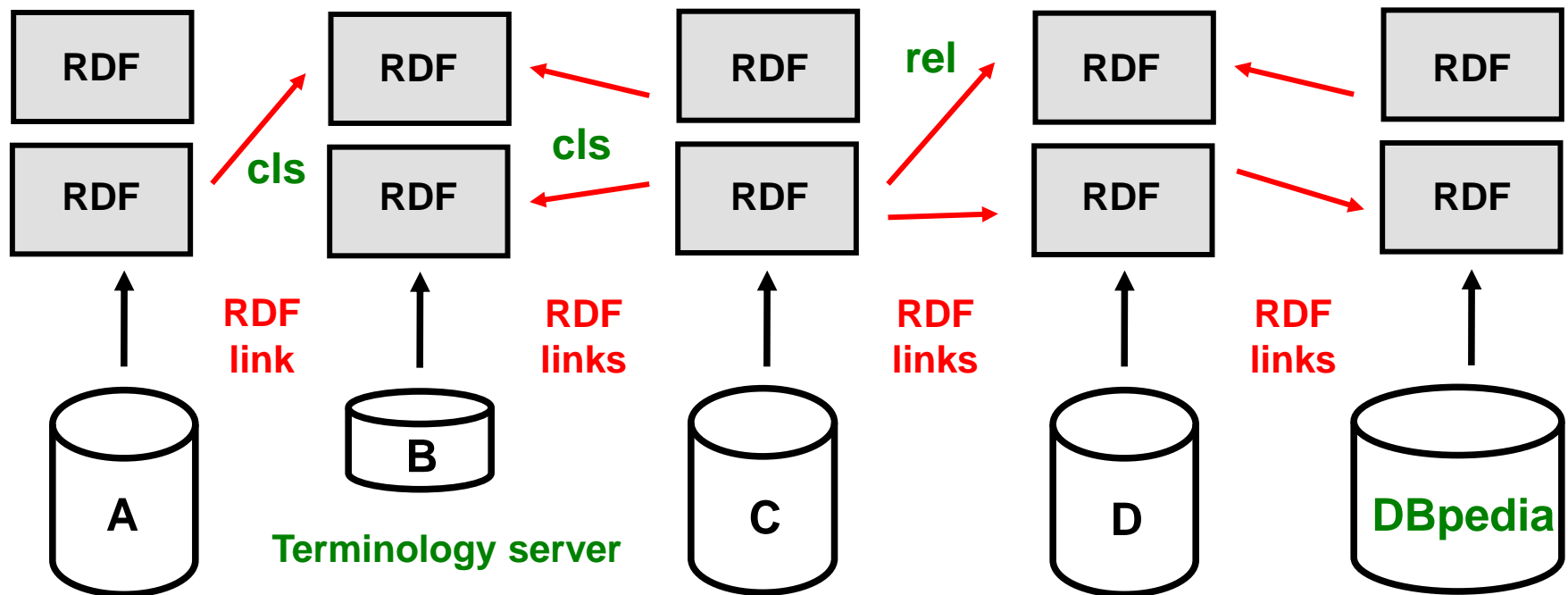
1. APIs provide proprietary interfaces (even though CERIF XML and OAI PMH formats standardize the interchange to some extent)
2. ~~Aggregators are based on a fixed set of data sources.~~ (not necessarily, but require some **registry of providers**).
3. You can **not** set hyperlinks **neither** between RIS entities (projects, people, organizations, publications) descriptions **nor from them to other data or terminologies**.

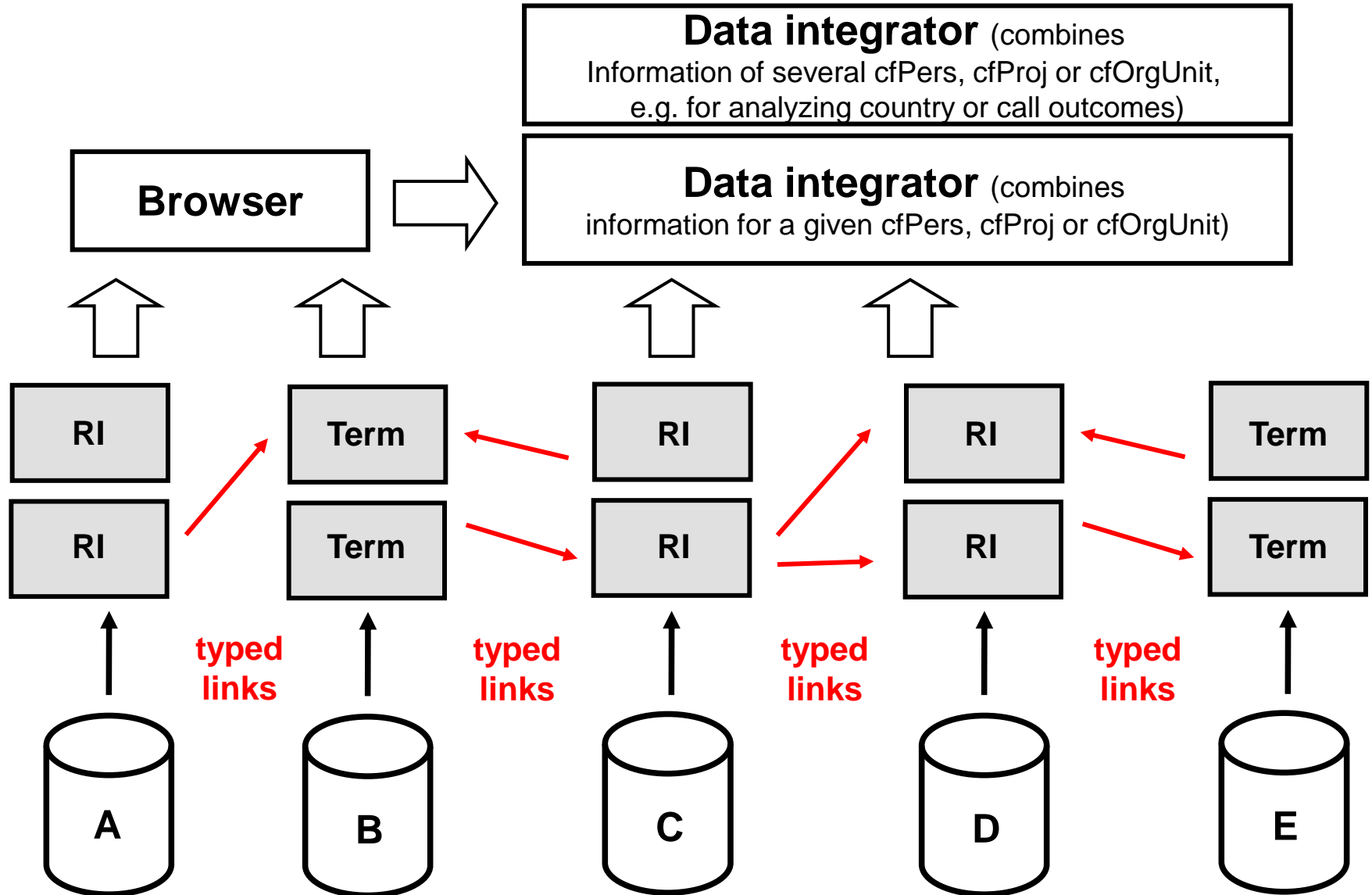
Principles of the LOD approach

1. Use URIs as names for things. CERIF core entities?
2. Use HTTP URIs so that people can look up those names.
3. When someone looks up a URI, provide useful information, using the standards (RDF*, SPARQL)
4. Include links to other URIs. so that they can discover more things. CERIF link entities?

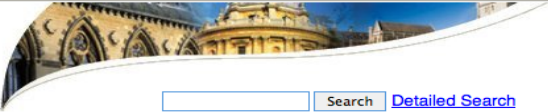
The linked data approach

- Use RDF to provide CERIF metadata
- Add links using different kinds of relations **rel** (mapping of CERIF link entities?).
- Connect to terminologies using some **Classification (cls)**.
- Link to other LOD datasets instead of repeating information.





An example of using linked data in RLS



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A walkthrough of the URL structures

- [Browse URLs](#)
- [Resource URLs](#)
 - [and versions](#)
- [Search URLs](#)

NB - 'pid' stands for the object's id

Browse URLs [to top](#)

- <http://ora.ouls.ox.ac.uk/browse> will show a set of facetable fields, each with a max of 10 groupings, sorted with the more populated groups first
- http://ora.ouls.ox.ac.uk/browse/field_name -> can be [keyphrase](#), [collection](#), [subject](#), [date](#), [faculty](#)
- http://ora.ouls.ox.ac.uk/browse/field_name/query -> For example, to browse the list of items which have a copyright date of 2008, visit <http://ora.ouls.ox.ac.uk/browse/date/2008>

Resource URLs [to top](#)

- <http://ora.ouls.ox.ac.uk/objects> will redirect to the search
- <http://ora.ouls.ox.ac.uk/objects/pid> or
- <http://ora.ouls.ox.ac.uk/objects/pid/show> will take them to the HTML splash page for the 'pid' record
- <http://ora.ouls.ox.ac.uk/objects/pid/datastreams> -> Show Html list of attachments for download
- <http://ora.ouls.ox.ac.uk/objects/pid/datastream?xml=true> -> Show xml list of attachments for download (shows all possible resources, not just those for 'human' download.)
- <http://ora.ouls.ox.ac.uk/objects/pid/datastreams/datastream> -> Start a download for the given datastream e.g. IMAGE01

Relationships and properties for objects - RDF [to top](#)

- <http://ora.ouls.ox.ac.uk/objects/pid/relationships> -> show as HTML the relationships attached to this item
- <http://ora.ouls.ox.ac.uk/objects/pid/relationships?format=n3> -> show the relationships attached to this item in rdf-n3 format for example)

OAI-ORE Resource Maps for objects - [to top](#)

- <http://ora.ouls.ox.ac.uk/objects/pid/aggregation> -> The URI-A for the object *pid*.
An HTTP GET on this URL will undergo content negotiation - Based on what mimetype responses the request header 'Accept' contains, you will be redirected to either the splash page for the item, or to a serialisation of the requisite resource map.
- <http://ora.ouls.ox.ac.uk/objects/pid/aggregation.xml> -> RDF/XML serialisation for the URI-R for object *pid*.
- <http://ora.ouls.ox.ac.uk/objects/pid/aggregation.nt> -> RDF/n-triples serialisation for the URI-R for object *pid*.
- <http://ora.ouls.ox.ac.uk/objects/pid/aggregation.n3> -> RDF/N3 serialisation for the URI-R for object *pid*.
- <http://ora.ouls.ox.ac.uk/objects/pid/aggregation.turtle> -> RDF/Turtle serialisation for the URI-R for object *pid*.
- <http://ora.ouls.ox.ac.uk/objects/pid/aggregation.atom> -> Atom serialisation for the URI-R for object *pid*.

Title: Shell middens, ships and seeds: exploring coastal subsistence, maritime trade and the dispersal of domesticates in and around the ancient Arabian Peninsula

Abstract: The Arabian Peninsula occupies a critical position at the intersect of several major Old World landmasses. Inland aridity and a major coastal perimeter have long made maritime activities critical to Arabia's cultural trajectory. A wealth of recent studies, not previously synthesised, suggest not only that the peninsular littoral offered a rich resource base for thousands of years of human occupation in the region, but also that Arabia witnessed some of the world's earliest seafaring and maritime exchange activities, and played a role in Bronze Age maritime trade that has often been underestimated. Maritime activities were closely linked to developments in agriculture, which not only fuelled trade and exchange, but were also impacted on by the dispersal of domesticates along early maritime corridors. While regional specialisation has to some degree prevented consideration of the maritime prehistory of the peninsula as a whole, it is clear that there are interesting parallels, as well as important differences, between cultural trajectories in different parts of the peninsula.

Author: Nicole Boivin

[Institution](#)

University of Oxford

(Nicole Boivin)

[Faculty/Department](#)

Social Sciences Division - Archaeology, School of

Author: Dorian Q. Fuller

[Institution](#)

University College London

(Dorian Q. Fuller)

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Institute of Archaeology

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Other version:

Host: "Journal of World Prehistory" **22** (2) 113-180

Publication status : *Published*

Peer Review status : *Peer reviewed*

DOI : 10.1007/s10963-009-9018-2 [Publisher's copy](#)

Publisher copy : <http://www.springer.com/social+sciences/archaeology+%26+anthropology/journal/10963>

Keywords/phrases:

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@prefix _13: http://ora.ouls.ox.ac.uk/objects/uuid:543b21e1-2530-4cf7-8c09-3274eb506e29/.
@prefix _14: info:fedora/fedora-system:.
@prefix _15: info:fedora/ora:.
@prefix _16: info:fedora/type:.
@prefix _17: info:fedora/uuid:543b21e1-2530-4cf7-8c09-3274eb506e29/.
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@prefix dcterms: http://purl.org/dc/terms/.
@prefix model: info:fedora/fedora-system:def/model#.
@prefix ore: http://www.openarchives.org/ore/terms/.
@prefix owl: http://www.w3.org/2002/07/owl#.
@prefix rdf: http://www.w3.org/1999/02/22-rdf-syntax-ns#.
@prefix rdfs: http://www.w3.org/2000/01/rdf-schema#.
@prefix rdfs1: http://www.w3.org/2001/01/rdf-schema#.
@prefix rel: info:fedora/fedora-system:def/relations-external#.
@prefix sioc: http://rdfs.org/sioc/ns#.
@prefix view: info:fedora/fedora-system:def/view#.
@prefix xml: http://www.w3.org/XML/1998/namespace.

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dc:creator "Boivin, Nicole",

dc:relation "http://www.springer.com/social+sciences/archaeology+%26+anthropology/journal/10963";

dc:subject "Arabia",

"Archeology",

"Land of Punt",

"Oman",

"Persian Gulf",

"Red Sea",

"Yemen",

"boats",

"crops",

"incense",

"livestock";

dc:title "Shell middens, ships and seeds: exploring coastal subsistence, maritime trade and the dispersal of domesticates in a

dc:type "Article: post-print",

"Peer reviewed",

"Published",

"text";

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model:createdDate "2010-12-10T15:05:03.01Z"^^<http://www.w3.org/2001/XMLSchema#dateTime>;

model:hasContentModel _14:DefaultContentModel-1;

model:label "ora:4598";

model:ownerId "fedoraAdmin";

model:state model:Active;

rel:isMemberOf _16:article;

rel:isMemberOfCollection _15:articles;


view:disseminates _17:DC,

_17:EVENT,


_17:MARC21,

_17:MODS,

The case of VOA3R









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Diane Le Hénaff
This is a good information about the recent initiatives in Open access: <http://blogs.wiley.com/publishingnews/2012/07/02/open-access-%E2%80%93-recent-developments-around-the-world/>
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Karma
 (71 points)
Member since
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Why don't you Google it?

Google "weed control" ecological

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董梅, 陆建忠, 张文驹, 陈家宽, 李博 - 植物分类学报, 2006 - plantsystematics.com
... 1997. **Ecological** characteristics of the ragweeds and countemeasure of the biological **weed control**. Journal of Northeast Normal University (东北师大学报自 然科学版) 3: 61-67. Lu JZ (陆建忠), Qiu W (裘伟), Chen JK (陈家宽), Li B (李博). 2005. ...
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Anterior 919293949596979899100


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Text based search

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7370 results found

Reduced tillage in temperate organic farming: implications for crop management and forage production

2010 ★★★★★

Authors: Krauss, Maike, Berner, Alfred, Burger, Dieter, Wiemken, Andres, Niggli, Urs, Mäder, Paul
Keywords: pasture and forage crops, crop combinations and interactions, soil biology
Language of the resource: en
Description: To promote conservation tillage in organic farming systems, weed control and ley removal within arable-ley rotations need to be optimized. A long-term field trial was thus established in Frick, Switzerland in 2002 on a clayey soil and with a mean precip (...)
Access to the resource: http://orgprints.org/16810/1/Krauss_etal_2010_Red_Till_in_Temperate_organic_farming.pdf
voa3rid: voa3r:oi:orgprints.org:16810

Does mechanical weed control take effect on Sonchus arvensis?


2003 ★★★★★

Authors: Lötjönen, Timo, Vanhala, Petri
Keywords: weed management
Language of the resource: en
Description: The main aims of this research were to study the biology of perennial weeds and to find out the best non-chemical control methods for Sonchus arvensis. The most effective control method seemed to be bare following.
Access to the resource: <http://orgprints.org/11141/1/NJF2.pdf>
voa3rid: voa3r:oi:orgprints.org:11141

Elements to be addressed (back to discussing LOD)

- Identification and joining of multiple views.
- A basic, official RDF mapping of CERIF.
- Linking to terminologies
 - Keyword with URIs to LOD de-referenceable documents are a solution.
- Linking across repositories
 - Best practices for the different kinds of curators.
 - Some kind of automated approach for bootstrapping.
 - Including the automated enrichment of institutional repositories providing bibliographic data.

Relevant recommendations



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AGRICULTURAL INFORMATION MANAGEMENT STANDARDS

"INTEROPERABILITY, REUSABILITY AND COOPERATION"

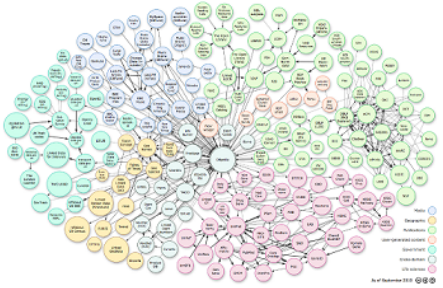
Linked Open Data. LOD Recommendations for bibliographical data

Linked Data, a term coined by Tim Berners-Lee in his design note regarding the Semantic Web architecture, refers to a set of best practices for publishing, sharing, and interlinking structured data on the Web. Key technologies that Linked Data builds on are URIs for identifying entities or concepts in the world, the RDF model for structuring and linking descriptions of things, and HTTP for retrieving resources or descriptions of resources (Source LOD2 Collaborative Project. 2010. Deliverable 12.5.1. Project fact sheet version 1).

With Web advances paving the way to an era with more open and linked data, the traditional approach of sharing data within silos seems to have reached its end. From governments and international organizations, to local cities and institutions, there is a widespread effort of opening and linking data according to the four principles of Linked Data. With that in mind, the Linked Open Data (LOD) cloud has dramatically increased in size and variety with a great number of datasets and RDF triples (statements) during the last two years.

Metadata Standards

In the bibliographic universe there is a clear paradigm shift from fixed record formats to re-combinable metadata statements. For anyone who is contributing to an open bibliographic data repository as a data provider or service provider, the processes and strategies of providing data as Linked Data are practical issues. Guidelines and recommendations on what standards to follow and how to prepare LOD-ready metadata are essential.



Linking Open Data cloud diagram, by Richard Cyganiak and Anja Jentzsch. <http://lod-cloud.net/>

There seems to be no one-size-fits-all approach because during the last two decades a great number of metadata-related standards have been created by different communities for specific purposes - to guide the design, creation, and implementation of data structure, data value, data content, and data exchange in certain communities.

The operational metadata standards for data structures form a whole spectrum, ranging from isolated ones (which do not reuse any metadata terms from a known namespace) to those fully employing and incorporating existing metadata terms from other namespaces, such as many newly developed metadata structure application profiles or ontologies. Decisions on what standard(s) to adopt will directly impact the degree of LOD-readiness of the bibliographic data.

The first step for producing "LOD"

The approach of employing well-accepted metadata element sets and value vocabularies has already shown great benefits and potential for both information professional services and end-users of these services in resource discovery, data reuse and sharing, and the creation of new content based on linked data. However, deciding to take this approach is only the first step for the data providers and service providers of an open bibliographic repository. In the context of producing LOD-enabled bibliographical data, data and service providers are likely to have many specific questions related to the encoding strategies, for example:

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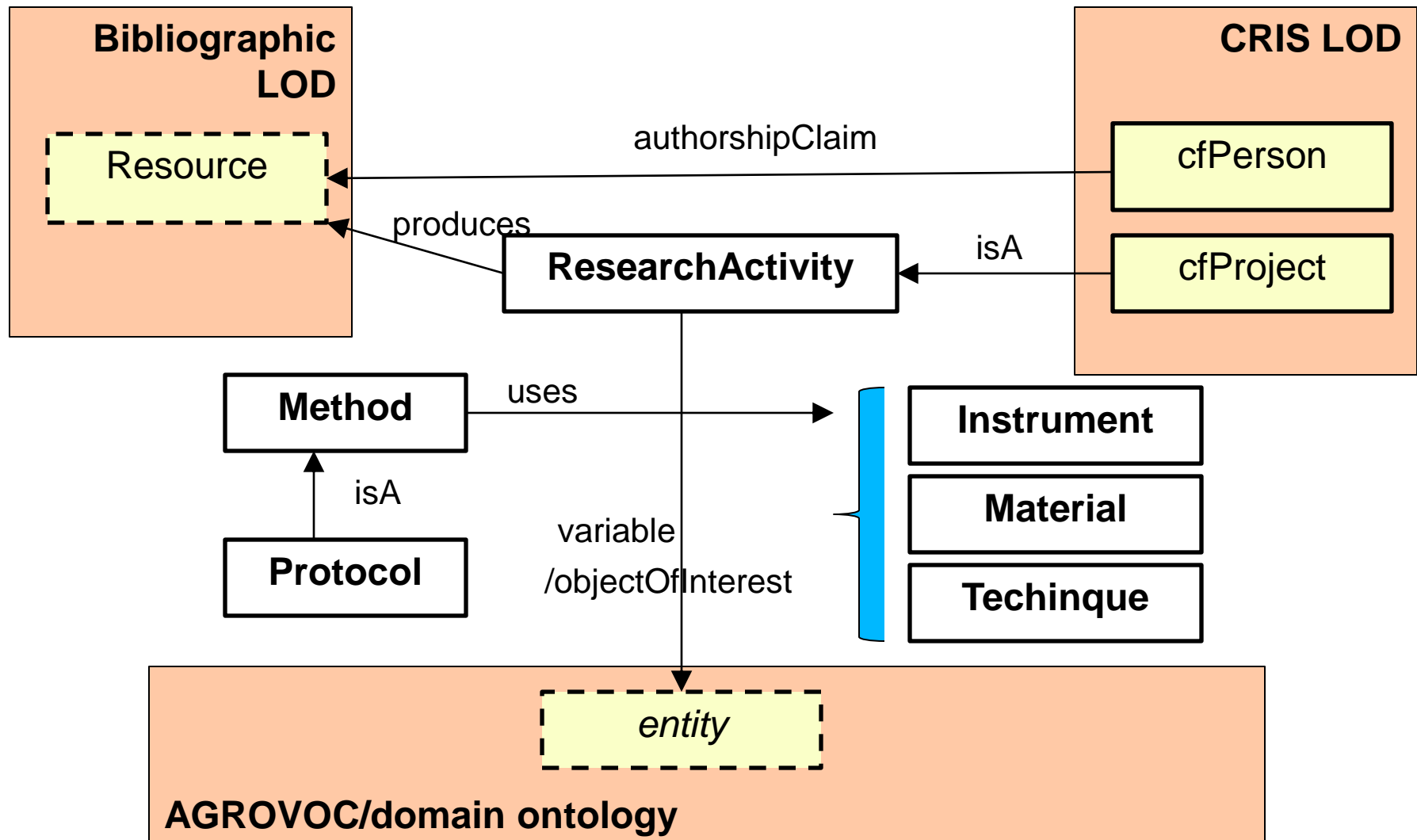
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Approach per type of data (VOA3R)

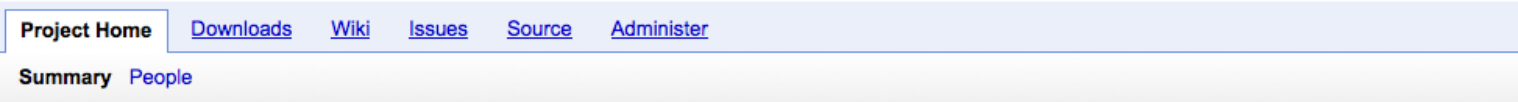
- | | |
|---|-----------|
| • Primary data: <ul style="list-style-type: none">– Structured data, e.g. datasets as tables– Digitized data: images, videos, etc. | OBOE |
| • Secondary data <ul style="list-style-type: none">– Elaborations of the primary, e.g. a dendrogram | |
| • Production context information, including authors, their organizations and projects | CERIF |
| • Methods and procedures followed | RM schema |
| • Reports, including papers | LODE-DB |
| • Secondary documents, e.g. training resources | |
| • Social data, tags, ratings, etc. | |

Research Methods (RM) schema



For those who want to play with it...

- <https://code.google.com/p/cerif-linked-data/>



Tip: Discuss and then document [each teammate's project duties](#). ✕

Project Information

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Labels
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Open Project related to the exposure of Linked Data-enabled CERIF datasets

This project currently contains:

- A set of technical instructions to publish Linked Data from CERIF databases. Availables at <http://code.google.com/p/cerif-linked-data/wiki/InstructionsLDfromCERIF>
- A instance of D2R Server preconfigured with the configuration files needed to publish linked data from a CERIF database <http://cerif-linked-data.googlecode.com/files/demo-d2r-server.zip>
- Report on how to expose Linked Data-enabled CERIF datasets (Proposal of Recommendations) <http://cerif-linked-data.googlecode.com/files/RecommendationsforLDandCERIF%2020120207.docx>
- Slides about how to expose Linked Data-enabled CERIF datasets (Proposal of Recommendations) <http://cerif-linked-data.googlecode.com/files/CERIF-LD%20Slides%2020120207.pptx>
- Draft of CERIF-2008-1.3 Ontology <http://spi-fm.uca.es/neologism/cerif>
- Draft of CERIF-2008-1.3 Semantic Vocabulary <http://spi-fm.uca.es/neologism/semcerif>
- Research Paper for International Journal of Software Engineering and Knowledge Engineering: [Connecting Closed World Research Information Systems through the Linked Open Data Web](#)

Do not forget to subscribe to our [discussion group](#).

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Combining IR and CRIS (now technical)

<http://voa3r.cc.uah.es:8080/dataset/resource/persons/Diane_Le_H%C3%A9naff>

a cerif:Person ;

rdfs:label "Diane Le Hénaff" ;

cerif:gender "f" ;

cerif:internalIdentifier

"ff8081813078a4dc01308979fe2c0002" ;

cerif:keyword "agriculture" ;

cerif:linksToProject

<http://voa3r.cc.uah.es:8080/dataset/resource/proj_pers/VOA3R-Diane_Le_H%C3%A9naff-uuid> ;

cerif:uri <fr.linkedin.com/in/lehenaff> ;

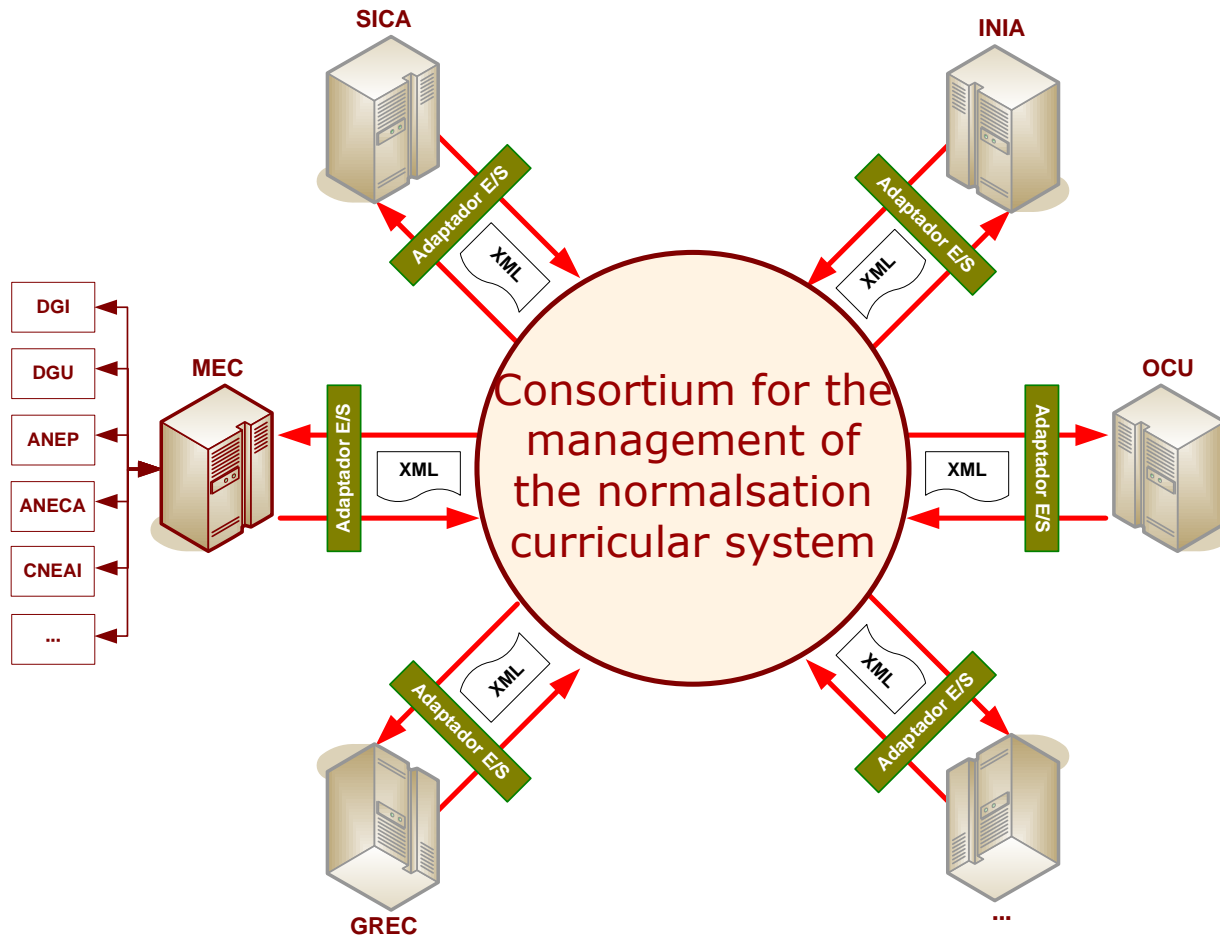
cerif:isAuthor <<http://www.inra.fr/234562>>

•

Outlook

- Main messages:
 - Research information: more than publications and citations.
 - The CRIS and the IR should converge.
 - A world of LOD-enabled IR and CRIS?
- Which is the role of the library in that future?
- Challenges ahead:
 - Interoperability between standards
 - Identifiers (sustainable), not URIs (locators)
 - Data as an actionable artefact.

At national level (the CVN example)



Example

CVN.xml (Person)

```
[...]
<GivenName code="000.010.000.020" multiplicity="false"
obligatory="true">
  <Item>Miguel Ángel</Item>
</GivenName>
<FirstFamilyName code="000.010.000.010" obligatory="true">
  <Item>Sicilia</Item>
</FirstFamilyName>
<SecondFamilyName code="000.010.000.010" obligatory="true">
  <Item>Urbán</Item>
</SecondFamilyName>
[...]
<BirthDate code="000.010.000.050" obligatory="true">
  <Item>1973-02-26</Item>
</BirthDate>
[...]
<Gender code="000.010.000.030" obligatory="true">
  <Item>000</Item>
</Gender>
[...]
```

Example

CERIF.xml (Person)

```
[...]
<cfPers>
  <cfPersId>4972b826-8ff1-4762-91ee-ab40c3f151ea</cfPersId>
  <cfBirthdate>1973-02-26</cfBirthdate>
  <cfGender>m</cfGender>
  <cfuri />
</cfPers>
<cfPersName>
  <cfPersId>4972b826-8ff1-4762-91ee-ab40c3f151ea</cfPersId>
  <cfFirstNames>Miguel Ángel Sicilia Urbán</cfFirstNames>
</cfPersName>
[...]
```

Example

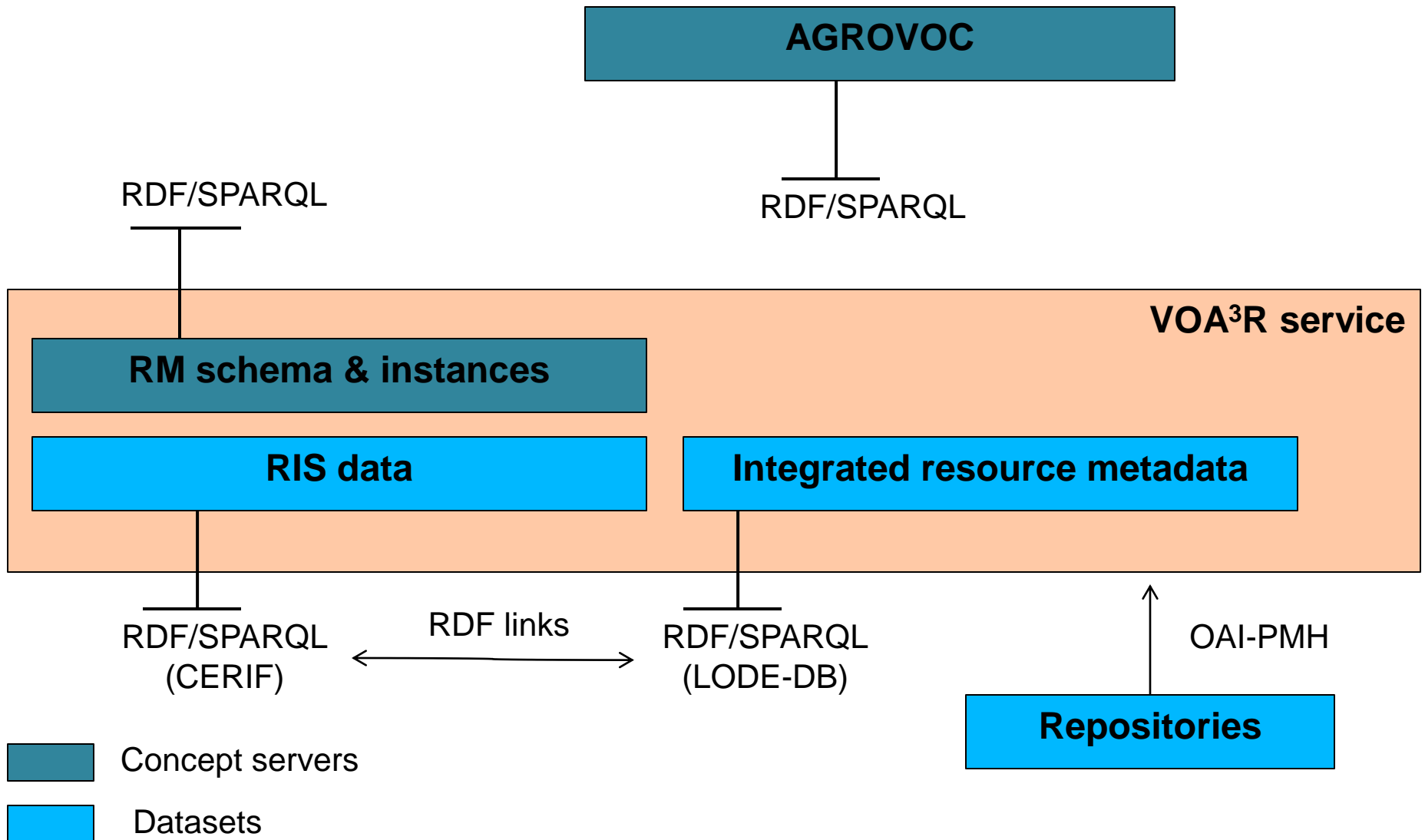
CERIF_DB.sql (Person)

[...]

```
INSERT INTO cfPers ( cfPersId, cfBirthdate, cfGender, cfuri ) VALUES (
'4972b826-8ff1-4762-91ee-ab40c3f151ea',
'1973-02-26',
'm',
" );
```

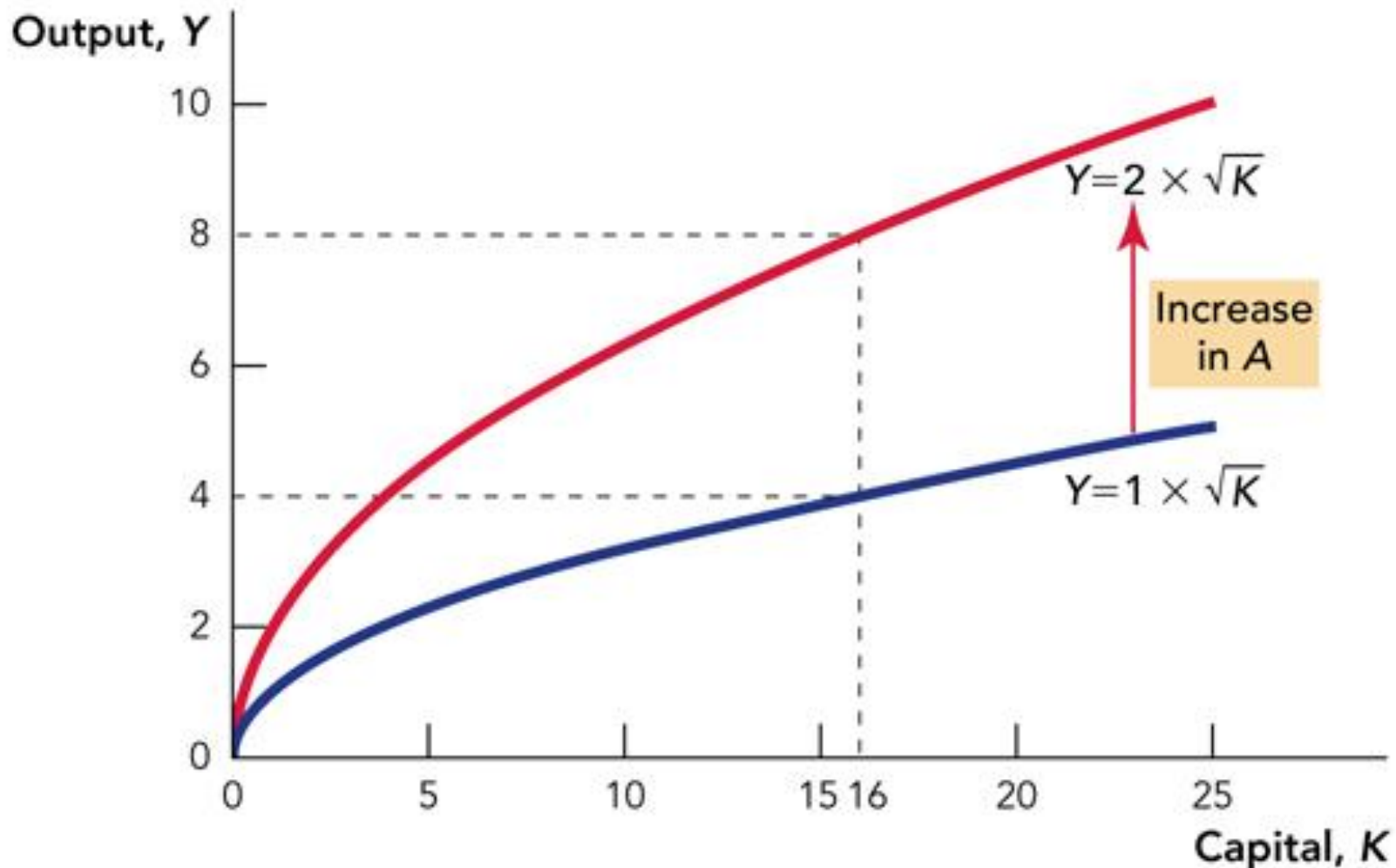
```
INSERT INTO cfPersName ( cfPersId, cfFirstNames ) VALUES (
'4972b826-8ff1-4762-91ee-ab40c3f151ea',
'Miguel Ángel Sicilia Urbán'
);
```

[...]



The Solow model & technological knowledge

Increasing technology (even while holding K constant) creates a higher growth rate.



What VIVO enables

The screenshot shows the VIVO profile page for Michael Conlon. The header includes the University of Florida logo and the text "George A Smathers Libraries". A search bar is present with the text "Search VIVO" and a "Go" button. The main navigation bar includes links for Home, People, Academic Units, Research, Events & Seminars, and Index. The profile section for Michael Conlon, Associate Director and Chief Operating Officer, displays a photo, a line graph showing 4 publications in the last 10 years, and a link to view all publications. The "overview" tab is selected, showing a detailed description of his role and background. The "affiliation" tab is also visible, showing his current position at the University of Florida Clinical and Translational Science Institute.

UF | George A Smathers Libraries

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VIVO Research & Expertise Across the University of Florida

Home People Academic Units Research Events & Seminars Index

Conlon, Michael

Associate Director and Chief Operating Officer

4 publication(s) within the last 10 years

[View all VIVO publications and corresponding co-author network](#)

overview

description

Dr. Conlon is Associate Director and Chief Operating Officer of the University of Florida Clinical and Translational Science Institute (CTSI), interim Director of Biomedical Informatics in the UF College of Medicine, and Principal Investigator for VIVO: Enabling National Networking of Scientists. His responsibilities include development of CTSI programs and services, development of academic biomedical informatics, expansion and integration of research and clinical information resources as well as creation of research networking tools and a national network of scientists. Previously Dr. Conlon served as Chief Information Officer of the University of Florida Health Science Center where he directed network and video services, desktop support, media and graphics, application development, teaching support, strategic planning and distance learning. He earned his Ph.D. degree in Statistics from the University of Florida, undergraduate degrees in Mathematics and Economics from Bucknell University, and is the author of over 150 scholarly publications and presentations. His current interests include enterprise change and organizational issues in the adoption of information technology, large scale data systems integration and enterprise architecture.

affiliation

preferred title

Associate Director and Chief Operating Officer, University of Florida Clinical and Translational Science Institute

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