

Libraries and their Role in Open Access

Challenges and Opportunities

Laura Morse, Harvard University

François Renaville, University of Liège

Christine Stohn, Ex Libris

Abstract

The open access movement gains momentum with an increasing number of institutions and funders adopting open access mandates for their funded research. Consequently, an increasing amount of material becomes freely available, either from institutional repositories or from traditional or newly established journals. Libraries can play a dual role in supporting this movement: Firstly, they can provide services supporting the deposit of research output in their institutional repositories, including support for making it widely discoverable via indexes such as Google Scholar and library discovery systems. Secondly, libraries can make open access materials discoverable by their patrons through such indexes, thus expanding their collection to include materials that they would not necessarily license.

This session will describe the experience of the University Libraries of Liège in Belgium and Harvard. University of Liège chose a top-down approach and made it compulsory for researchers to deposit their output in the institutional repository—ORBi. To support this mandate, the library offers services that help researchers deposit and disseminate their publications. Both libraries—Liège and Harvard—enable their students and faculty to discover open access content beyond their library's acquired collection via their library discovery system.

The session will also address challenges that arise from indexing open access publications and how index providers and libraries can deal with such publications, especially with articles that are deposited in different institutional repositories or published in so-called hybrid journals that contain a mix of open access and subscription articles.

Finally, we will discuss with the audience how they see libraries' role evolving in this area, what challenges they are currently facing, and the solutions and opportunities they have found.

Agenda

- Introduction – Christine Stohn
- Open Access at Harvard University – Laura Morse
- Open Access at the University of Liège – François Renaville
- Open Access discovery in Primo Central– Christine Stohn

The ecosystem of scholarly communication is changing

- Funding bodies are enforcing open access policies
- Public awareness for cost of knowledge increases

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How Aaron Swartz paved way for Jack Andraka's revolutionary cancer test

Jack Andraka's breakthrough pancreatic cancer test would have never come about were it not for access to online journals...

Aaron Swartz was promoting before his death... free online academic journals in the research databases, articles cost about \$35, and then...

Massoud Hayoun | Posted: Jan 29th, 2013



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... The public funds a lot of this research. Shouldn't the public have access to it?"

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The eco system of scholarly communication changes

- Funding bodies are enforcing open access policies
- Public awareness for cost of knowledge increases
- Traditional publishers embrace Open Access
- Science-metrix report: half of publications published in 2011 are available free
- Many institutions adopt institutional mandates (ROARmap)
- ARL, AAU and APLU propose SHARE – a network of digital repositories

[HSBC, 2013](#)

[https://www.research.hsbc.com/midas/Res/RDV?ao=20&key=RxArFbnG1P&n=360010.](https://www.research.hsbc.com/midas/Res/RDV?ao=20&key=RxArFbnG1P&n=360010)

[PDF](#)

http://www.science-metrix.com/eng/news_13_08.htm

<http://roarmap.eprints.org/>

Open Access leads to more diversity

- More publication and access models
- Not just one place, many places
- Shorter publication cycle of research, quicker (and different) review processes
- More diverse readers
- More openly available supplementary material (e.g. research data)
- Wider usage - more impact metrics

Roles for librarians

- Managing institutional research output
 - Managing article processing charges
 - Providing author support with information about funding policies
 - Providing meta data and distribution services
 - Providing impact metrics services (e.g. altmetrics)
- Providing discovery
 - Discovery of articles and research data beyond the institutional subscriptions
 - Open access journals
 - Open access articles in hybrid journals
 - Open access articles from institutional repositories

Open Access at Harvard University

Laura Morse, Harvard University



HARVARD UNIVERSITY

Established

1636

Faculty

About 2,100 faculty members and more than 10,000 academic appointments in affiliated teaching hospitals

Students

Harvard College – About 6,700

Graduate and professional students – About 14,500

Total – About 21,000

Faculties, Schools, and an Institute

Harvard University is made up of 11 principal academic units – ten faculties and the Radcliffe Institute for Advanced Study. The ten faculties oversee schools and divisions that offer courses and award academic degrees.



HARVARD LIBRARY

- 70 separate library units
- nearly 1,000 fulltime employees
- 18.9 million volumes
- 42 million digital files
- 174,000 serial titles
- 10 million photographs
- an estimated 400 million manuscript items

Open Access at Harvard University

Open Access at Harvard began in 2008 when the Faculty of Arts and Sciences passed the first Open Access Policy. The Office for Scholarly Communication was established in support of the school policy. This office spearheads campus-wide initiatives to open, share, and preserve scholarship. With support from OSC, open-access policies are now in place at the following schools:

- Harvard Faculty of Arts and Sciences - 2008
- Harvard Graduate School of Education - 2009
- Harvard Graduate School of Design - 2011
- Harvard Business School - 2010
- Harvard Law School – 2008
- Harvard Kennedy School of Government - 2009
- Harvard Divinity School – 2010
- Harvard School of Public Health – 2012

Overview - <https://osc.hul.harvard.edu/about>

Harvard OA Policies - <https://osc.hul.harvard.edu/>

Open Access at Harvard University

- Policies are not identical, but the major themes are the same.
- These policies all:
 - Grant the institution certain non-exclusive rights to future research articles published by faculty
 - Require deposit in the repository
 - Offer a waiver option or opt-out for individual articles

Office for Scholarly Communications

OSC Services for Faculty:

- Provide guidance for Harvard Open Access Policy participation
- Evaluate and amend licensing agreements
- Make use of alternative publishing models
- Provide broader access to faculty works
- Offer reimbursement to scholars for the processing fees of articles published in eligible open-access journals and for which no alternative funding is available

Office for Scholarly Communications

Promotion of services:

- Liaison program for every school
- Offer training for existing faculty assistants and market services to new hires
- Work with department chairs and deans to highlight services at department meetings
- Provide monthly usage stats to authors, including download, unique user count, and countries represented



DIGITAL ACCESS TO SCHOLARSHIP AT HARVARD

- The OSC also develops and maintains a central, open-access repository for Harvard Community - DASH
- The deposit process begins with authorization
 - Assistance Authorization Form – grants OSC staff rights to make deposit and distribution decisions and confirms the non-exclusive license (Copyright 205e act)
- Many pathways are offered to remove barriers for use
 - Email to OSC Staff
 - Quick deposit webform
 - In person assistance from open access fellows
 - Directly via DASH Deposit Interface



DIGITAL ACCESS TO
SCHOLARSHIP AT HARVARD

Metadata in DASH

- Extensive data *can* be collected for each article in addition to expected citation data, provenance, and publishing information, such as:
 - Classification Number (Dewey, LC, other)
 - Subject Headings (MESH, LC, other)
 - Abstract
 - Peer Reviewed Status



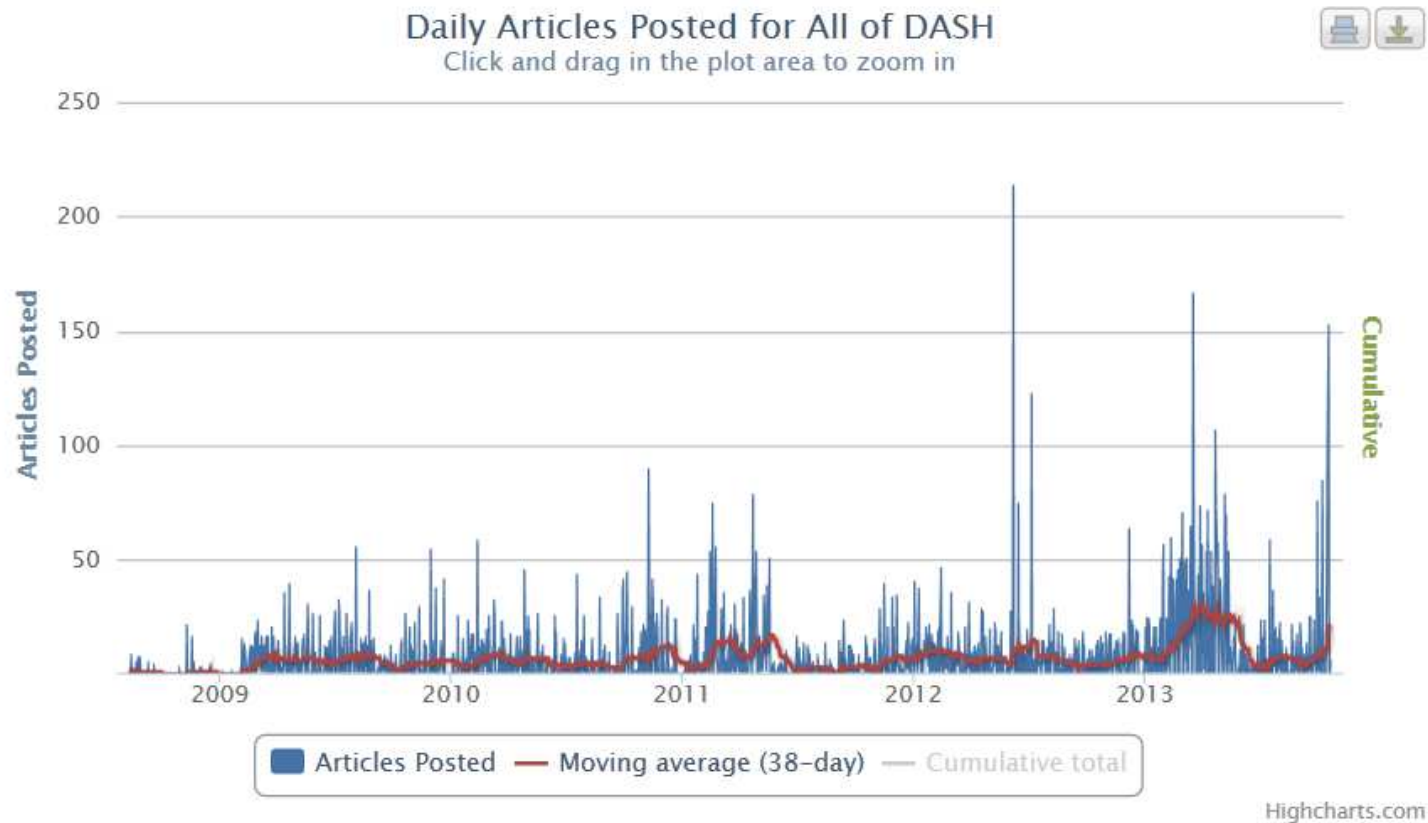
DIGITAL ACCESS TO SCHOLARSHIP AT HARVARD

- Verifying metadata
 - OSC program staff first verify publishers permission via the SHERPA/Romeo website
 - Verify accurate citation information
 - Conduct bibliographic research to ensure accurate and complete metadata
- Basic Facts About DASH
 - Built on DSPACE
 - Solely a full text repository
 - 86% of the content is bright (14% dark)
 - <http://dash.harvard.edu/>
 - Usage Dashboard - <https://osc.hul.harvard.edu/dash/mydash>



DIGITAL ACCESS TO SCHOLARSHIP AT HARVARD

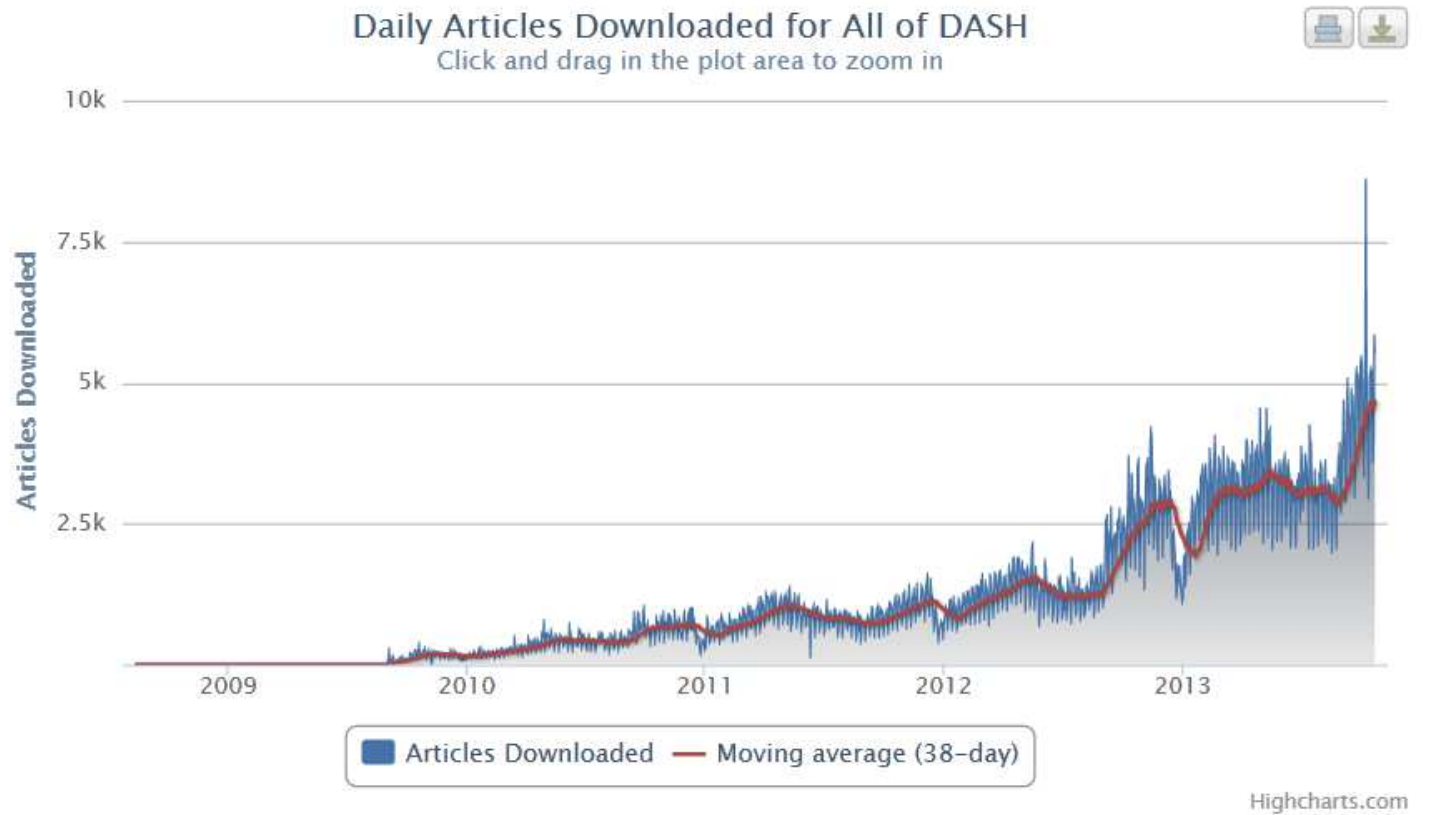
13,491 deposited articles





DIGITAL ACCESS TO SCHOLARSHIP AT HARVARD

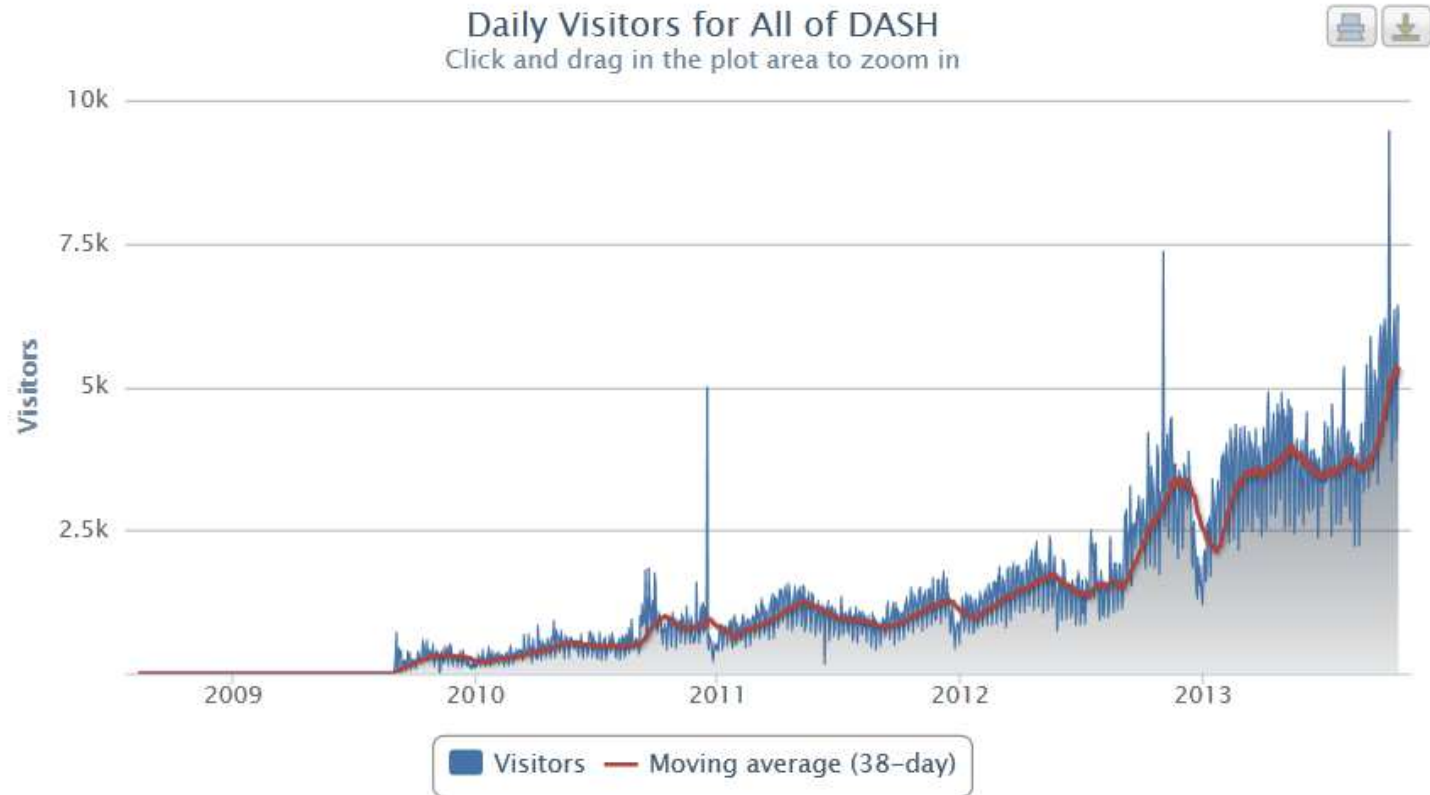
2,063,438 downloads





DIGITAL ACCESS TO SCHOLARSHIP AT HARVARD

1,377,477 unique visitors



Highcharts.com



DIGITAL ACCESS TO
SCHOLARSHIP AT HARVARD

And those visits are from around the globe



<https://osc.hul.harvard.edu/dash/mydash?v=geomap&gi=alldash&t=1&p=alltime>



DIGITAL ACCESS TO SCHOLARSHIP AT HARVARD

- Emphasis for OSC is to promote discoverability in as many places as possible – not solely from DASH search interface
 - 60% from google services
 - 20% referred from other systems
 - 20% direct DASH access
- Each cover page includes citation information, links to publisher, terms of use, etc.
- Users can provide stories of how DASH has been helpful. 1 – 3 stories a day are submitted, and provide a valuable testament to the use of the service.
 - <https://osc.hul.harvard.edu/dash/stories>



DIGITAL ACCESS TO SCHOLARSHIP AT HARVARD

- So, how is DASH content made discoverable?
 - OpenSearch API and OAI-PMH
 - <http://openmetadata.lib.harvard.edu/content/digital-access-scholarship-harvard-dash-dataset>
- Metadata is made available for harvest for:
 - a. personal study;
 - b. teaching (including distribution of copies to students and use in coursepacks and courseware programs);
 - c. research and scholarship (including computational research uses such as data-mining and text-mining); and
 - d. provision of value-added services (including full-text searching, cross-referencing, and citation extraction)



DIGITAL ACCESS TO
SCHOLARSHIP AT HARVARD

- *But, not all records in DASH have complete descriptive metadata.* This is an new opportunity for libraries to help promote discoverability of this content.



- **NISO RP-19-201x, Open Discovery Initiative: Promoting Transparency in Discovery** (currently in comment period) recommends providing the following information for all content provided citation data, provenance, publishing information:
 - Subject
 - Contributor
 - Abstract/description
 - Full text flag
 - Open Access flag
 - Component Of (Title)
 - Component Of (Title ID)

OSC and Library Technology Services

- LTS hosts all OSC systems
- Lead OSC developer has bi-weekly check-ins with the Director, Systems Development
- OSC Developers attend LTS Monthly Staff Meeting
- But, most importantly, we collaborate on integrated projects, like thesis deposit workflows into DASH, ILS, and Digital Preservation Repository and, upcoming, providing linking service to DASH content in our OpenURL resolver.

Many thanks to Suzanne Kriegsman (OSC Program Manager) and Reinhard Engels (OSC Digital Library Software Engineer) for providing information for this presentation.

Open Access at the University of Liège

François Renaville, ULg

University of Liège (ULg)



- Funded in 1817
- Public and pluralist
- One of the 3 main universities of the French-speaking part of Belgium
- 20,000 students (122 nationalities)
- 3,300 staff (lecturers-researchers)

- Complete university (9 Faculties, 1 School, 1 Institute)
 - 38 bachelor degrees
 - 193 master degrees (33% of which are unique in French-speaking Belgium)
 - 68 complementary master degrees



University of Liège Library

- **5 main libraries:**

- Arts & Humanities Library
- Agronomy Library
- Law & Social Sciences Library
- Life Sciences Library
- Science & Technology Library

- **Spread on 4 campuses:**

- Liège Sart-Tilman (main campus)
- Liège City centre
- Gembloux
- Arlon

- **Collections:**



- 2,000,000 books
- 89,000 e-books
- 5,400 current print subscriptions
- 57,000 e-journals
- 565 incunables
- 6,500 manuscripts

→ 17 library facilities



- **Staff:** about 115 people (ca 82 FTE)

Open Access at the University of Liège

- Long-standing story
- Based on a real conviction shared by
 - **University Authorities**
 - Chancellor Bernard Rentier, active advocate for OA, <http://recteur.blogs.ulg.ac.be/?cat=10>
 - and **librarians:**
 - Chief librarian Paul Thirion
- Concrete Open Access initiatives from the Library:
 -  **PoPuPs:** portal and toolbox for diffusion of open access journals published by ULg members (since 2005), <http://popups.ulg.ac.be>
 -  **BICTEL/e:** repository for PhD theses (since 2006), <http://bictel.ulg.ac.be>
 - **ORBi:** institutional repository (since 2008), <http://orbi.ulg.ac.be>
- University of Liège
 - has been subscribing to Biomed Central since 2004
 - doesn't support any publication in hybrid journals

PoPuPS

- Platform for OA publishing of academic journals (since 2005)
- 14 journals
 - 2,600 scholarly articles in PDF and/or XML
 - 2 journals have got an IF
 - no APC!!
- Built on Lodel software (<http://lodel.org>)
- Statistics since February 2011:
 - more than 459,000 PDF downloads
 - more than 1,184,000 XML visualisations
- Titles already included in:
 - EBSCO A-to-Z®
 - Ex Libris SFX®
 - Ex Libris Primo Central® (+ articles harvested)
- Directly available at <http://popups.ulg.ac.be>



VISIBILITY!



ORBi



<http://orbi.ulg.ac.be>

- May 2007:
 - Decision from the Administrative Board to create an institutional bibliography and a repository
 - **Strong institutional mandate:**

✓ **Introduction of references for all publications by ULg members, backdated to 2002**

✓ **Deposit of the full electronic version of all articles published by ULg members, backdated to 2002**

FT in Open Access or restricted access according to the publishers' policy

- Built on DSpace
- July 2008: Beta launch with some volunteers
- November 2008: official launch of ORBi (*Open Repository and Bibliography*)

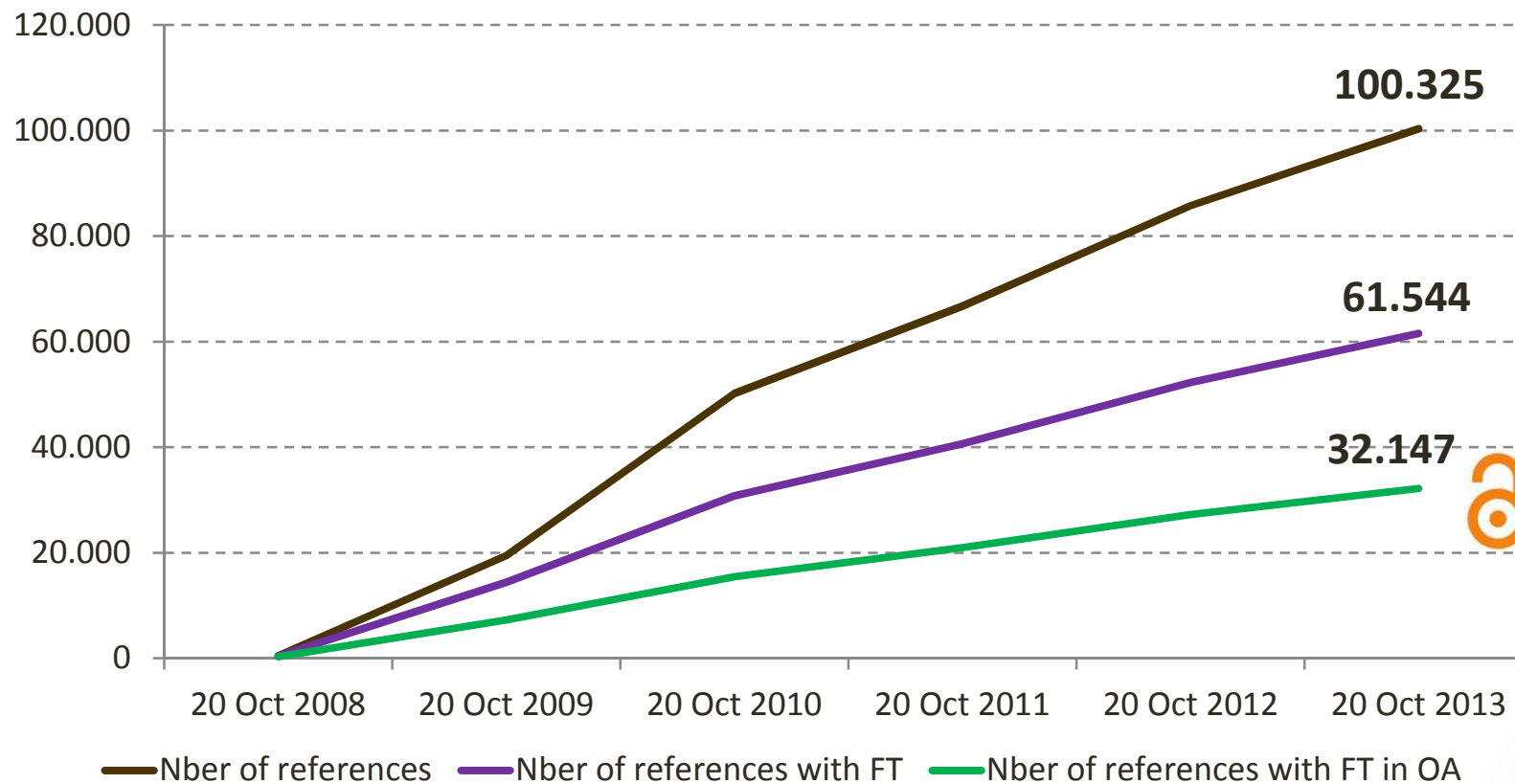
top



down

ORBi: successful project

Number of references on October 20th from 2008 to 2013

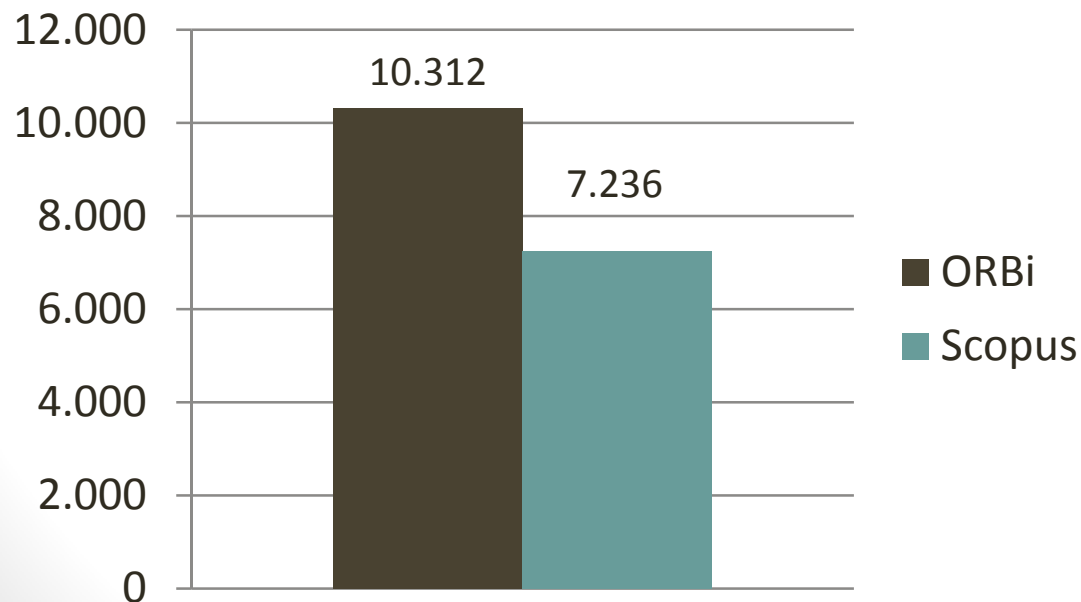


From August 2008 until end of October 2013:
1,872,676 full text downloads (spiders excluded)

Towards exhaustiveness...

- Remember: Repositories with no mandate have max. 15% of exhaustiveness (see Harnad *et al.* (2009) <http://eprints.soton.ac.uk/266616>)
→ Libraries must convince the Institution Authorities to have a strong, ambitious and coherent mandate!

**Journal articles published between 2009 and 2012
to be found in ORBi and Scopus**

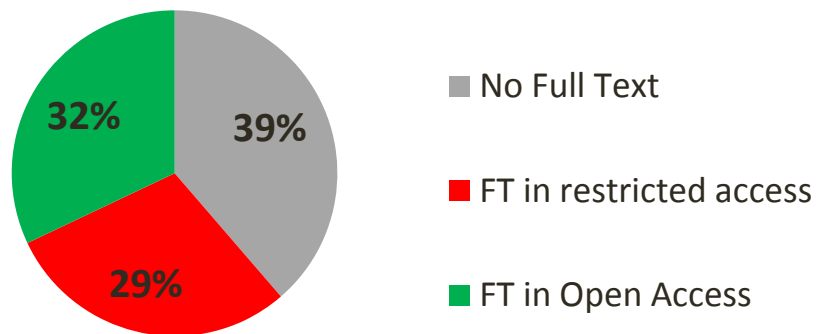


Better visibility
of the scholarly
production of the
University

A Stimulating Mandate

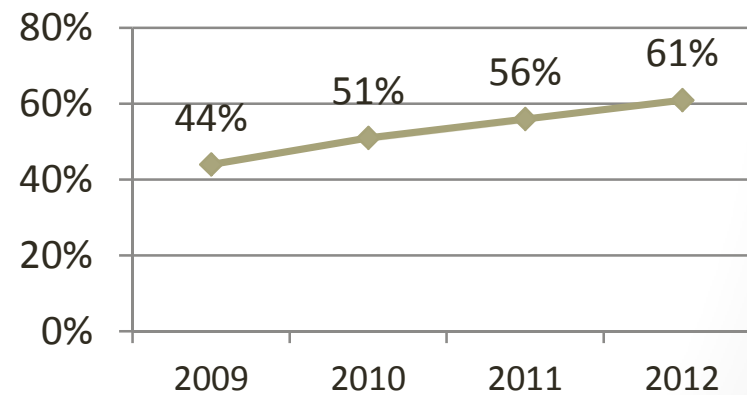
- Immediate-Deposit/Optional-Access (ID/OA) Mandate (<http://roarmap.eprints.org/56/>)
- Already communicated to the University Community before the official Decision (<http://recteur.blogs.ulg.ac.be/?p=103>)

Full text in ORBi



On October 20th, 2013

New references with FT in OA



- **Motivation: ORBi = single source for evaluations and promotions**
→ **only** references listed in ORBi are taken into account (“if it is not in the IR, it doesn’t exist”)


A whole concept

- Development of ORBi : more than a technique, a whole concept

1) Librarians as coaches : Help authors depositing

- Users' guides, FAQ, automatic and contextual help...
- Legal help by ORBi staff and a lawyer librarian
- Training sessions
- Very active hotline by phone and e-mail

2) Put the **author at the core** : **concerned AND responsible**

- 
- Role of the « back office »: Quality Control from the Library
 - Authors concerned and sole responsible of the quality of the records
 - no correction made by ORBi staff!!
 - eventual suppression: only by ORBi staff
 - Faulty behavior warned to authors by the University Authorities themselves
- Ensure that metadata is comprehensive enough for discovery

A whole concept

3) Reduce constraints for authors:

- Work sharing between University authors
- User-friendliness + quick deposit webform
- Whole deposit process thought over
- Pre-import & import functionalities (PubMed, WOS, Scopus, Nasa, EndNote, BibTex...)
- Permanent updating of the periodical database
- Tools
 - for personalised publication reports
 - to follow the « in press », « in progress », imports...
 - for redundancy detection
 - for incoherent data detection
 - for false full text detection
 - to export references (RIS, BibTex...)
- ...

(See Thirion *et al.* (2010), <http://hdl.handle.net/2268/65254>)



<http://www.chrisg.com/overcoming-your-own-constraints/>

Being seen...

- We don't expect anyone coming on ORBi to make searches and discover the institutional research output
- Long work to be indexed and harvested
- available through Google one hour after validation
 - harvested by Primo Central Index (Ex Libris) and in many other tools
 - *open to any new collaboration!!*




Open Access discovery in Primo Central

Christine Stohn, Ex Libris

Goal

- Discovery of open access material via the library
- Including
 - Open Access journals
 - Articles in hybrid journals
 - Material in repositories, e.g. ORBi and DASH
 - Institutional repositories
 - Community based repositories, e.g. arXiv

Availability on article level – Hybrid journals

- 6  **The Formation of an Anti-Cancer Complex Under Simulated Gastric Conditions**
Food Digestion, 2013, Vol.4(1), pp.7-18
Sullivan, Louise ; Mok, K. ; Brodkorb, André
May be full text - check tabs below
More Options Details

- 7  **A Double-Blind Clinical Study to Investigate the Effects of a Fungal Protease Enzyme System on Metabolic, Hepato-renal, and Cardiovascular Parameters Following 30 Days of Supplementation in Active, Healthy Men**
Food Digestion, 2013, Vol.4(1), pp.19-25
Anderson, Mark
Full text available

See all versions

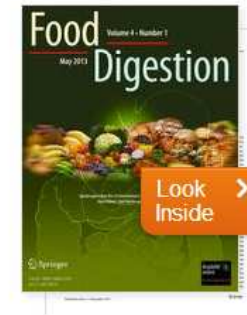
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Food Digestion
May 2013, Volume 4, Issue 1, pp 19-25,
Open Access

A Double-Blind Clinical Study to Investigate the Effects of a Fungal Protease Enzyme System on Metabolic, Hepato-renal, and Cardiovascular Parameters Following 30 Days of

- 8  **Human Gastrointestinal Juices Intended for Use in In Vitro Digestion Models**
Food Digestion, 2011, Vol.2(1), pp.52-61
Ulleberg, Ellen ; Comi, Irene ; Holm, Halvor ; Herud, Espen ; Jacobsen, Morten ; Vegarud, Gerd
Full text available
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- 9  **Development of the Digestive System—Experimental Challenges and Approaches of Infant Lipid Digestion**
Food Digestion, 2012, Vol.3(1-3), p.63-77
Abrahamse, Evan ; Minekus, Mans ; Van Aken, George A ; Van De Heijning, Bert ; Knol, Jan ; Bartke, Nana ; Oozeer, Raish ; Van Der

ext →

Availability on article level – institutional repositories

Inhibition of dd-Peptidases by a Specific Trifluoroketone: Crystal Structure of a Complex with the A

Search

Advanced Search
Browse Search

rss

Add page to e-Shelf

Expand My Results

Expand beyond library collections

Refine My Results

Topic

- Proteases (2)
- Life Sciences :: Biochemistry, Biophysics & Molecular Biology [f05] (1)
- Hydration (Chemistry) (1)
- Enzyme Activation (1)
- Universities And Colleges (1)
- Sciences Du Vivant :: Biochimie, Biophysique & Biologie Moléculaire [f05] (1)
- Biochemistry (1)
- Crystal Structure (1)
- More options v

Show Hot Articles v

3 Results for Books Articles etc

Sorted by: Relevance v



Article

Inhibition of dd-Peptidases by a Specific Trifluoroketone: Crystal Structure of a Complex with the Actinomadura R39 dd-Peptidase.

Dzhekieva, Liudmila ; Adediran, S. A. ; Herman, Raphael ; Kerff, Frédéric ; Duez, Colette ; Charlier, Paulette ; Sauvage, Eric ; Pratt, R. F.
Biochemistry. (2013).
2013

Full text available

View Online | Details | More

Open source in a new window

File(s) associated to this reference

Fulltext file(s):

	File	Commentary	Version	S
	Dzhekieva_Biochem_2013.pdf		Publisher postprint	4

SHARE



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Institutional publications - valuable for global use

- Is it relevant to a global user community?
- Is it globally accessible for reading?
- Can you provide
 - OAI-PMH for harvesting?
 - Correctly tagged meta data (with an OA or free-to-read tag)?
 - Consistent and good metadata?

Open Access Metadata and Indicators

Recommendations for a standard set of metadata to easily identify

- Availability of individual articles (e.g. in hybrid journals)
- Reuse rights for such items

KBART – KnowledgeBase Recommendations

New recommendations contain OA flag on journal level

Summary and discussion

- Managing institutional research output
 - Managing article processing charges
 - Providing author support with information about funding policies
 - Providing meta data services
 - Providing impact metrics services (e.g. altmetrics)
- Providing discovery
 - Discovery of articles and research data beyond the institutional subscriptions
 - Open access journal
 - Open access articles in hybrid journals
 - Open access articles from institutional repositories

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- NISO RP-19-201x, Open Discovery Initiative: Promoting Transparency in Discovery http://www.niso.org/apps/group_public/document.php?document_id=11606

Thank You!

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