Adapting Koha for use as a Local Authors Catalog

The Problem. MedStar Washington Hospital Center is a teaching hospital with 1,362 medical staff, 1,719 nurses, and 30 residency and fellowship programs with 342 residents and fellows. (FY 2013 data.) They contribute a significant number of articles, posters, and conference presentations to the body of medical literature. How can we keep track of them all?

Old system. Librarians developed a weekly auto alert that scanned Medline for potential articles from local authors. They then culled the list for matches and converted brief Medline citations to HTML. Problems: citations didn't have departments, no name authority control, no mesh terms, not easily searched. When the library staff wanted to compile the list into an annual bibliography, the list was not much help.

Introducing a Citation Manager. In 2012, the library started using Reference Manager to track citations. Now librarians could upload entire Medline records, including abstracts, as well as other scholarly activities such as poster presentations. They also standardized authors' names and added department affiliations. Producing the annual bibliography got much easier to produce.

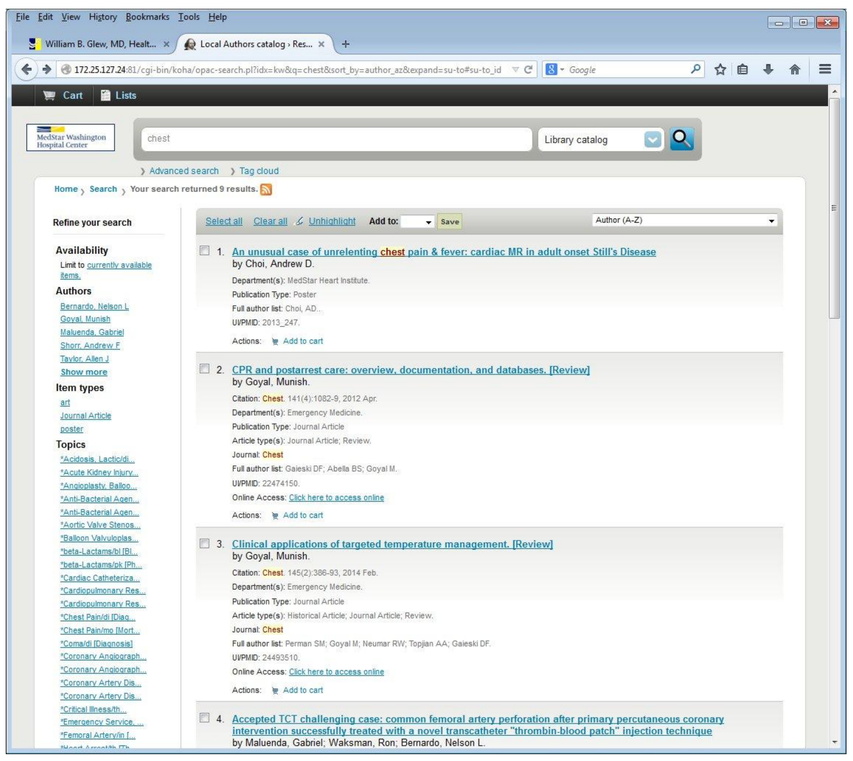
But: The list still isn't readily accessible. What to do?

Koha to the Rescue. In 2013, the library replaced its ILS with Koha. Since Koha is open source software and designed to be infinitely configurable, it was relatively easy to modify its templates to different bibliographic formats. Now the Local Authors Catalog can be searched from anywhere in the hospital, and can be searched by author, journal, article title, department, and many other fields.

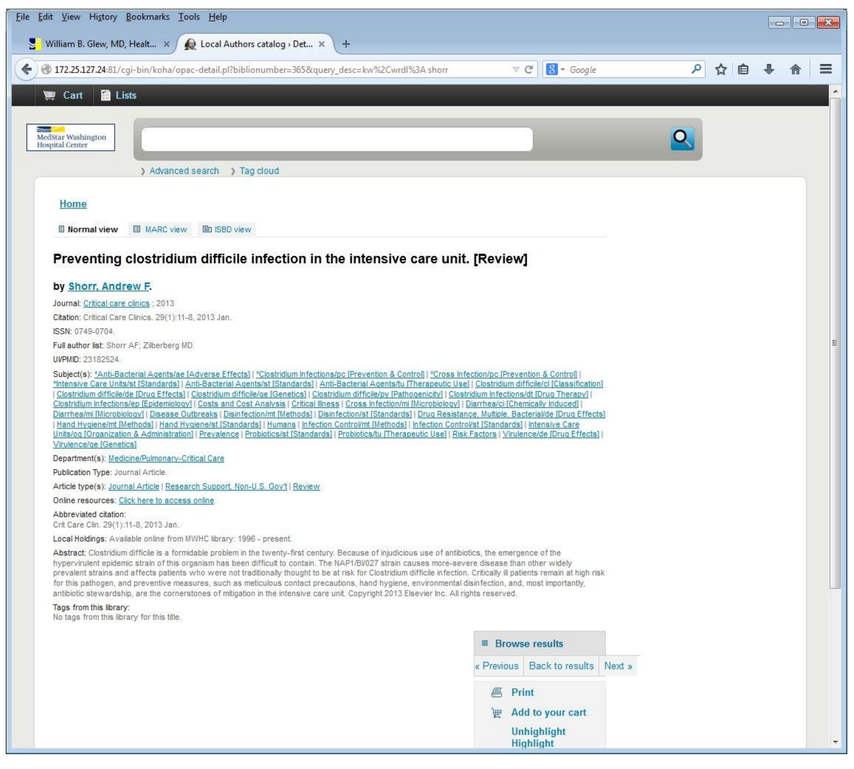
Why Koha? Koha is free to download and install, and the library was using it anyway. Modifying an existing system was more time- and cost-efficient than acquiring a new system that library users and the library sysadmin would have to learn.

How is it Used? The MedStar Foundation has shown potential donors what research is being done at the hospital. Residents have looked up what their attending physicians have written. Medical students can see which departments and physicians they would like to work with. Public Relations, the Center for Excellence in Nursing, and individual departments all use the catalog to demonstrate the quantity and variety of MedStar's contribution to the field of medicine.

Author Catalog: Search Results



Author Catalog: Single Record



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With profuse thanks to my fellow MWHC librarians
Jory Barone and Layla Heimlich

From an Ovid Medline Record…

1.

Unique Identifier	23182524
Record Owner	From MEDLINE, a database of the U.S. National Library of Medicine.
Status	MEDLINE
Authors	Zilberberg MD. Shorr AF.
Authors Full Name	Zilberberg, Marya D. Shorr, Andrew F.
Institution	EviMed Research Group, LLC, Goshen, MA 01032, USA. evimedgroup@gmail.com
Title	Preventing clostridium difficile infection in the intensive care unit. [Review]
Source	Critical Care Clinics. 29(1):11-8, 2013 Jan.
Abbreviated Source	Crit Care Clin. 29(1):11-8, 2013 Jan.
NLM Journal Name	Critical care clinics
Publishing Model	Journal available in: Print Citation processed from: Internet
NLM Journal Code	ccc, 8507720
Journal Subset	IM
Local Messages	Available online from MWHC library: 1996 - present
Country of Publication	United States
MeSH Subject Headings	*Anti-Bacterial Agents / ae [Adverse Effects] Anti-Bacterial Agents / st [Standards] Anti-Bacterial Agents / tu [Therapeutic Use] Clostridium Infections / dt [Drug Therapy] Clostridium Infections / ep [Epidemiology] Risk Factors Virulence / de [Drug Effects] Virulence / ge [Genetics]
Abstract	Clostridium difficile is a formidable problem in the twenty-first century. Because of injudicious use of antibiotics, the emergence of the hypervirulent epidemic strain of this organism has been difficult to contain. The NAP1/BI/027 strain causes more-severe disease than other widely prevalent strains and affects patients who were not traditionally thought to be at risk for Clostridium difficile infection. Critically ill patients remain at high risk for this pathogen, and preventive measures, such as meticulous contact precautions, hand hygiene, environmental disinfection, and, most importantly, antibiotic stewardship, are the cornerstones of mitigation in the intensive care unit. Copyright 2013 Elsevier Inc. All rights reserved.
Registry Number/Name of Substance	0 (Anti-Bacterial Agents).
ISSN Electronic	1557-8232
ISSN Linking	0749-0704
Publisher Item Identifier	S0749-0704(12)00083-8
Digital Object Identifier	http://dx.doi.org/10.1016/j.ccc....
Publication Type	Journal Article. Research Support, Non-U.S. Gov't. Review.
Language	English
Date of Publication	2013 Jan
Date Created	20121127
Year of Publication	2013
Entry Date	20130509
Update Date	20131217

• Abstract Reference
• Find Similar
• Find Citing Articles
• Full Text

…to a modified Koha MARC record.

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None  =LDR 03479nam a22007097a 4500
None  =008 130807s2013 2013\\\xxu||||\|||\00|\0\eng\d
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DB    =040 \\$aOvid MEDLINE(R) (Database)
UI    =099 \\$a23182524 (PMID. Also goes in call number field 952p)
FA    =100 \\$aShorr, Andrew F (Author's full name. Only local authors go in this field.)
TI    =245 \\$aPreventing clostridium difficile infection in the intensive care unit. [Review] (Article title)
AU    =246 \\$aShorr AF (Author's name. All authors go in this field.)
      =246 \\$aZilberberg MD
SO    =250 \\$aCritical Care Clinics. 29(1):11-8, 2013 Jan. (Source)
NJ    =260 \\$bCritical care clinics (NLM standard journal name)
      =260 \\$c2013
LM    =501 \\$aAvailable online from MWHC library: 1996 – present (Local holdings)
AS    =505 \\$aCrit Care Clin. 29(1):11-8, 2013 Jan. (Abbreviated Contents Note)
AB    =520 \\$aClostridium difficile is a formidable problem in the twenty-first century. Because of
      injudicious use of antibiotics, the emergence of the hypervirulent epidemic strain of this
      organism has been difficult to contain.... (Abstract)
LG    =546 \\$aEnglish (Language)
MH    =650 \\$a*Anti-Bacterial Agents/ae [Adverse Effects] (MeSH terms)
      =650 \\$a*Clostridium Infections/pc [Prevention & Control]
      =650 \\$a*Cross Infection/pc [Prevention & Control]
      =650 \\$a*Intensive Care Units/st [Standards] (etc.)
None  =656 \\$aMedicine/Pulmonary-Critical Care (Department)
PT    =657 \\$aJournal Article (Publication type)
      =657 \\$aResearch Support, Non-U.S. Gov't
      =657 \\$aReview
None  =856 \\$uhttps://www.clinicalkey.com/#!/content/journal/1-s2.0-S0749070412000838 (Link to
        online article. Not always the same as the DOI, as the library gets articles from many sources.)
DO    =899 \\$ghttp://dx.doi.org/10.1016/j.ccc.2012.10.006 (DOI)
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None  =952 \\$w2013-09-17$8Article$p23182524$70$r2013-09-17$40$9370
      $yart$10$d2013-09-17$00  (Koha item information)
None  =999 \\$c365$d365  (Koha control numbers)
```

How to Do It

1. Run a weekly Medline autoalert. Export the list as a text file with enough information to match possible authors.

2. Go through the list looking for possible local author matches. In 2014, Medline began including the institutional affiliation of all the authors, which makes looking for MedStar authors much easier. Copy the PMIDs into a separate file.

3. Search the possibly-match PMIDs in Medline. Export to a file that includes all fields needed in both Reference Manager and Koha.

4. Verify that the articles are written by local authors. Most journals will let you look at the authors' affiliations even if access to the article is blocked. If the article isn't by a local author, delete the citation. If the article is by a local author and it's available online, add a link to the article. Delete the non-local authors from the Full Author Name field.

5. Add name authority control and department affiliations. The text replacement program looks for variations of the authors name, converts it to a standard form, and adds the department. Names that aren't in the replacement table are tagged as NOT FOUND and are added to the replacement table.

6. Import the citations into Reference Manager

7. Convert Reference Manager tags to MARC tags.

8. Remove duplicate department tags, add other data to MARC record.

9. Compile the citations into an upload file with MarcEdit.

10. Upload to Koha.

Conferences, Posters, and Books, Oh My! Information on presentations and other scholarly activities is entered directly into Reference Manager. It can be exported and converted to modified MARC format the same way the Medline citations are processed. The challenge of modifying standard MARC records for books or book chapters written or edited by local authors has yet to be resolved.

Problems and Other Considerations

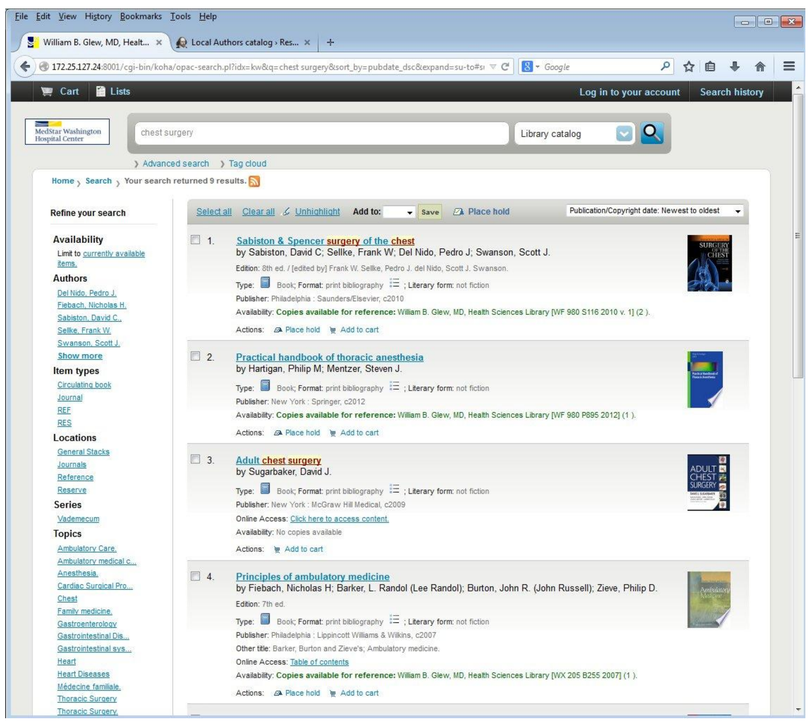
How to keep the list of names to search up to date? People come and go; it's easy to remove their names when their articles no longer show a MedStar affiliation, but finding new names is more difficult if the Medline citation doesn't show all the authors' institutions.

The process is time-consuming. Some steps can probably be streamlined, but checking authors' names and affiliations in journal articles takes time. Standardizing names and adding departments is another bottleneck.

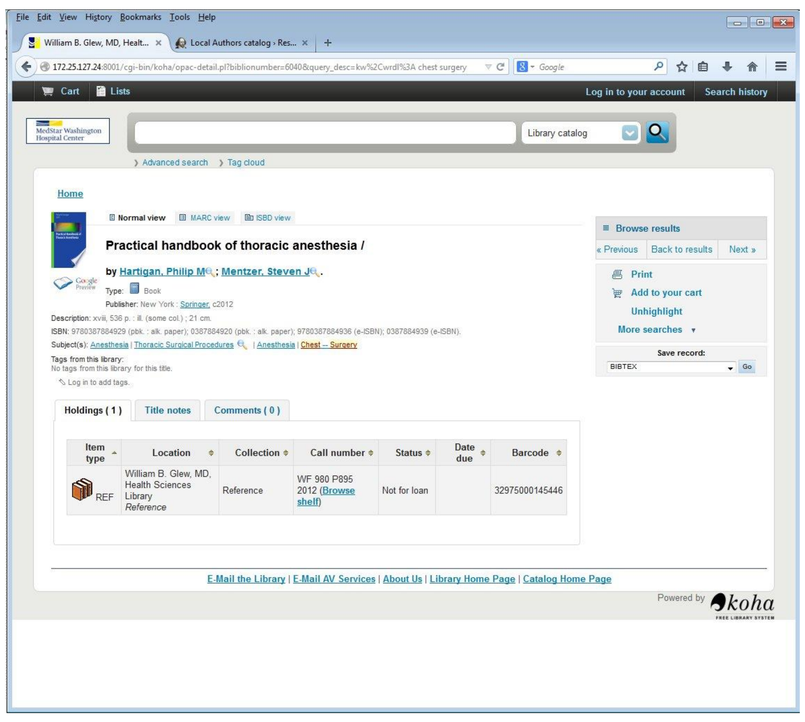
The catalog is only available within the hospital's network. For security reasons, the Koha server is behind the hospital's firewall. The library is exploring options to make it more widely available.

Dates and scope are limited. Journal citations currently go back to 2012; other activities are cataloged starting in 2013. The collection is limited to authors at MedStar Washington Hospital Center, MedStar National Rehabilitation Network, MedStar Institute for Innovation, and MedStar Health Research Institute. Adding previous years' publications and expanding the catalog to include authors from other MedStar institutions will take time.

Library Catalog: Search Results



Library Catalog: Single Record



For More Information

About Koha:

http://www.koha-community.org

About this project:

http://www.philobiblios.net/koha

MedStar Washington Hospital Center