

## ALISE 2006

### Integrating Informatics into a Health Sciences Librarianship MLIS Program: The Alabama Experience

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## My Background

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- Sought career counseling after a “ young-life crisis” in my late 20’s and discovered librarianship:
  - Cautiously sought experience prior to library school
  - Answered an ad for a paraprofessional position at HAM-TMC
- Was directed to the MSIS program at UNT:
  - Worked for Dr. Ana D. Cleveland
  - One of the very first projects with which I assisted was a grant application for U.S. Dept of Education for Title Ib fellowships
- Slyly realized that maybe one of these fellowships might be a great thing! ;-)
  - Provided for a non-NLM funded informatics education in a SLIS context

## Health Sciences Informatics in LIS Education at the University of Alabama

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- General question: What unique role can health sciences librarians play in supporting activities in various practice environments?:
  - Clinical environments:
    - Medical informatics
    - Nursing informatics
  - Public health environments:
    - Public health informatics
  - Biology and Genomics:
    - Bioinformatics
- Concluded that an understanding of informatics applications is necessary for the 21<sup>st</sup> century health sciences librarian

## Alabama Approach

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- Two course sequence in MLIS program + internship:
  - LS 534 – Health Sciences Librarianship
  - LS 564 – Health Sciences Informatics
  - LS 570 – Internship
    - Various academic centers and hospitals in region
    - Centers for Disease Control and Prevention
- Continuing education opportunities for practicing professionals:
  - Librarian 2.0 technologies (e.g., blogs, wikis, podcasting, tagging, etc.)
  - PHP/MySQL

## Alabama Philosophy

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- We seek to leverage the existing network of health science librarians
- We recognize crucial role of informatics in 21<sup>st</sup> century health sciences librarianship
- Education for the 21<sup>st</sup> century health sciences environment:
  - Solid foundation in library practice
  - Understanding of outreach opportunities to various practice contexts, both in person (e.g., as informationists) or virtually (e.g. clinical branch digital libraries)

## What’s a Clinical Branch Digital Library?

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- Start with highly structured web-based resources:
  - Currently, best examples are online medical textbooks
- Combine these highly structured web-based resources to create cross-publisher collections of highly indexed resources that standardize secondary navigation
- Customize the collections so that the resources meet the epidemiologically determined needs of specific clinical environments
- Example: Capstone Clinic at the University of Alabama

## Collection Services in Context (CoSIC)

- Seeks to contextualize collections of web-based resources to clinical practice environments
- Health sciences libraries would have as many branch digital libraries as needed to match the number of clinical service contexts under their purview (including personalized “My Library” services for clinicians)
- Complements existing ISIC programs resulting in “complete” digital library services (i.e., public and technical services) to clinical environments

## Example Informatics App: HL7 Infobutton

- Students must first understand the role of information in clinical decision making (CDM):
  - They learn various models of CDM in informatics course
  - Understand the various constraints impacting decision making in the clinical environment
  - Understand the design of electronic patient record systems
- Students learn the role of standards in the transfer of computer-mediated information:
  - Infobutton is an HL7 standard for linking from electronic patient record systems to knowledge resources
  - This example provides an understanding of librarians’ potential role in an informatics applications

## Example: HL7 Infobutton (cont.)

- Students build on their knowledge of controlled vocabularies:
  - Understanding is built on knowledge of MeSH gained in first course in sequence (health sciences librarianship)
  - Other clinical vocabularies are introduced (e.g., for disease tracking → family of ICDs; for pathology → SnoMed)
- Students can then understand how Infobutton passes parameters from a specific patient’s e-record to e-resources:
  - HIPPA compliant patient demographic information
  - Medical problem (or DDx list of possible problems)

## Example: HL7 Infobutton (cont.)

- Role of health sciences librarians is to maintain various clinical branch digital libraries:
  - Budget for the development of collections of high quality, cross-publisher networked resources
  - Participate in the indexing process
- Example of clinical digital libraries integration – example scenarios:
  - Known medical problem: Pediatric AIDS
  - DDx scenario: Painful elbow

## Summary

- Alabama approach builds on and extends the principles of health sciences librarianship for the network era by acknowledging the critical need for informatics education in the LIS curriculum
- HL7 Infobutton example demonstrates the various facets of informatics that are required when seeking to leverage the existing network of health sciences librarians in terms of information services to clinical environments