



# Research Assessment: A Diverse Role for Repositories

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# Decades of Achievement

Internet (packets)

Web (documents)

Repository (preservation)





# Openness Agendas



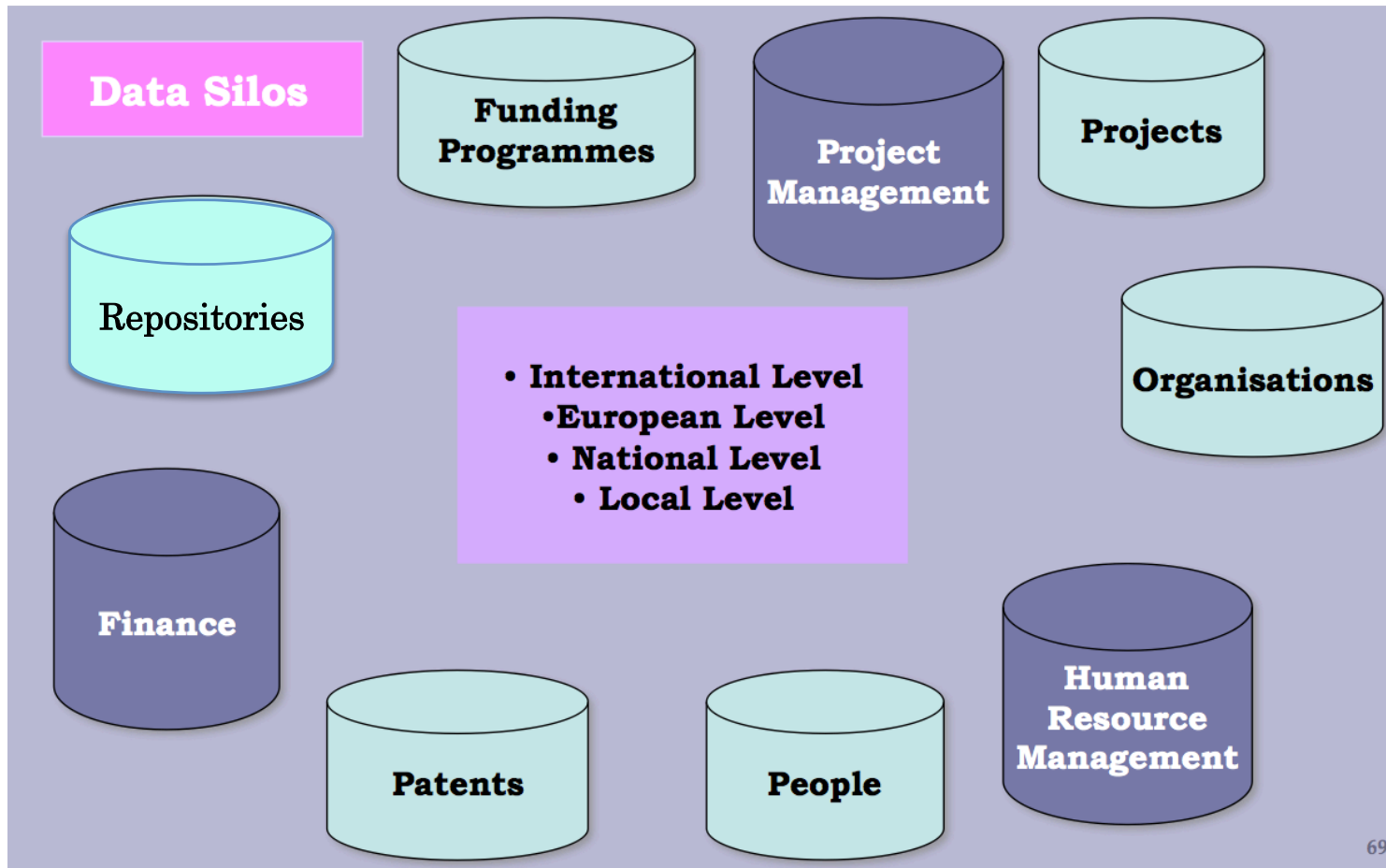
- Open Access to Research Outputs
  - Supported by all Research Councils
  - Heavily promoted by JISC
- Open Research Data
  - Move from closed VRE / EScience environment
  - To open (able) data
- Open Educational Resources
  - Move from “Learning Objects” to “Learning Resources” via Open Access practice and methodology
  - Move from closed VLEs to sharing resources
  - All underpinned by active preservation and curation policies and workflows

# Open Access vs Research Assessment?

- In UK, high proportions of public-funded research
  - National research assessment processes
  - All universities required to account for research outcomes / quality
- Repositories found role in cataloguing research outputs for RAE2008
  - Embedded them at the heart of institutional infrastructure ✓
  - Diverted (temporarily) from Open Access goals ✗
- But for REF....

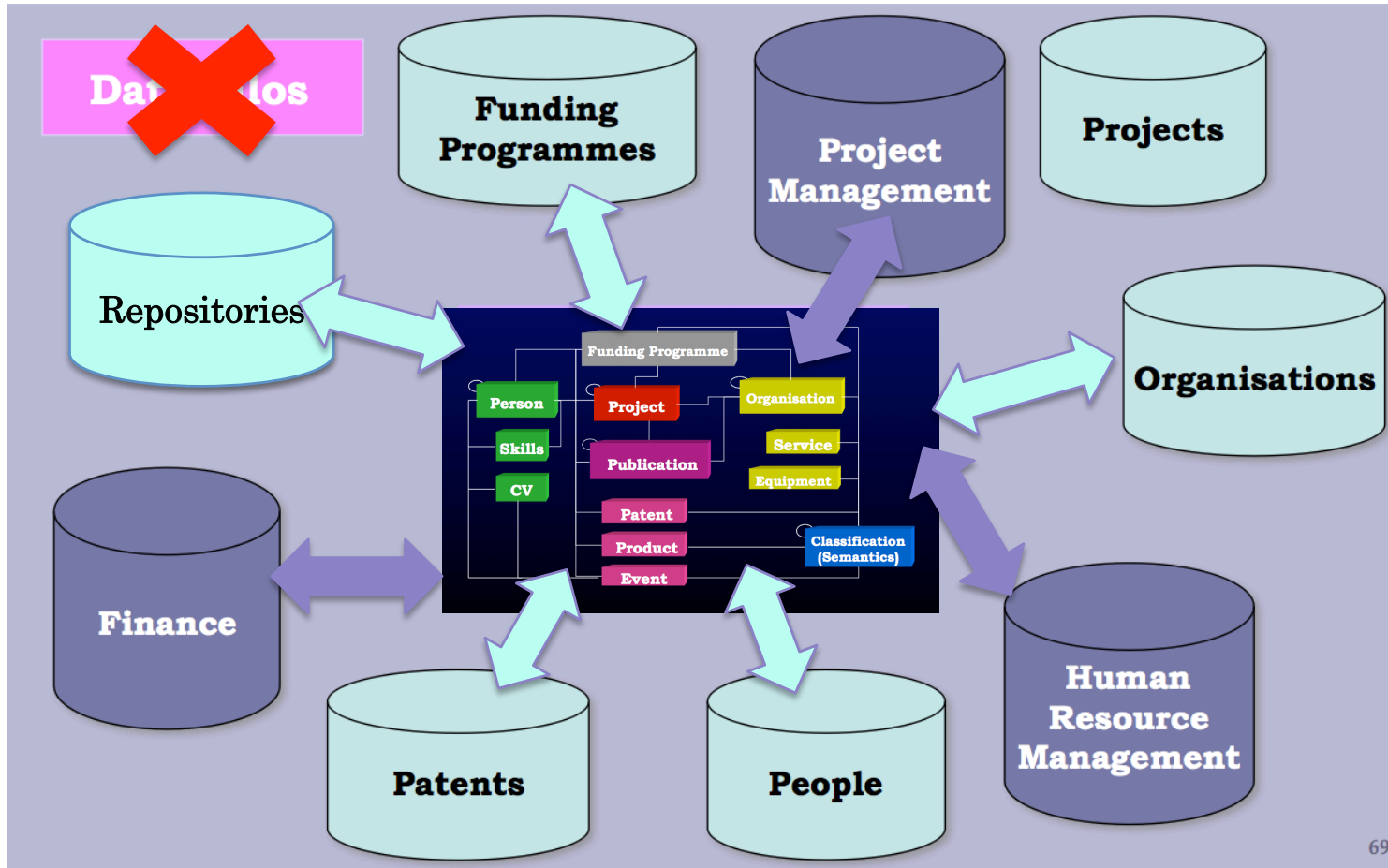


# CRIS: Current Research Info Systems



- EuroCRIS organisation promotes systems that deal with whole research infrastructure

# CRIS: Current Research Info Systems



- CERIF standard data schema interoperates between different systems

*Repositories should support CERIF*



# FRIS portal (NL)

- CRIS pulls together all research & admin information to create a unified view about a researcher's involvement
- Comes from *administration*
- Promoted by REF

The screenshot displays the FRIS research portal interface. At the top, there is a navigation bar with links for 'Help', 'Contact', 'About the Portal', and 'News'. Below this is a search bar and a main menu with categories: 'Research projects', 'Organisations', 'Researchers', 'Funding programmes', and 'Equipment'. The profile of 'Johan Lefevre' is shown, including his affiliation 'K.U. Leuven Departement Biomedische Kinesilogie' and various contact details. A central network diagram illustrates his collaborations with other researchers and projects. To the right, a 'Content' sidebar lists 'Researchers' and 'Organisations' he has worked with. At the bottom, 'Research projects' are listed. The footer contains copyright information and contact details for the Flemish Government.

Help Contact About the Portal News

Research projects Organisations Researchers Funding programmes Equipment

Johan Lefevre  
K.U. Leuven [Departement Biomedische Kinesilogie](#)

[johan.lefevre@faber.kuleuven.be](#) - work address  
+32-16-329084 - work address  
UZ-Vesaliusinstituut-q, Minderbroedersstraat 12 blok q, 3000 Leuven - postal address  
[http://owisdb.kuleuven.be/persdb-bin/persdb?lang=N&oprop=person&naam=00003378](#) - work address

Profile Collaboration Competence Map

Restart

Content

Researchers ☒  
Who Johan Lefevre has worked with...

- [Kourosch ABBASPOUR TEHRANI](#)  
Vrije Universiteit Brussel
- [Ahmed ABDELHAMID](#)  
Vrije Universiteit Brussel
- [AHMED ABDELKHALEK](#)  
Vrije Universiteit Brussel
- [Ademola ABIJOYE](#)

Organisations ☒  
Where Johan Lefevre has worked...

- [Departement Biomedische Kinesilogie](#)  
Gymnasium - Zwembad  
Tervuursevest 101, 3001 Heverlee, BE
- [Departement Humane Kinesilogie](#)  
Gymnasium - Zwembad  
Tervuursevest 101, 3001 Heverlee, BE
- [Afdeling Fysieke Activiteit en Gezondheid](#)  
Gymnasium - Zwembad  
Tervuursevest 101, 3001 Heverlee, BE

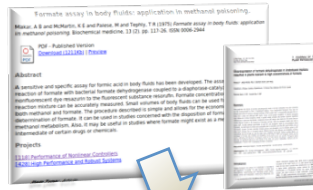
Research projects ☒  
What Johan Lefevre has worked on...

- [Sportparticipatie en fysieke activiteit in Vlaanderen](#)  
2 Jan 2008 - 31 Dec 2011
- [Steunpunt Cultuur, jeugd en sport](#)  
1 Jan 2007 - 31 Dec 2011

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Flemish Government  
Department of Economy, Science and Innovation  
Koning Albert II-laan 35 bus 10  
B-1030 Brussel - Belgium  
E-mail: [fris@vlaanderen.be](#)

# EPrints / CRIS Chimera



publication records

which link to

grant administration records

which link to

funding organisation records...



- As part of JISC's Readiness for REF project, Eprints accommodates the CERIF data scheme
  - CERIF data interchange
  - Not just *publications* but *projects* and *organisations*
- CERIFed repositories have many separate datasets, all linked together via explicit relationships
  - a paper doesn't have a *project property*, it is related to *project objects*



# EPrints Before (sans CERIF)

- Projects and funding organisations are just names typed into the paper's metadata record
  - with name authority assistance

The screenshot displays two sections of a metadata entry form. The top section, titled 'Funders', contains a single input row with the text '1. EPSRC' and a dropdown arrow. Below this is a button labeled 'More input rows'. The bottom section, titled 'Projects', contains a single input row with the text '1. AgentLink III' and a dropdown arrow. Below this is a button labeled 'More input rows'. Both sections have a question mark icon in the top right corner.

Funders	
1.	EPSRC
<a href="#">More input rows</a>	


Projects	
1.	AgentLink III
<a href="#">More input rows</a>	

# EPrints After

- Now they are repository objects in their own right
- A paper links to its affiliated projects, instead of just mentioning them

**Formate assay in body fluids: application in methanol poisoning.**

Makar, A B and McMartin, K E and Palese, M and Tephly, T R (1975) *Formate assay in body fluids: application in methanol poisoning*. Biochemical medicine, 13 (2). pp. 117-26. ISSN 0006-2944

 PDF - Published Version  
[Download \(1211Kb\)](#) | [Preview](#)

**Abstract**

A sensitive and specific assay for formic acid in body fluids has been developed. The assay is based on the reaction of formate with bacterial formate dehydrogenase coupled to a diaphorase-catalyzed reduction of the nonfluorescent dye resazurin to the fluorescent substance resorufin. Formate concentrations of 0.5 µg/ml of reaction mixture can be accurately measured. Small volumes of body fluids can be used for the analysis of both methanol and formate. The procedure described is simple and allows for the economical and rapid determination of formate. It can be used in studies concerned with the disposition of formate, as it relates to methanol metabolism. Also, it may be useful in studies where formate might exist as a metabolic intermediate of certain drugs or chemicals.

**Projects**

[\[118\] Performance of Nonlinear Controllers](#)  
[\[428\] High Performance and Robust Systems](#)

**Item Type:** Article

**Performance of Nonlinear Controllers**

We are concerned with controlling uncertain nonlinear systems via adaptive techniques. We are particularly interested in evaluating the performance of adaptive controllers, and comparing them against eg. robust designs. This has involved developing techniques which allow lower and upper bound estimates to be made of eg. LQ performance. Uniquely in adaptive control theory, we are accounting for the control effort in the cost. Our original focus of attention is in controlling systems containing significant static functional uncertainties (as opposed to the more standard set-up where the uncertainties considered are parametric). The approach considered involves the introduction of function approximators for on-line modelling of the static uncertainties. We have developed a framework for describing the classes of uncertainties for which such controls are valid -- contrasting to the robust theory, uncertainties are measured by spatial L2 weighted norms contrasting to usual static uncertainty models which are formed by pointwise bounds. The interest in performance arose as we tried to quantify which function approximator structures are 'best'. This wonderfully ill-posed question is very rich. Currently we have been able to exhibit some structures whose associated LQ performance scales badly as the resolution of the approximator is increased, and also to construct controllers and approximator structures which scale well. Unfortunately, the class of approximator based controllers scale poorly includes some of the standard designs. Our focus of attention is now on using the framework developed for addressing the above question to compare the performances of more classical designs.

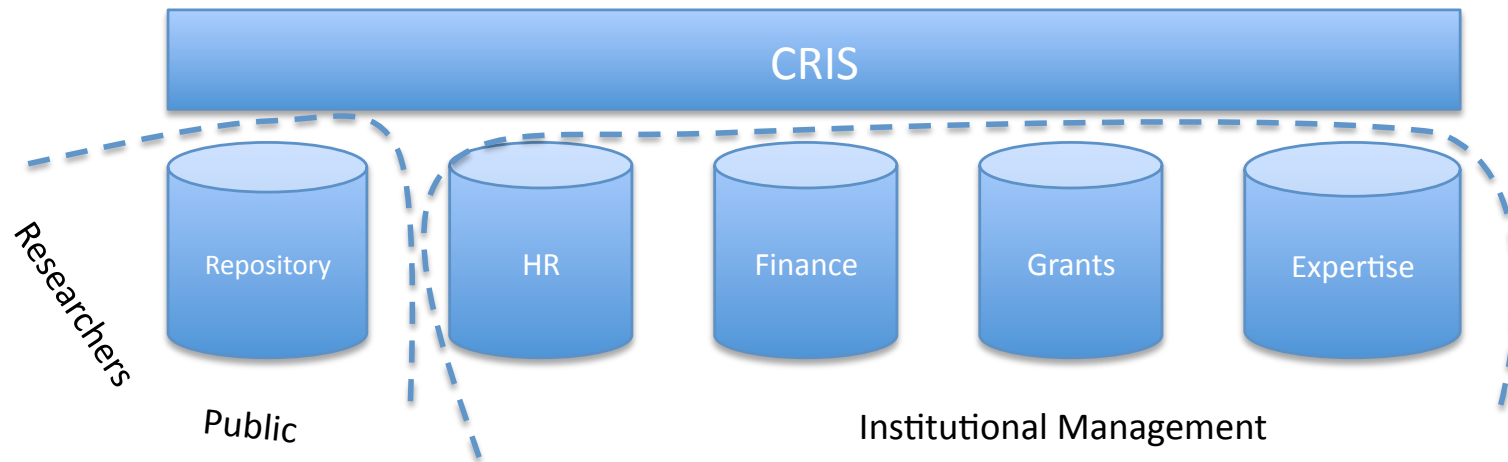
**Contributors**

Type	Name	ID
Principal Investigator	French, Mark	maf@ecs.soton.ac.uk
Co-Investigator	Harris, Chris	ch@ecs.soton.ac.uk
Co-Investigator	Rogers, E	ecr@ecs.soton.ac.uk

**Grant Reference** GR/R27594/01  
**Funders** [\[21\] Engineering and Physical Sciences Research Council](#)  
**Commencement Date** 01 April 2001  
**Completion Date** 31 May 2004  
**URI** <http://www.isis.ecs.soton.ac.uk/control/projects/adaptive/adaptive.htm>  
**Id** 118



# CRIS Dichotomy

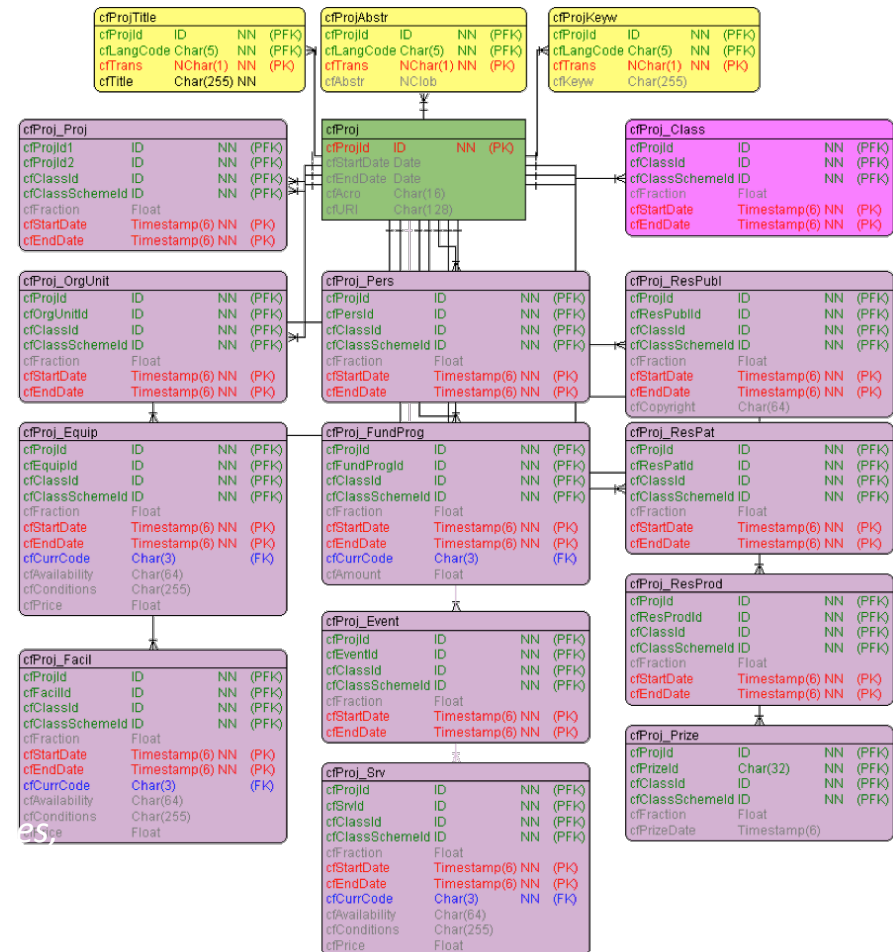


CRIS components attempt to provide service to *research management* and *administrators*

Repository attempts to reach researchers and public, and provide a service to management

# Admin/CERIF View of A Project

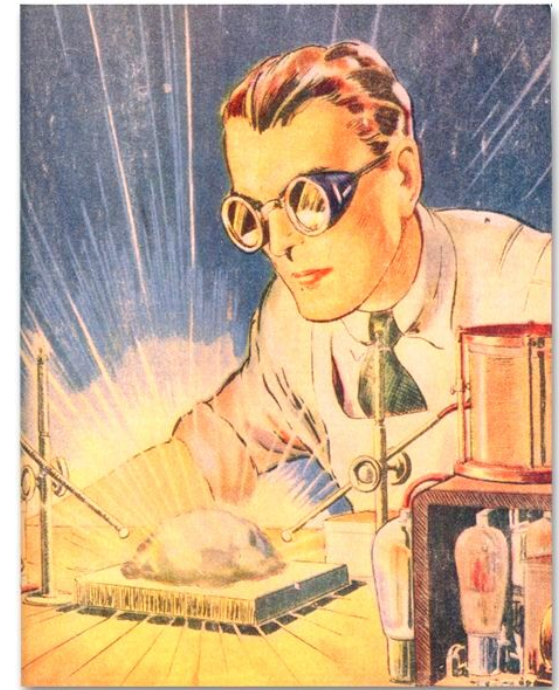
- Grant ID / Funder / Amount
- Start date, End Date
- Investigators
- Budget breakdown






# Researchers' View of A Project

- Project name
- Project aims / objectives
- Project Logo / Website / Blog
- Press releases
- News clippings
- Funder

[illegible]




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School of Electronics  
and Computer Science


f.Southampton > ECS > EdSpace >

**Welcome to the EdSpace project website**


is developing EdShare, the University of Southampton service to support sharing and collaboration in teaching. EdSpace aims to change culture in the University of Southampton by facilitating all involved to share educational resources. Technically, this will be achieved by implementing small "Web 2.0" tools for a repository based on EPrints. Culturally, this will be achieved by working with all the parties and to discover how they will best benefit from such change.



**31/03/2009**  
EdSpace Project JISC  
funded period ended



**27/02/2009**  
EdShare homepage re-designed  
New presentation of a range of features



**26/01/2009**  
EdShare upgrade to v.1.3  
Collections and Bookmarking functionality  
Rev. INSEP - Comments and Notes

is a JISC-funded project within the Institutional Exemplars Programme. It is managed from within the School of Electronics and Computer Science in collaboration with other groups across the University of Southampton: iSolutions (formerly ISS), the Library, Student Services and the Learning and Teaching

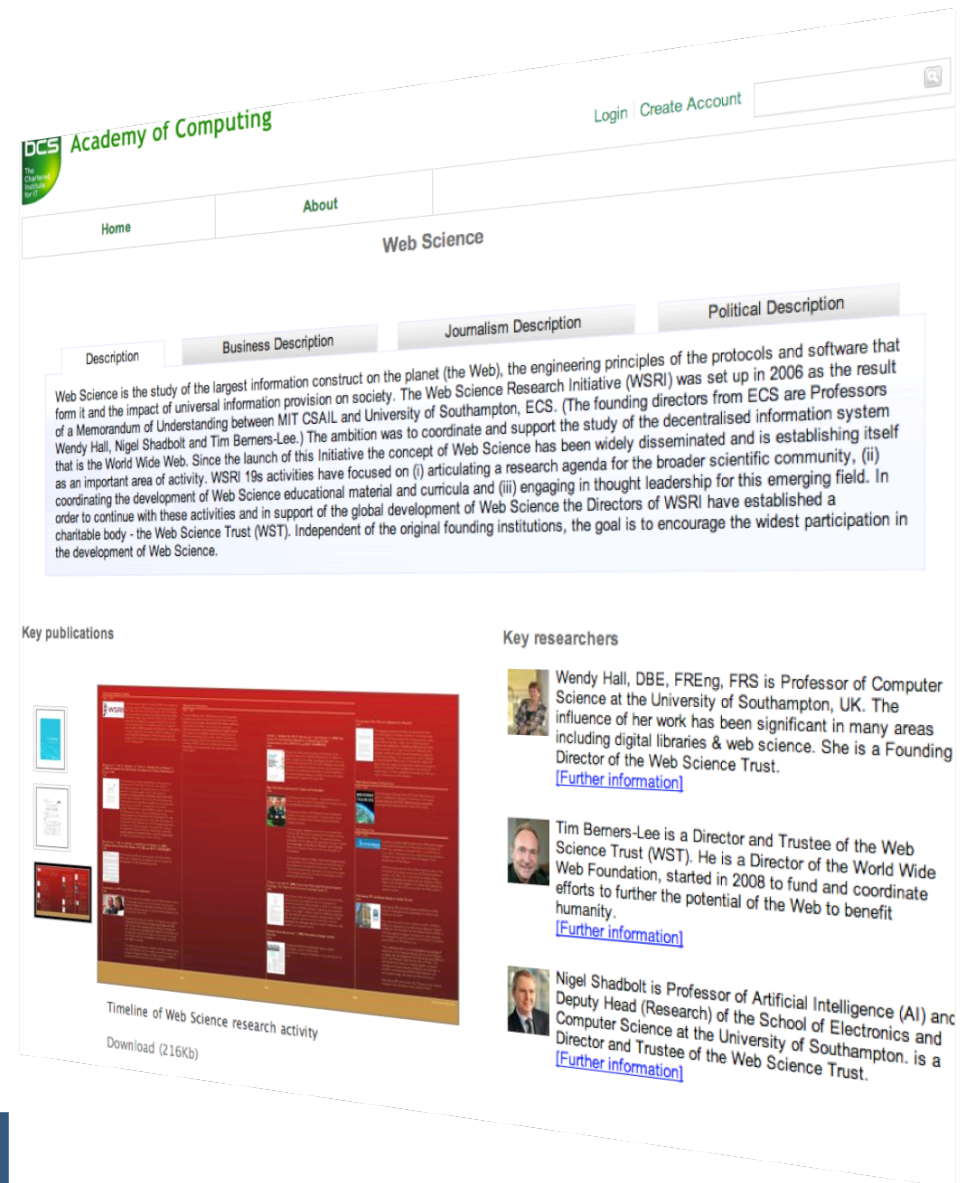
[More Updates](#)

# Repository / CRIS combination

- Bring new perspective to CRIS
  - Researcher-oriented
  - Publicity-oriented
  - Marketing-oriented
- Descriptive, narrative
- Complementary to administrative perspective

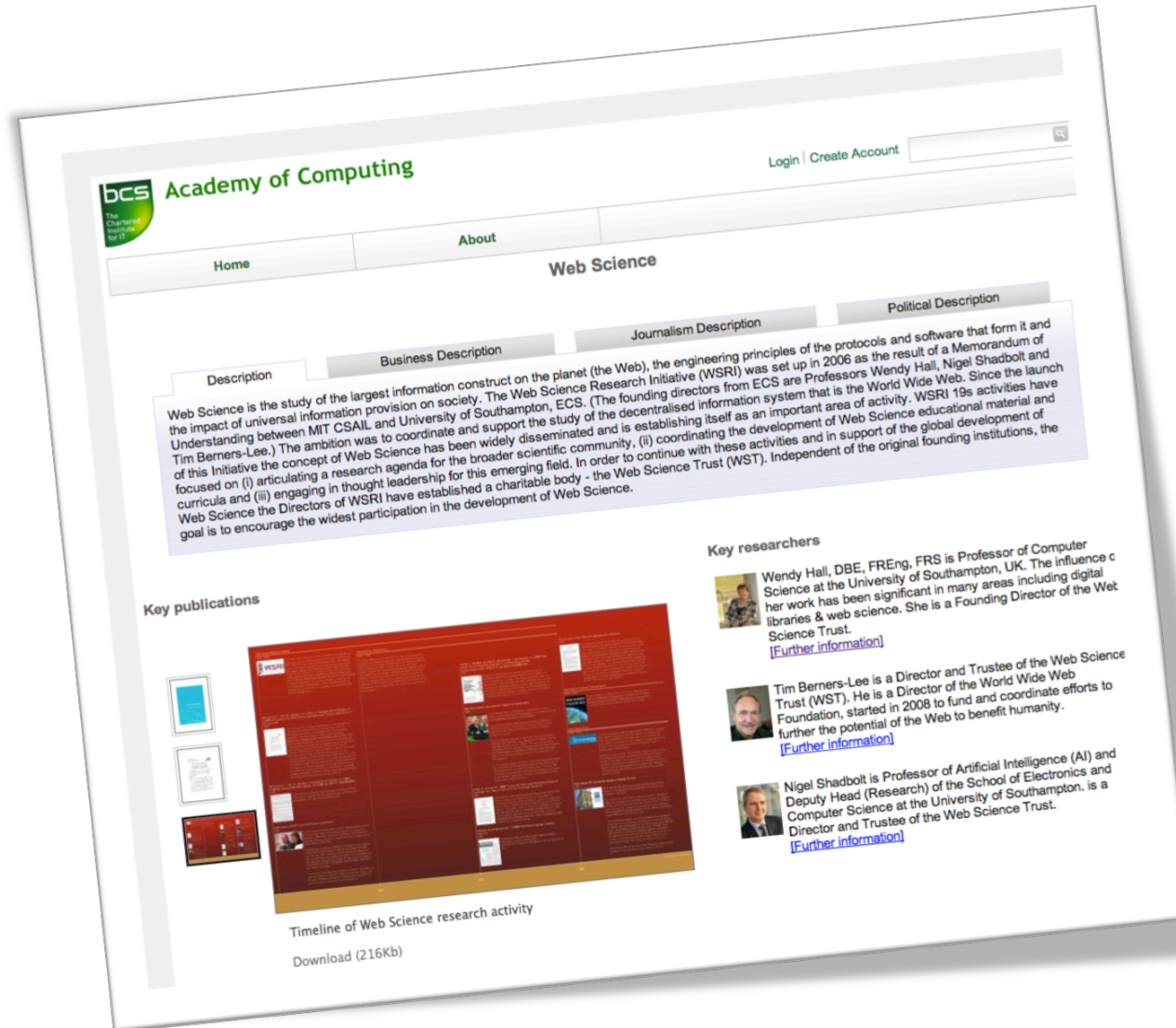
# Pulling Together

- JISC Open Impact project
- Repository of High Impact Research
- Brings together staff, outputs, projects
  - Repository acts as a CRIS
  - Holds admin data
  - Collects outputs and evidence



JISC

# Impact Narratives



- Collecting evidence of *research impact*
- Preserving evidence
- Presenting evidence
- Publications, press reports, reviews etc



- Generated from repository RSS feed
- Using off-the-shelf timeline software
  - Timeline 3D for Mac
  - *Allows different visualisations: posters, movies*



# Presenting Research Feeds as Slideshows

Home

About

Contact

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School of Electronics  
and Computer Science

feed2pptx

[University of Southampton](#) > [ECS](#) > [feed2pptx](#)

Use the form below to generate slideshows (in .pptx format) from [RSS](#) (1.0, 2.0) or [Atom](#) (0.3, 1.0) feeds.

Enter the URL of the feed, and then select a template to base the generated slideshow from:

Funded by:

**JISC**

as part of the

[Open Impact project](#)

URL of feed:

Select a template:

ECS researchers develop intelligent medical sensors

ECS researchers are developing intelligent medical sensors which will be used to monitor patients in hospital and at home. The sensors will also be used to monitor patients in hospital and at home.

[View more](#)

ECS engineers power to success in World Solar Boat Championships

Team Tarka, led by Dr Peter Davies of the School of Electronics and Computer Science, has achieved outstanding success in Solar Splash - the World Championships of Collegiate Solar Boating.

[View more](#)

Image scale factor:   
*resizes feed images up or down by this factor*

Maximum content length:   
*trim content of feed items to this number characters, or set to 0 for no trimming*

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# e.g. RSS Feed from Press Releases

The screenshot shows a PowerPoint presentation window titled "feed-4.pptx". The interface includes a menu bar with options like New, Open, Save, Print, Undo, Redo, Format, Text Box, Picture, Shapes, Table, Media, New Slide, Slide Show, Gallery, Toolbox, Zoom, and Help. Below the menu bar is a toolbar with icons for these functions. The main area displays a slide with a blue background. The slide title is "HV Lab staff celebrate opening of new research space". Below the title is a group photo of staff and students. Under the photo is the URL <http://www.ecs.soton.ac.uk/news/3266>. The slide content reads: "Staff and students at the Tony Davies High Voltage Laboratory are celebrating the completion of construction work in the Lab which has provided valuable new space for high voltage research." The left sidebar shows a list of slides, with slide 7 selected. The bottom status bar indicates "Slide 7 of 10".

feed-4.pptx

Slides Outline

4 Researchers pioneer new technology for pharmaceutical drug development

5 ECS researchers develop intelligent medical sensors

6 Wendy Hall receives honorary degree and city freedom in Greece

7 HV Lab staff celebrate opening of new research space

8 ECS PhD thesis on Control judged best in the UK by a I

9 ECS engineers power to success in World Solar Boat Championships

HV Lab staff celebrate opening of new research space

<http://www.ecs.soton.ac.uk/news/3266>

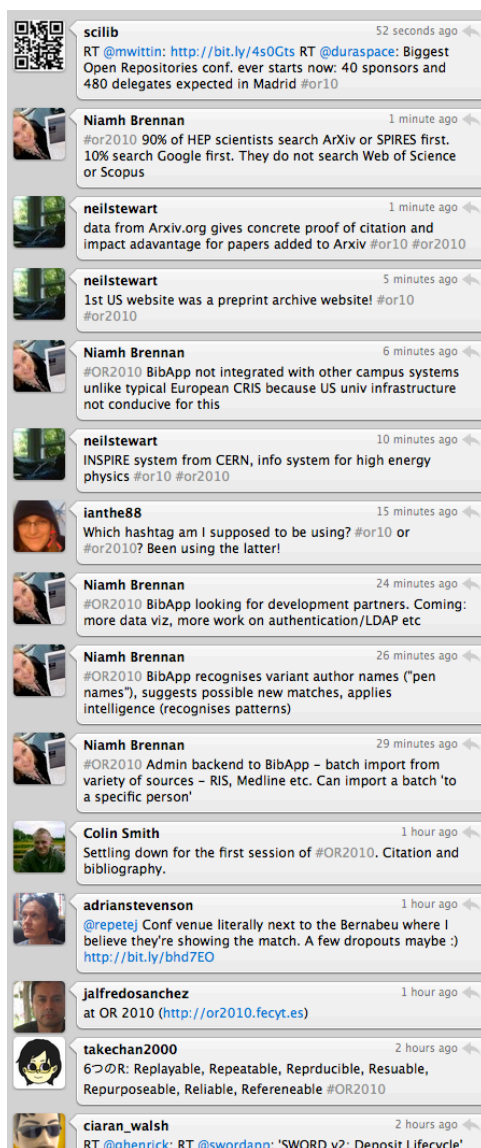
Staff and students at the Tony Davies High Voltage Laboratory are celebrating the completion of construction work in the Lab which has provided valuable new space for high voltage research.

Click to add notes

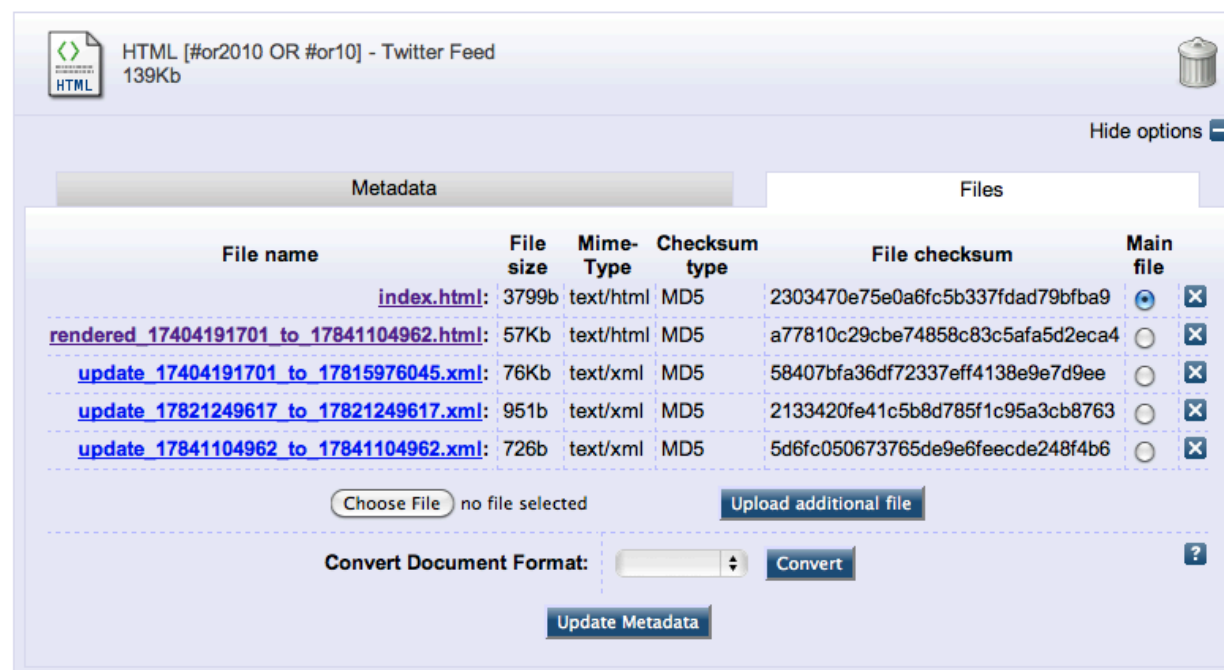
Normal View

Slide 7 of 10

# Repository collecting social feeds



A screenshot of a Twitter feed. The tweets are from various users, including scilib, Niamh Brennan, neilstewart, ianthe88, Colin Smith, adrianstevenson, jalfredosanchez, takechan2000, and ciaran\_walsh. The tweets discuss the OR2010 conference, the BibApp, and the deposition lifecycle.



A screenshot of a web interface for managing a Twitter feed. The interface shows a list of files with columns for File name, File size, Mime-Type, Checksum type, File checksum, and Main file. The files are listed in a table, and there are buttons for 'Choose File', 'Upload additional file', 'Convert Document Format', and 'Update Metadata'.

File name	File size	Mime-Type	Checksum type	File checksum	Main file
<a href="#">index.html</a>	3799b	text/html	MD5	2303470e75e0a6fc5b337fdad79bfa9	<input checked="" type="radio"/>
<a href="#">rendered_17404191701_to_17841104962.html</a>	57Kb	text/html	MD5	a77810c29cbe74858c83c5afa5d2eca4	<input type="radio"/>
<a href="#">update_17404191701_to_17815976045.xml</a>	76Kb	text/xml	MD5	58407bfa36df72337eff4138e9e7d9ee	<input type="radio"/>
<a href="#">update_17821249617_to_17821249617.xml</a>	951b	text/xml	MD5	2133420fe41c5b8d785f1c95a3cb8763	<input type="radio"/>
<a href="#">update_17841104962_to_17841104962.xml</a>	726b	text/xml	MD5	5d6fc050673765de9e6feecde248f4b6	<input type="radio"/>

- Twitter data periodically collected from the Twitter API
- Stored as a dynamically growing collection of XML files
- Wish to extend to other 'feeds'



# Repository collecting Twitter feeds

- XML data can be downloaded for analysis
- Rendered by repository as a list of tweets for the user

## Results for Twitter search for #or2010 OR #or10



[janehsmith](#) is hoping that there will be tea at break during [#OR10](#)  
Wed, 30 Jun 2010 10:12:06 +0000



[SHERPAServices](#) making last minute arrangements for [#OR10](#) next week, poster ready, travel etc sorted, meetings sorted, if you want to meet just let us know  
Wed, 30 Jun 2010 10:21:54 +0000



[atmire](#) [#OR10](#) overview schedule in ical <http://bit.ly/bYZr7r> and xml <http://bit.ly/cPX9ME>  
Wed, 30 Jun 2010 12:54:32 +0000



[atmire](#) [#OR10](#) overview schedule in ical (corrected) <http://bit.ly/b7GbKn>  
Wed, 30 Jun 2010 12:56:33 +0000



[timdonohue](#) Really hoping this Madrid Metro strike gets resolved before [#or10](#) : <http://bit.ly/bDoAdY>  
Wed, 30 Jun 2010 20:51:16 +0000



[jserranom](#) Con Little Toni [@toniprieto](#) en la FNB preparando la presentaci3n para [#OR10](#) <http://bit.ly/c5Y2DB>  
Thu, 01 Jul 2010 07:43:05 +0000



[OpenRepository](#) After a busy but successful [#ALA10](#), we are really looking forward to [#OR10](#) next week in Madrid!  
Thu, 01 Jul 2010 09:23:29 +0000



[atmire](#) Anyone else staying at the AC Aitana <http://bit.ly/8XxtFd> ? [#OR10](#)  
Fri, 02 Jul 2010 11:28:43 +0000



[ianthe88](#) getting my slides ready for [#or10](#).  
Fri, 02 Jul 2010 14:16:26 +0000

# Collecting Other Impact Evidence

- Accommodating unexpected objects in a dedicated research repository
  - Press releases
  - BBC news video clips
  - Reviews



BBC News Report on use of Agents Technology by Aroxo  
[\[Further information\]](#)  
136Kb

Metadata	Files
<p>★ Genre: <span>Output</span> <span>Product</span> <span>Benefit</span> <span>Evidence</span> <span>Personnel</span></p> <p>Content: <span>Impact Evidence</span></p> <p>★ Format: <span>PDF</span></p> <p>Description: <span>BBC News Report on use of Agents Techn</span></p> <p>Official URL: <span>http://news.bbc.co.uk/1/hi/health/8185896.stm</span></p> <p>★ Visible to: <span>Anyone</span></p> <p>License: <span>UNSPECIFIED</span></p> <p>Embargo expiry date: Year: <span></span> Month: <span>Unspecified</span> Day: <span>?</span></p>	

# Concluding Remarks

- Social, political & funding pressures are changing the roles of Research Information Environment
- Repositories have a history of engagement with grassroots / public
  - providing services (portfolios, collections, reports)
  - collecting/managing/preserving information and knowledge products
- These engagements can enrich administrative CRIS products
- CRIS ontological breadth can enrich repositories
- Distinction between CRIS / repository starts to blur.

# A PostScript About Co-constitution

- A repository is not an information management black box
- It is a socially embedded technological phenomenon that promotes new relationships to research information
- OA Repositories have put pressure on Research Funders to change their relationship to research information
- Now Research Funders are changing repositories

