

# Institutional Repositories in the Health Sciences: A View of the Landscape

Ramune K. Kubilius  
Lisa A. Palmer (contributor)

*Presented during the Health Science Librarians of Illinois (HSLI)  
virtual conference on September 8, 2022  
[www.HSLI.org/conference](http://www.HSLI.org/conference)*

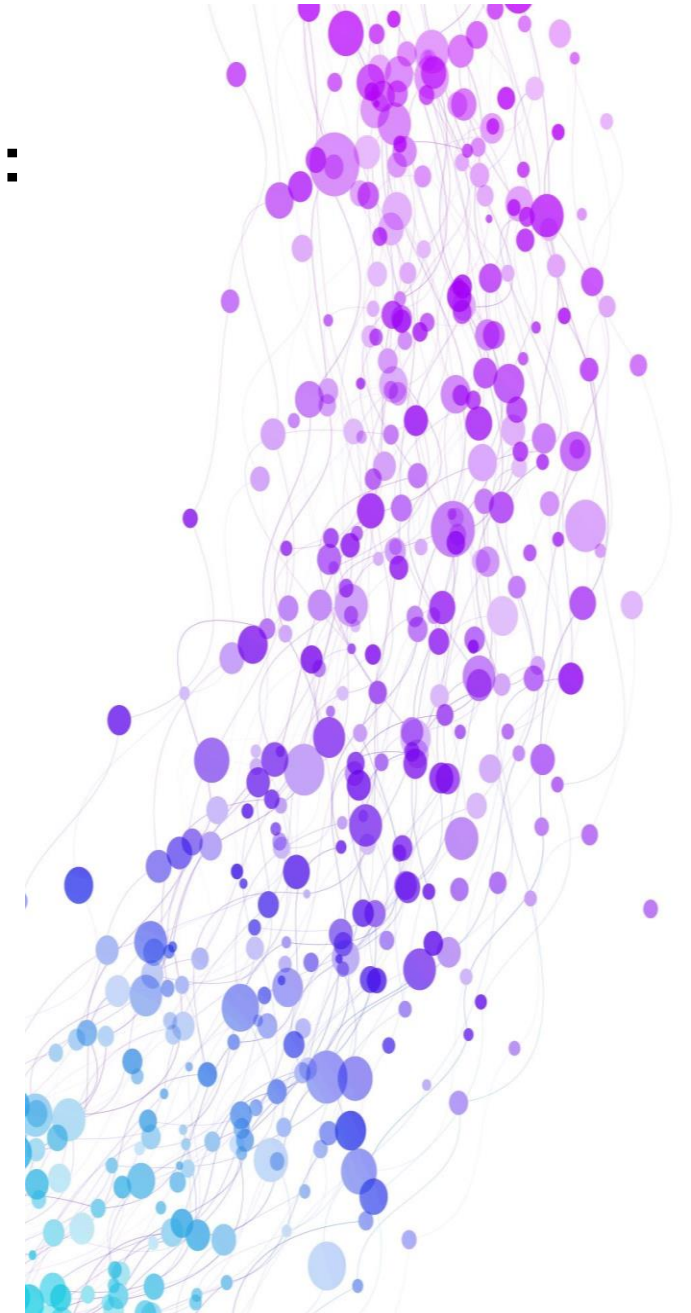


## **CE 2: Panel discussion – Institutional Repositories – the joys and challenges**

- Ramune Kubilius – Overview / Landscape of IRs

### *Panel:*

- Amanda Avery (Parkland College) – Digital Commons
- Sandra De Groot (UIC) – figshare
- Jennifer Deal (Advocate Aurora) – Digital Commons
- Mingyan Li (UIC) – Omeka



**\*\*\*THIS INTRO\*\*\***

**The IR landscape in the health sciences: a whirlwind 10 minute “tour”**

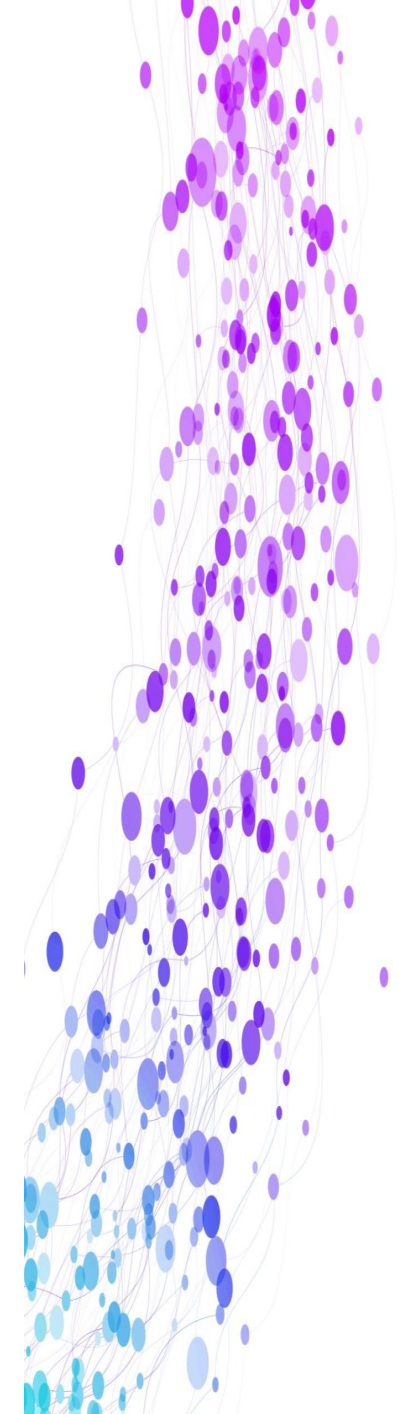
- Benefits, numbers, and content
- Variety (“flavors” and use cases): platforms, administration, management
- Appendices for further perusal: directories, conferences, selected references

Disclaimer:

*Use cases or repository platforms are named not as an endorsement, but for illustration purposes. Check IR and repository platform sites for more complete and current information.*

Acknowledgements:

*This presentation is inspired by and builds on an in-service IR training tradition at Galter Health Sciences Library & Learning Center, coordinated by Karen E. Gutzman ([2017 example](#)), that always includes a “World of Repositories” section, as well as survey work conducted with Lisa A. Palmer and Dan G. Kipnis (included in the reference list).*





## What are institutional repositories?

Some common definitions:

- *An institutional repository is an archive for collecting, preserving, and disseminating digital copies of the intellectual output of an institution, particularly a research institution.*
- *An institutional repository (IR) is an online digital archive that organizes, preserves, and provides access to the educational, scholarly, and research output of an institution.*
- SPARC: *Institutional repositories are digital collections capturing and preserving the intellectual output of a single or multi-university community to provide a compelling response to two strategic issues facing academic institutions:*
  - *as a natural extension of academic institutions' responsibility as generators of primary research seeking to preserve and leverage their constituents' intellectual assets; and*
  - *as one potentially major component in the evolving structure of scholarly communication.*

\*\*\*\*\*

Institutional repositories are not limited to the academic / research institution world...  
and deposits may include varied outputs...



## Why an institutional repository?

### Benefits

- Showcase for the institution
- Collect, organize and disseminate original content (e.g. grey literature)
- House local scholarly productivity output not deposited elsewhere or in one place
- Promote open access

### Possible deposits

- **Articles**- preprints, accepted manuscripts, published versions, postprints
- **Lab notebooks**
- **Patient education** materials
- **Presentations**- grand rounds, professional conferences (*eg. posters, slides, recordings*)
- **Systematic search service support**- forms, review protocols, search strategies (and even search results)
- **Student projects**- capstones, theses, and dissertations
- **Technical documents**- white papers, descriptions of locally produced tools, and other reports
- **Historical** (e.g. oral histories, archival)
- **Marketing** materials
- **Media**- audio, video, photographs,

### Other uses

- Hosting- newsletters, journals, e-books, open educational resources
- Data sets, also metadata only records (e.g. data catalogs)
- Virtual showcases, exhibits, presentations, conferences
- Support to help meet funder or other requirements

*And more...*



## Evolving numbers

### Number of repositories worldwide in [OpenDOAR](#)

**2015:** 2874, 85% hosted by research institutions and universities

**2022:** 5902, 89% (5241) hosted by institutions

### Medical schools with institutional repository services ([AAHSL](#) members are surveyed about IRs every 3 years)

**2010:** 35.9 % (42) reported offering, 34.2% (40) planned or considering IRs [AAHSL]

**2017:** 60% plan to continue offering; 8% planning [AAHSL]

**2018:** 70% (35/50) have or are implementing; 14% evaluating; 16% (8) not considering [JMLA, 2019; [PMCID](#)]

*Note: Of those with IRs, 60% participate in an institution-wide IR; 40% administer their own IR.*

**2020:** 55% (71) have / continue offering; 8 (6.2%) plan to implement in next 12 months; 50 (38.8%): not considering; 92 not known/no response [AAHSL]

### Hospitals, networks, and other types of healthcare organizations

*“While institutional repositories are common in medical schools and academic health centers, they have been used by only a small number of health systems to track and promote their research and scholarly activity.”*

[Martin HJ and Schwartz A, *JMLA* 2020, [PMC7524618](#); Fay B, Deal J, Budzisz V., *Med Ref Serv Q.* 2017 PMID: [28714819](#)]

### Reasons some academic health science libraries have not implemented an IR

(Applicable in other settings as well)

- Financial considerations
- Not a high priority
- Lack of demand from the community
- Lack of support from administration
- Lack of staff



## Platforms

(NOTE: Repository names do not always reflect the platform “under the hood”)

### 2018

Survey responses- *the most popular repository platforms (survey response of academic health sciences libraries):*

DSpace and bepress Digital Commons (*acquired in Aug. 2017 by Elsevier*) - *Plus:*

- |   |                                    |
|---|------------------------------------|
| -In-house   | -Invenio (TIND)                    |
| -ContentDM ( <i>sunsetted local version in 2017</i> ) | -Islandora                         |
| -Eprints  | -Samvera ( <i>formerly Hydra</i> ) |
| -Fedora   | -Other                             |

### 2022

*Platforms: some new and / or gaining traction*

- |   |                                   |
|---|-----------------------------------|
| -DSpace ( <i>installed in-house or hosted</i> ) | -figshare                         |
| -ExLibris Esploro                               | -Samvera ( <i>Hyrax or Hyku</i> ) |
| -Fedora ( <i>alone, Hydra, Islandora</i> )      | -Omeka                            |
|   | -Ubiquity                         |

## Mergers & expansions & migrations:

- *As institutions merge, they need to expand or merge IRs*
- *Institutions may elect to migrate from one IR platform to another*

*Challenges: availability (or not) of needed features (modularity)--*

*E.g. One use case: from bepress to 2 platforms- IR & a platform for journal publishing-*

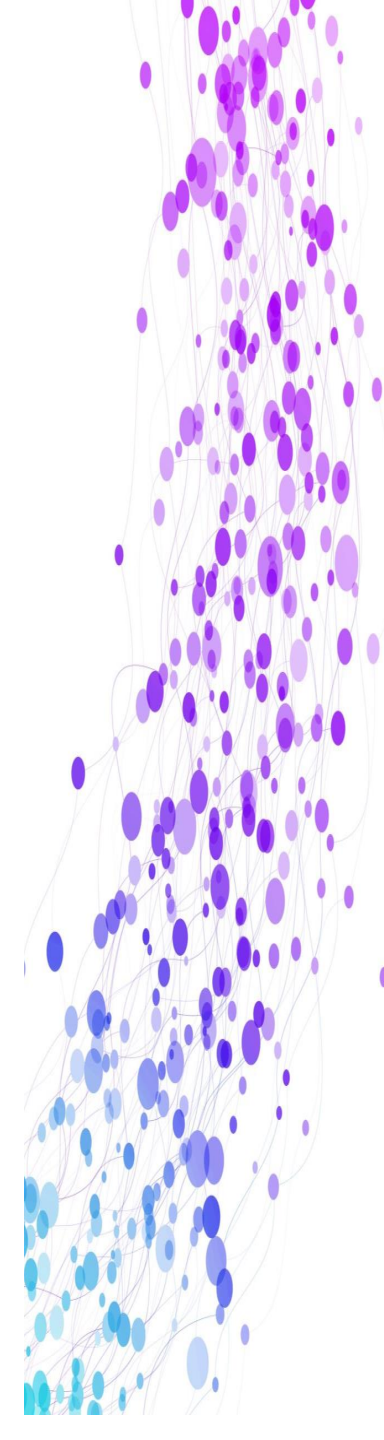
*-Dspace: alone or with advanced support / hosting IR (3 levels of “[registered DSpace Service providers](#)”)*

*-[Janeway](#): for journal / scholarly publishing*

***“Migration is the hardest part; Transition is the work...”***

<https://educopia.org/migration-is-the-hard-part/>

*(Applies to IRs for “library as publisher” and to IRs in a broader sense)*



**Flavors: disciplines, formats, choices...** *(Some are available for use by registered individuals at no cost.)*

▪ **Discipline-specific**

- [Sigma Repository](#) (Nursing)
- [PsyArXiv](#) (Psychology)

▪ **Generalist & cross-disciplinary products, services, and tools**

- [OSF](#) (Center for Open Science): used for individual deposits (a long-term data repository, electronic lab notebook, or as the collaboration tool for their team's research, institutions, and scholarly community projects, e.g. [FORECE11 Scholarly Communications Institute](#))
- [figshare](#) – individuals, institutions (for RDM and IR); publishers; funders; conferences
- [Invenio](#)- can include RDM, ILS, framework for large-scale digital repositories. [Showcase](#).
  - [Zenodo](#)- repository service that will run on InvenioRDM framework.
- Data--see NIH guidelines regarding data repositories
- Model organisms, sequencing, structure...
- Pilots–
  - [CARLI Investigative Task Force Report](#) (2018)--CARLI shared IR pilot (announcement Fall 2022 ?)
  - [Next Generation Library Publishing and Janeway Systems Launch Pilot with Five Library Publishers | Educopia Institute](#)

▪ **Choices for depositors- where to deposit, based on mandates and available IRs...**

- The American Library Association (ALA) has [ALAIR](#) hosted by UIUC...The Medical Library Association (MLA) does not have its own repository, so MLA units' authors may decide to deposit in various IRs the posters or reports about their collaborative work that they wish to widely share. Examples:
  - *An Analysis of Publisher DEI Policies* (MLA 2021 vposter- [OSF](#));
  - *Designing an Open Repository of Educational Resources for Health Information Professionals* (MLA 2021 vposter- [Duke](#) IR)
  - *Creating a Directory of Information Literacy Mapping in Health Sciences Disciplines* (MLA 2021 vposter- [Duke](#) IR)
- [Recommended repositories](#) (PloS Global Health)- for data  
“Authors should select repositories appropriate to their field of study” & “If no specialized community-endorsed public repository exists, IRs that use open licenses...are also suitable for deposition.”



## Staffing role

Management- recruitment, intake, and promotion

[The Handy IR Manager: A Toolkit for Recruitment, Intake, and Promotion <https://scholarworks.uark.edu/liblearn/2>]

&

technology support or liaison & collaborative work with technical support team/s

## Staff

Repository managers, library liaisons, technical staff (metadata, programming), library assistants, student workers, interns, volunteers...

“Natural division and distribution of labor, tasks & responsibilities”

Certain key staff involved in key areas, some historic, based on job description, cross-training. Detail-oriented persons for quality control (e.g. approval or review of deposits)...

[Ellen Brassil, Director, Health Sciences Library at Baystate Health, and Dina McKelvy, Director, Library and Knowledge Services at Maine Medical Center. [Supporting Medical Research and Raising the Profile of the Library.](#)]

### ▪ Full-time work [1]

- 1 or fewer full-time staff working on the IR: more than ½ of respondents (60%)
- 0 full-time staff (26%).
- 5 IRs (14%) were staffed by 5 or more full-time staff.

### ▪ Hours? [1]

How many total hours staff collectively spent on repository tasks in a typical week? The ranges reported were:

- 6–10 hours (20%)
- more than 20 hours (20%).

1. Kipnis DG, Palmer LA, Kubilius RK. The institutional repository landscape in medical schools and academic health centers: a 2018 snapshot view and analysis. *J Med Libr Assoc.* 2019 Oct;107(4):488-498. doi: 10.5195/jmla.2019.653. Epub 2019 Oct 1. PMID: 31607806; PMCID: [PMC6774547](#).





## IRs: case studies- building, expanding, migrating

- **Providence St. Joseph - Building a repository**

- Research institutes started reaching out to library to help gather info
- Discussions with colleagues with repositories in place
- Evaluation of possible platforms: open source (may need to purchase display platform) vs subscription
- Institutional buy-in: stakeholders, IT

Source: Martin, Heather J.; Delawska-Elliott, Barbara (Basia); and Dickman, Daina, "Building a Health System Institutional Repository: Setting Yourself Up for Success from the Start" (2019). [https://digitalcommons.psjhealth.org/other\\_pubs/59](https://digitalcommons.psjhealth.org/other_pubs/59)

- **Maine Health and Baystate Health (Massachusetts) - Building a repository**

- Make a use case
- Pros and cons of "pilot"
- Market and do outreach (market to your staff first)

Source: [Supporting Medical Research and Raising the Profile of the Library](#). [bepress sponsored webinar]

- **Aurora Health Care in Wisconsin and Advocate Health Care in Illinois merger into Advocate Aurora Health - Expanding a repository**

- Lay groundwork, identify stakeholders, renegotiate IR platform contract
- Implement workflow & staff changes, naming conventions, outreach efforts, plan ahead

Source: Deal, Jennifer and Hanus, Karen, "When Mergers Happen: Doubling Your Institutional Repository's Scope Overnight" (2021). *Medical Institutional Repositories in Libraries (MIRL)*. 18. <https://hsrc.himmelfarb.gwu.edu/mirl/2021/program/18>

- **Oregon Health & Science University (OHSU)...Migrating decisions**

An approach for evaluating platforms as well as how the role as a health sciences library catering to groups that include marketing departments, historical researchers, and data scientists, shapes platform needs...

- Use cases and requirements- questions, list, needs and wants (*OHSU spreadsheet listed 77 different needs / wants*)
- Special considerations for Special Collections
- List of candidate platforms. Focus on top priorities, saving others for second round

Source: Pierce, Pamela; Duckworth, Steve; and White, Marijane, "Undertaking a Digital Collection Platform Evaluation at a Health Sciences Library" (2021). *Medical Institutional Repositories in Libraries (MIRL)*. 17 <https://hsrc.himmelfarb.gwu.edu/mirl/2021/program/17>





## Questions?

### **Ramune K. Kubilius**

<r-kubilius@northwestern.edu>

Collection Development / Special Projects Librarian  
Galter Health Sciences Library & Learning Center  
Northwestern University Feinberg School of Medicine

<https://orcid.org/0000-0002-7881-9396>

IR: [DigitalHub](#)

migrating to new platform and new name, Prism  
(tentatively *scheduled for late October 2022*)

### **Lisa A. Palmer**

<Lisa.Palmer@umassmed.edu>

Institutional Repository Librarian  
Lamar Soutter Library  
Umass Chan Medical School

<https://orcid.org/0000-0002-4116-1279>

IR: [eScholarship@UMassChan](#)

migrating to new platform  
(*scheduled for late Summer / Fall 2022*)





## APPENDIX [1]:

### Conferences

- [MIRL](#) (Medical Institutional Repositories in Libraries) *free (2<sup>nd</sup> symposium- November 17, 2022)*
- [NIRD](#) (Northeast Institutional Repository Day) *free-next date not announced*
- [SMIRC](#) (Southern Miss Institutional Repository Conf) *free-next date not announced*
- OR (Open Repositories) [Denver, CO](#) 2022, *next date not announced*

Conferences may include keynote talks, use case presentations, user group meetings, and may or may not include presentations / updates about or by platform providers & vendors.

### Communities, User Groups, Associations

- Users' groups that use specific platforms include:
  - Digital Commons: [Expert Gallery Suite & Digital Commons flyer for Health Care Networks/Hospitals – bepress](#)  
**Note-** Hospital / Health Care User Group Meeting- *group has been inactive since [2019](#)*
  - DSpace: [one major meetup](#) per year held in conjunction with the Open Repositories Conference; user groups are geographic
- Specialized focus
  - Developers (programmers) - [Code4Lib](#)
  - IR Managers - [forum](#)
- Confederation of Open Access Repositories (COAR) - brings together individual repositories and repository networks
  - Reports such as: [COAR Community Framework for Good Practices in Repositories, Version 2](#)



## APPENDIX [2]: IR implementations

Aspirational institutions & features: visit & examine various sites...

Does the repository:

- Provide clear instructions / documentation?
- Generate DOIs?
- Allow creation of collections or communities? How are they displayed?
- Allow embargos and visibility restrictions?
- Have interesting/useful metadata fields?

### HOSPITALS

- Rochester Regional Health [Browse Collections | RocScholar \(rochesterregional.org\)](https://rochesterregional.org)
- Advocate Aurora Health [LibGuide](#)

### UNIVERSITIES *(solo; internal & external collaborations, partnerships)*

- Cornell <https://guides.library.cornell.edu/ecommons>
- Medical University of South Carolina [MEDICA \(musc.edu\)](https://medica.musc.edu); part of Lowcountry Digital Library, which is a member of the [South Carolina Digital Library](#) initiative sponsored by [PASCAL](#).
- Northwestern University, Galter Health Sciences Library & Learning Center DigitalHub [GalterGuide](#)
- Oregon Health Sciences University (OHSU) [LibGuide](#)
- University of Alabama [University of Alabama Institutional Repository: Community List \(ua.edu\)](https://ua.edu)
- University of Colorado Anschutz [Strauss Health Sciences and Auraria Libraries Shared Repository](#)
- University of Houston [Repository Home \(tdl.org\)](https://tdl.org)
- University of Massachusetts eScholarship@UMassChan [LibGuide](#)

### GRASSROOTS PROJECTS, COMMUNITIES

- [Mukurtu](#), including [Native Health Database](#)



## APPENDIX [3]: Directories, mandates, policies

### Directories

- **Directory of Open Access Repositories (DOAR)**  
[Welcome to OpenDOAR - v2.sherpa](#)  
Repository type: Institutional, Subject area: Health & Medicine...
- **Registry of Open Access Repositories (ROAR)**  
[About the Registry - Registry of Open Access Repositories \(eprints.org\)](#)
- **Disciplinary repositories [may not be current]**  
[http://oad.simmons.edu/oadwiki/Disciplinary\\_repositories](http://oad.simmons.edu/oadwiki/Disciplinary_repositories)
- **Platforms: [may not be current]:**  
[Repository Platforms \(readme.io\)](#)

### Data repositories

[Selecting a Data Repository | Data Sharing \(nih.gov\)](#)

Also:

- A listing of [generalist repositories](#) that accepts all data types
- FAIRsharing.org: [Generalist Repository Comparison Chart | Zenodo](#)
- Nature's [Data Repository Guidance](#)
- The [Registry of Research Data Repositories](#)

### Mandates & policies

- [Scientific Data Sharing](#) - *NIH dashboard--new Data Management & Sharing Policy, effective January 25, 2023*
- [OSTP Policy Memo \(a.k.a. the Nelson Memo\)](#) - *Ensuring Free, Immediate, and Equitable Access to Federally Funded Research, effective January 2026*
- [Sherpa Romeo](#) - *Publisher Open Access Archiving Policies*

## APPENDIX [4]: Some sources and references

### Books

- *The Complete Guide to Institutional Repositories* / edited by Stephen Craig Finlay American Library Association, 2021. Earlier version of chapter 1: [A Librarian's Process for Building an Institutional Repository](#)
- *Making Institutional Repositories Work* / edited by Burton B. Callicott, David Scherer, and Andrew Wesolek. Charleston Insights in Library, Archival, and Information Sciences, 2016. <http://library.oapen.org/handle/20.500.12657/31579>

### Articles / presentations / white papers:

- Baird, L. & Meetz, J., (2022). Digital Commons to Hyku: An Institutional Repository Migration at a Small Liberal Arts University. *Journal of Librarianship and Scholarly Communication* 10(1). doi: <https://doi.org/10.31274/jlsc.12916>
- Ellen Brassil, Director, Health Sciences Library at Baystate Health, and Dina McKelvy, Director, Library and Knowledge Services at Maine Medical Center. [Supporting Medical Research and Raising the Profile of the Library](#). [Bepress hosted webinar, 2018]
- Crocken, Todd and Washington, Anne, Strategies and Tools for Digital Repository Selection and Migration (2019). Digital Initiatives Symposium. 8. <https://digital.sandiego.edu/symposium/2019/2019/8>
- Deal, Jennifer and Hanus, Karen, When Mergers Happen: Doubling Your Institutional Repository's Scope Overnight (2021). *Medical Institutional Repositories in Libraries (MIRL)*. 18. <https://hsrc.himmelfarb.gwu.edu/mirl/2021/program/18>
- Fay B, Deal J, Budzisz V. An Institutional Repository Experience at a Large Health Care System. *Med Ref Serv Q.* (2017) Jul-Sep;36(3):280-291. doi: 10.1080/02763869.2017.1332264. PMID: 28714819.
  - Also: Fay B, Budzisz V, Deal J. [An institutional repository in a multi-hospital health care system](#), poster: Joint Meeting of the Midwest Chapter & Midcontinental Chapter of the Medical Library Association; October 24, 2016; Des Moines, IA.
- Herr, M., Kelly, J., & Middleton, C. C. (2022). The Handy IR Manager: A Toolkit for Recruitment, Intake, and Promotion. *University Libraries Teaching and Learning*. <https://scholarworks.uark.edu/liblearn/2>
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  - Also: Kipnis DG, Palmer LA. (2018). Medical Institutional Repositories in a Changing Scholarly Communication Landscape. *Library Publications*. [https://escholarship.umassmed.edu/lib\\_articles/217](https://escholarship.umassmed.edu/lib_articles/217)
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- Martin, Heather J.; Delawska-Elliott, Barbara (Basia); and Dickman, Daina, Building a Health System Institutional Repository: Setting Yourself Up for Success from the Start (2019). [https://digitalcommons.psjhealth.org/other\\_pubs/59](https://digitalcommons.psjhealth.org/other_pubs/59)