Looking back over the next five years

UK LOCKSS Alliance

Adam Rusbridge
EDINA, University of Edinburgh

30th October 2013
Preservation, Trust and Continuing Access for eJournals

Summary

- Libraries use LOCKSS to build local collections of web published content (journals, books)
  - Local capacity and capability to provide readers with continuing access
- LOCKSS: Digital equivalent of the physical shelf
  - Libraries : get strong assurance of access
  - Publishers : get first refusal of content supply
- Future work
  - Make it easier to understand when these services are needed
  - Better demonstrate value of participation

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Background to the LOCKSS Program

The LOCKSS Program is an open-source, library-led digital preservation system built on the principle that "Lots of Copies Keep Stuff Safe."

- Libraries have a role as memory organisations
- Each institution builds collections on a local LOCKSS box (avg. £2000)
- Periodic library staff administration (1 - 2hr/month)
  - Consult with academics to determine collection priorities
  - Configure titles for collection in LOCKSS
  - Activate new titles in link resolver systems
- University has ownership of preserved content
- Library controls local access, even when they can't access publisher copy

"The LOCKSS box is held locally and thus is under the control of the library. This involves some maintenance and administration but significantly it also means that the library decides what to archive"

– University of Warwick Case Study

Community Action for Assured Access

UK LOCKSS Alliance
Today's scholarly content, secured for tomorrow

- *JISC funded UK LOCKSS Pilot Programme: 06-08*
- *UK LOCKSS Alliance: 08 – Present*
- *A co-operative organization to **ensure continuing sustainable access to scholarly work over the long term**.*
  - Libraries: responsible for local infrastructure, building and managing collections
  - EDINA: responsible for supporting UK LOCKSS community & assisting its development
  - LOCKSS at Stanford University: responsible for content processing and software development

14 member institutions

De Montfort University
King's College London
London School of Economics
Natural History Museum
Open University
Royal Holloway, University of London
University of Birmingham
University of Edinburgh
University of Glasgow
University of Huddersfield
University of Oxford
University of St. Andrews
University of Warwick
University of York

Steering Committee to direct activity

Phil Adams (De Montfort University)
Lisa Cardy (London School of Economics)
James Fisher (University of Warwick)
William Nixon (University of Glasgow)
Liz Stevenson (University of Edinburgh)
Lorraine Estelle (JISC Collections)
Peter Burnhill (EDINA)
Adam Rusbridge (EDINA)

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Sustainable Electronic Access Policies

- After cost, continuing access concerns were the main barrier hindering a sectoral shift to e-only journal provision
    - JISC/RIN/PRC/RLUK "Overcoming Barriers" report (2009): http://bit.ly/5GT6Ig

- E-policies formalise conditions by which a library can move to e-only and discard print:

> *The library [can now]* ***cancel or relegate print holdings that fit the definition of sustainable electronic content****, when at least one of the following applies:*
>
> *•**The library has perpetual access rights to the content**, via the web, including those titles archived by Portico and LOCKSS*
> *•The journal is permanently open access for all years or certain years (Hybrid open access journals are not included in this category).*
> *•The content is in one of the library's trusted services such a JISC-funded archive.*
>
> *http://www.hud.ac.uk/library/policy/collectionmanagementanddevelopmentpolicy/#appendix2*

- Archive clause of NESLi2 Model License supports local archiving:

> 8.5 Upon termination of this Licence (except for a material breach by the Institution of its obligations under this Licence), the Publisher will provide (**at the option of the Institution**) the Institution and its Authorised Users with continuous access to and use of the full text of the Licensed Material which was published and paid for during the term of this Licence and preceding licences (where applicable) between the Publisher and the Institution, without charge, either by one or more of the following options:
>
> i) continuing online access to archival copies of the same Licensed Material on the Publisher's server;
>
> **ii) supplying archival copies of the same Licensed Material to the Institution in an electronic medium mutually agreed between the parties;**
>
> iii) supplying archival copies of the same Licensed Material to a central archiving facility operated on behalf of the UK HE/FE community or other archival facility;
>
> **iv) granting access to the same Licensed Material through one of the e-journals archiving solutions as listed in Schedule 3.**

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Build Collections with LOCKSS

- Content from over 500 publishers and societies
  - Full list online: http://www.lockss.org/community/publishers-titles-gln/
  - Libraries **build local collections** of content
    - We must understand and satisfy local collection priorities
  - Institutional content priorities depend on context:
    - Current subscription access (post-1995) for post-cancellation access
    - Historic back copy (& current subscription) when discarding print
    - At-risk content (low-use, small OA) for preservation
    - Recent & in-demand content for short-term backup
  - *In summary: lots of content to process!*

"One of the keystones of the e-first policy is confidence in the preservation status of e-journals. [LOCKSS] contributes to that confidence."

– London School of Economics Case Study

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Technical Principles of the LOCKSS Approach

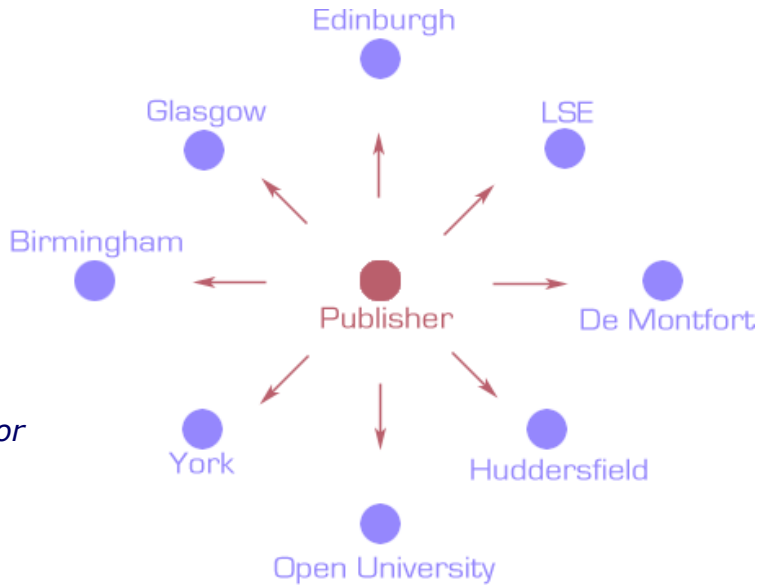
- How best to manage risks and threats?

- LOCKSS provides a distributed preservation platform
  - Communities have custody of content
    - *Trust in the longevity of the library*
    - *Reduce impact of failure and policy changes to external service providers*

- Replicate widely (and responsibly)
  - Model on success of print collections
    - Avoid single points of failure
    - *Multiple copies minimise impact of accidental loss, operator error*
  - Content under different administrative control
    - *Avoid loss if initiative ends*
    - *Reduce risk of legal challenges*

- Preserves integrity
  - Audit protocol to prevent damage
    - *Hard to alter content without detection*

- *Preserve content as it was published*



Research article

Lack of α8 integrin leads to morphological changes in renal mesangial cells, but not in vascular smooth muscle cells

Ines Marek[1†], Gudrun Volkert[2†], Angelika Jahn[1], Fabian Fahlbusch[1], Christina Zürn[2], Zehra Özcan[2], Margarete Goppelt-Struebe[2], Karl F Hilgers[2], Wolfgang Rascher[1] and Andrea Hartner[1*]

* Corresponding author: Andrea Hartner andrea.hartner@uk-erlangen.de

† Equal contributors

▸ Author Affiliations

1 Hospital for Children and Adolescents, Universität Erlangen-Nürnberg, Loschgestrasse 15, 91054 Erlangen, Germany

2 Department of Nephrology and Hypertension, Universität Erlangen-Nürnberg, Loschgestrasse 8, 91054 Erlangen, Germany

For all author emails, please log on.

BMC Cell Biology 2010, **11**:102 doi:10.1186/1471-2121-11-102

The electronic version of this article is the complete one and can be found online at: http://www.biomedcentral.com/1471-2121/11/102

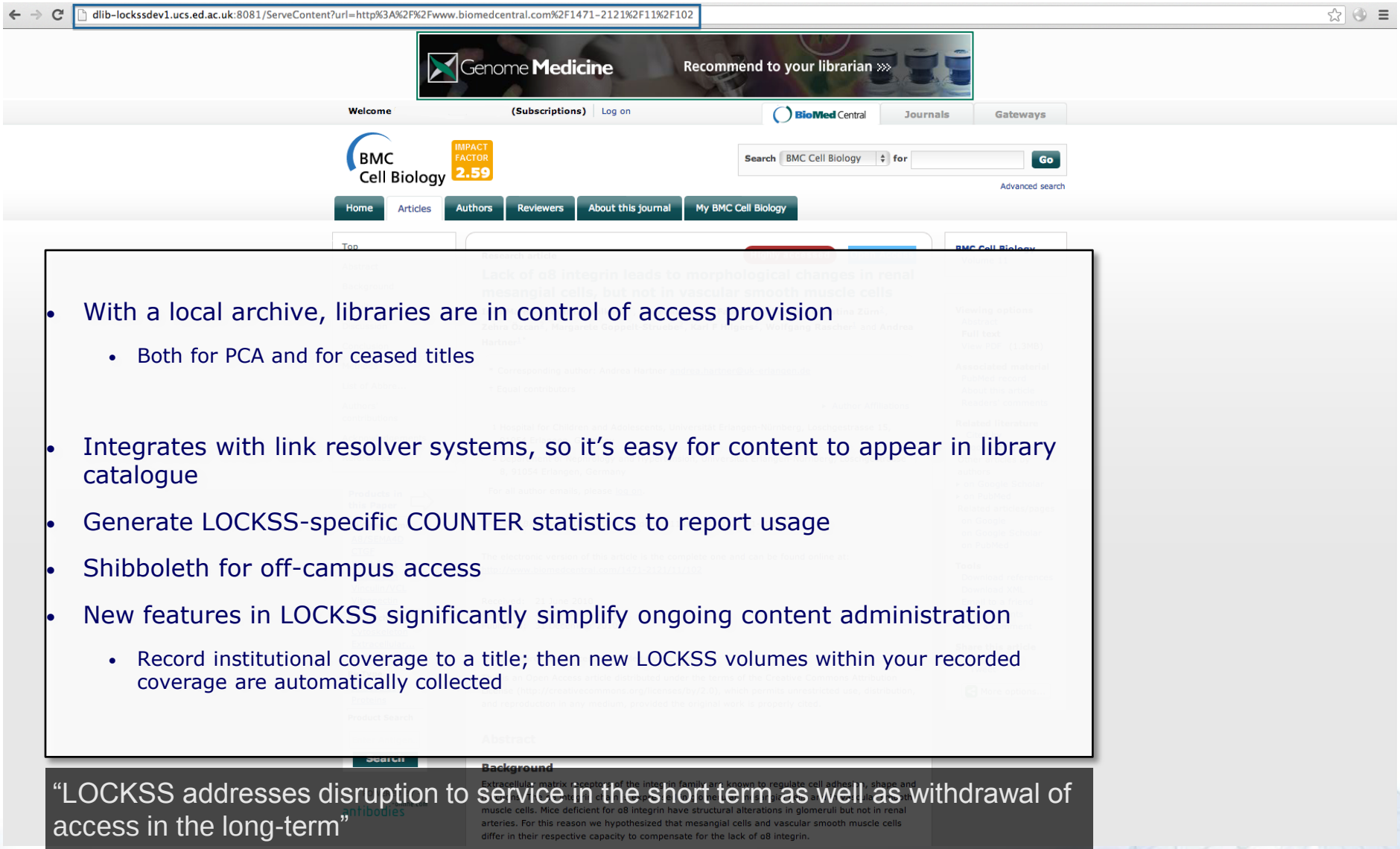
Received: 21 June 2010
Accepted: 31 December 2010
Published: 31 December 2010

Abstract

Background

Extracellular matrix receptors of the integrin family are known to regulate cell adhesion, shape and functions. The α8 integrin chain is expressed in glomerular mesangial cells and in vascular smooth muscle cells. Mice deficient for α8 integrin have structural alterations in glomeruli but not in renal arteries. For this reason we hypothesized that mesangial cells and vascular smooth muscle cells differ in their respective capacity to compensate for the lack of α8 integrin.

LOCKSS works for Libraries



- With a local archive, libraries are in control of access provision
  - Both for PCA and for ceased titles
- Integrates with link resolver systems, so it's easy for content to appear in library catalogue
- Generate LOCKSS-specific COUNTER statistics to report usage
- Shibboleth for off-campus access
- New features in LOCKSS significantly simplify ongoing content administration
  - Record institutional coverage to a title; then new LOCKSS volumes within your recorded coverage are automatically collected

"LOCKSS addresses disruption to service in the short term as well as withdrawal of access in the long-term"

– De Montfort University Case Study

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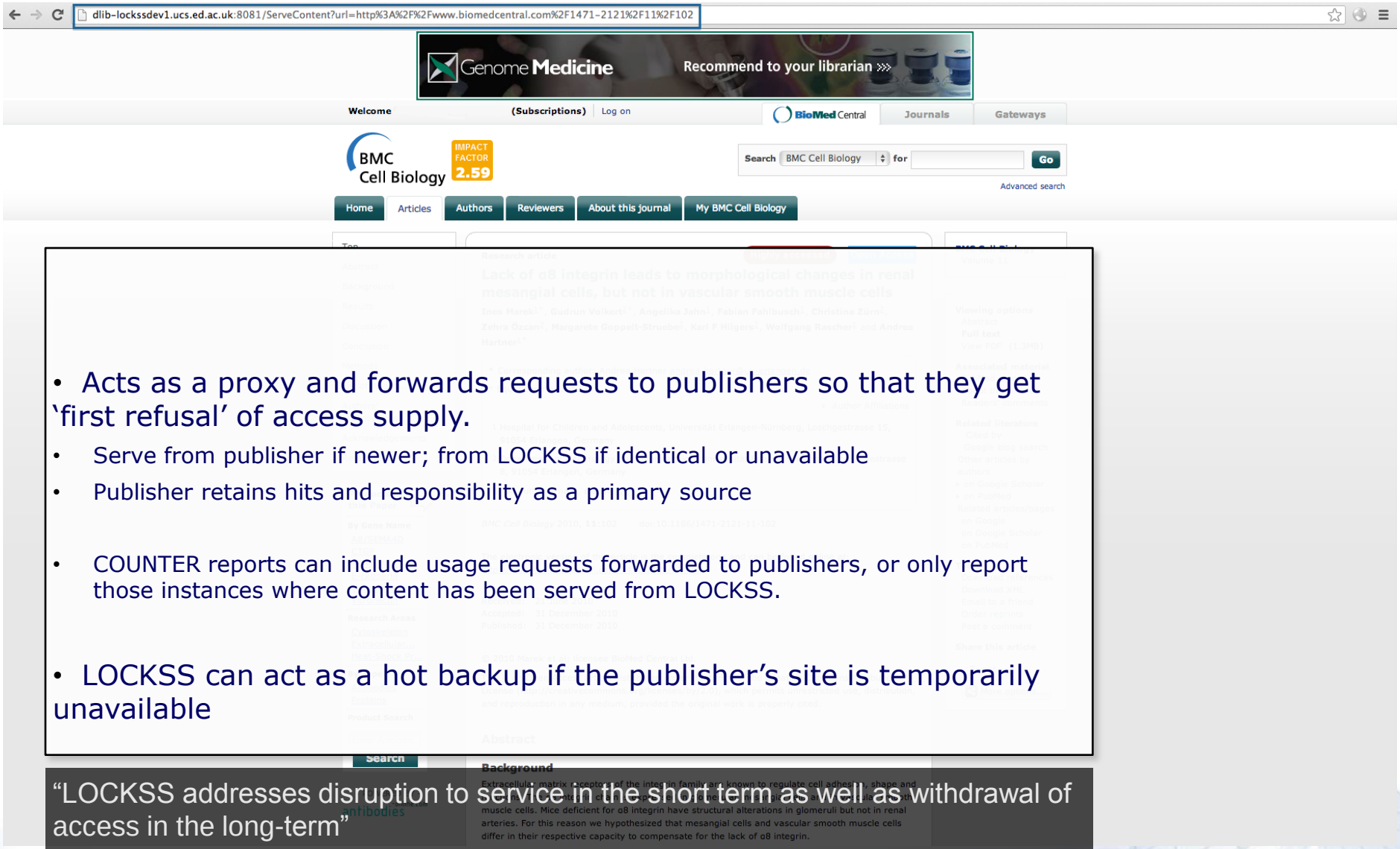
LOCKSS works for Publishers



- Acts as a proxy and forwards requests to publishers so that they get 'first refusal' of access supply.
- Serve from publisher if newer; from LOCKSS if identical or unavailable
- Publisher retains hits and responsibility as a primary source
- COUNTER reports can include usage requests forwarded to publishers, or only report those instances where content has been served from LOCKSS.
- LOCKSS can act as a hot backup if the publisher's site is temporarily unavailable

"LOCKSS addresses disruption to service in the short term as well as withdrawal of access in the long-term"

– De Montfort University Case Study

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Looking to the Future

- Increase take up of link resolver integration, continue to reduce administration effort, increase availability of content

- The LOCKSS software provides an infrastructure platform

- Communities are implementing LOCKSS in different ways
  - Alternative model for scholarly content: CLOCKSS Archive
  - Other content types: MetaArchive, COPPUL PLN, ADPNet

- Options for technical deployment, organisational management
  - We will consider other organisational models, technical deployments that would assist the UK community

Looking to the Future

- Continuing access tools to support library use cases are now available
- Make it easier to utilise tools when needed & demonstrate value *(trust them)*

- **Let's get specific.** What am I losing access to? When? How do I recover?
- Library cancelling a subscription or big deal. What would the institution lose access to?
- When considering disposal of print stock, or when moving to e-only. What would the institution lose access to?
- In the case of title changes or titles moving between publishers.
- When carrying out an annual review of subscriptions to see what has changed.
- Errors during system change (Library LMS, Publisher Platforms, Institutional Merge, Subscription Agents)
    - *Outputs from PECAN Phase 2, EDINA and Jisc Collections*

- Suite of tools to consider:
    - TRANSFER to highlight titles demanding attention
    - KB+ to show changes to subscription packages over time
        - ELCAT to highlight post-cancellation access licensing information
    - JUSP to show potential demand for post-cancellation access
    - Keepers Registry to highlight titles no longer available
    - COUNTER statistics to highlight usage of preserved content

- Combination of content preservation, entitlement information, collection management information

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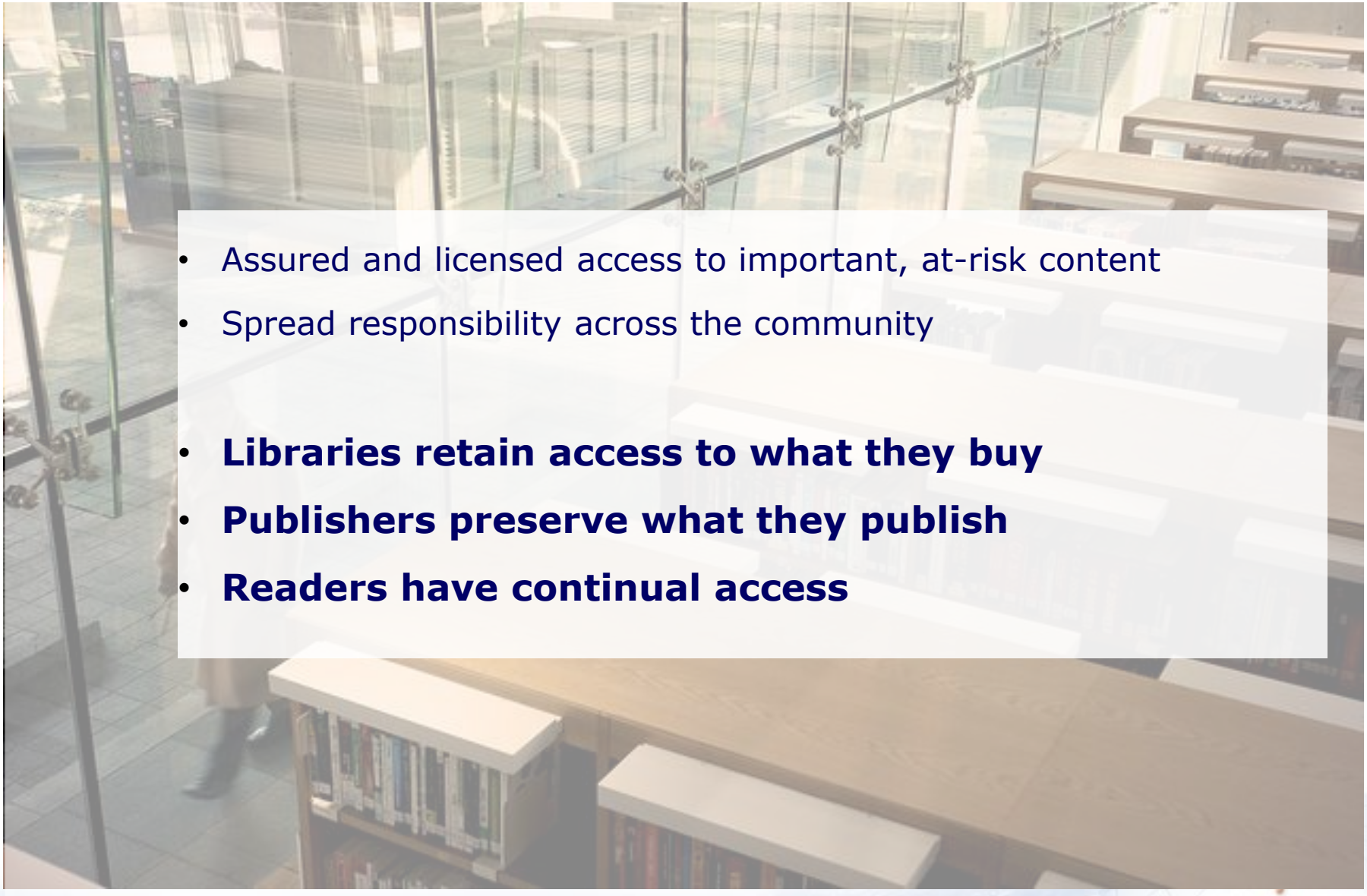
Building Trusted Archives



- Assured and licensed access to important, at-risk content
- Spread responsibility across the community

- **Libraries retain access to what they buy**
- **Publishers preserve what they publish**
- **Readers have continual access**

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Find out more...

JISC Band	Annual Fee
A	£5,000
B	£3,750
C	£2,750
D	£2,250
E-F	£1,800

https://www.jisc-collections.ac.uk/Catalogue/Overview/index/1557

- Case Studies: http://www.lockssalliance.ac.uk/participating-institutions/case-studies

http://www.lockssalliance.ac.uk

a.rusbridge@ed.ac.uk

@EDINA_eJournals

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