

## Panel

### **Research in the Library: An Evidence-based Approach for Making Informed Decisions**

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#### **Purpose**

This panel highlights three research projects at the NIH Library. The panelists will address the advantages and limitations between the different research methodologies used, highlight the findings from the studies and their effect on the library, and discuss the implications for future research. Additionally, they will discuss the incorporation of evidenced-based research at the library and its implications in terms of staff development and competencies.

#### **Study Objectives and Design**

##### **Federated Search Interface Design**

For the first study, the researchers were interested in the needs and preferences of NIH staff in terms of searching for biomedical information in support of research. Data gathered from this study would assist in the development of a meta-search tool for locating relevant biomedical information on the web and in subscription databases.

This study was divided into two phases. The first phase consisted of focus groups conducted with six nurse specialists from the Department of Clinical Research Informatics. Using the principles of grounded theory, the content of interviews was transcribed, coded, and analyzed in ATLAS.ti. In the second phase of the study, the researchers contracted for usability study comparing two different search interfaces. The primary outcome of the usability study was a better understanding of user performance with the search interfaces. Of particular importance was an understanding of how users identified potential sources of information and refined their search strategies. For example, the study focused on user awareness and utilization of advanced search, clusters, sorting, refining, narrowing sources, and limiting results.

##### **Visual Scan**

For the second study, the researchers wanted to document how patrons were interacting with the library's physical space. Specifically, the researchers wanted to know where patrons were sitting, what they were doing, and if they were engaged in collaborative work. Additionally, the project was a case study of how the library used innovation to convert a paper-based notation system into an automated method of documenting the usage of the facility.

In the past, visual scans of the library reading room relied on the use of paper maps of the library, divided into activity zones. The paper-based method made it difficult to mark, score, and effectively

tabulate the results. An interactive computer-based form was developed to allow library staff to easily record patron activity, and the use of library space. The software was installed on a touch-sensitive laptop. The user interface consisted of a map of the library, which let library staff record where clients were sitting and the type of activity in which they were engaged. The data from the observations were automatically captured and stored in a database. This allowed the researchers to create a variety of reports and thematic maps to visualize particular activities. Additionally, researchers could identify the high and low usage areas of the library, and improve decision-making related to space planning.

### **Information Needs of Disaster & Emergency Response Professionals**

For the third study, the researchers were interested in methods to enhance how librarians and libraries provide information services that support staff responding to a disaster or emergency event. The investigators hypothesized that interviews with experienced disaster response professionals will provide librarians with insight into their unique information needs and challenges experienced when responding to an event. This insight can serve as the basis for future efforts by librarians and libraries to provide information services that support staff responding to a disaster or emergency event.

Twelve public health or military personnel with disaster or humanitarian response experience were interviewed from the Uniformed Services University of the Health Sciences (USUHS), Center for Disaster & Humanitarian Assistance Medicine (CDHAM) at USUHS, and offices within the U.S. Department of Health and Human Services (HHS). A survey instrument consisting of nine questions was developed and used. Questions were designed to explore the specific types of information used by the informants. Interviews were conducted in February and March 2008, and December 2008 through March 2010. Each interview lasted approximately 15-30 minutes. Interviews were digitally recorded and transcribed by the investigators. Each investigator independently coded the transcribed interviews, and identified major themes.

### **Results**

Data from the above-mentioned studies is currently being analyzed. Upon completion, analysis and findings will be included in the final conference paper.