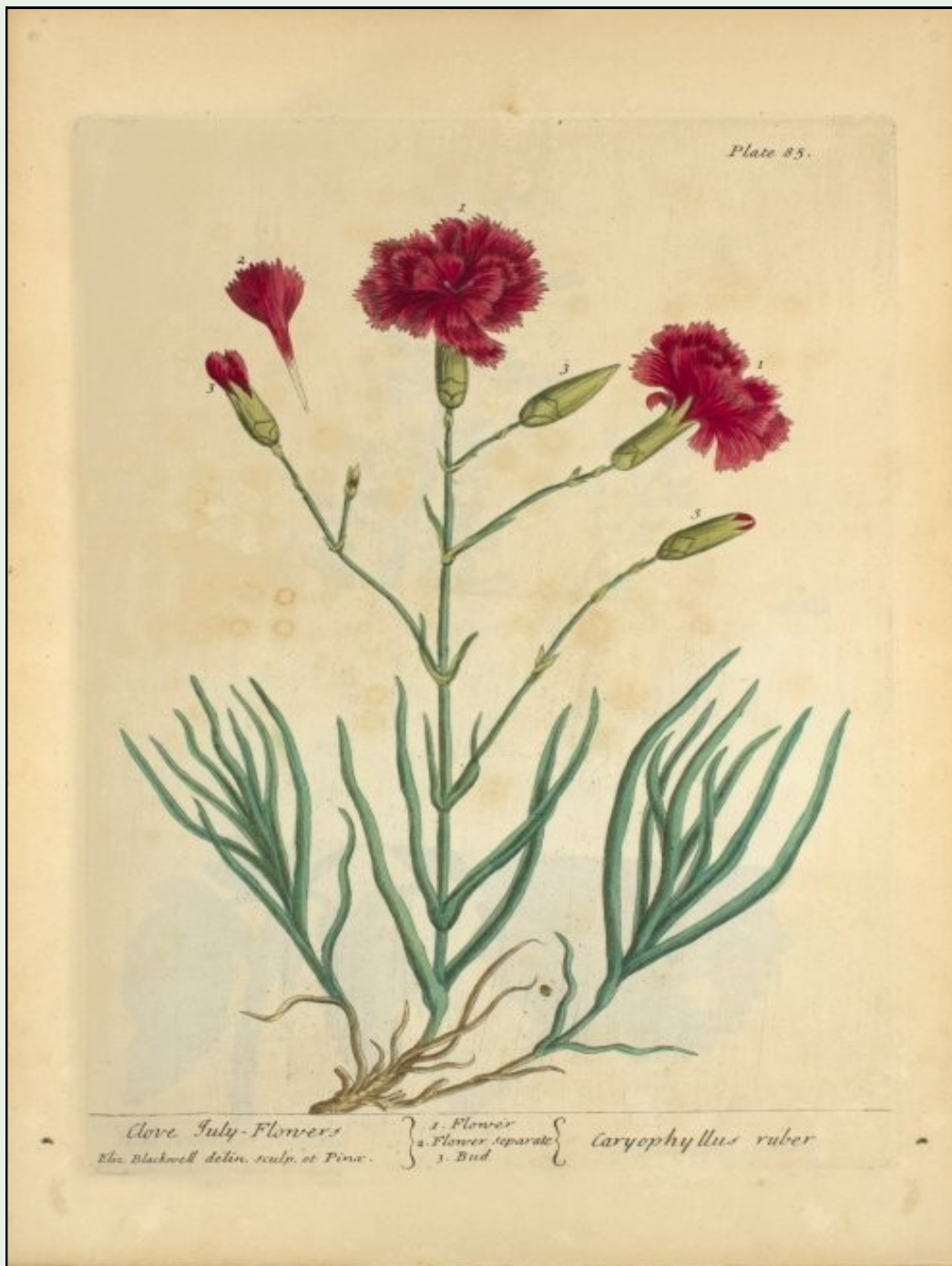


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# Hypothesis

The Journal of the Research Section  
of the Medical Library Association



# Hypothesis

The Journal of the Research Section of  
the Medical Library Association

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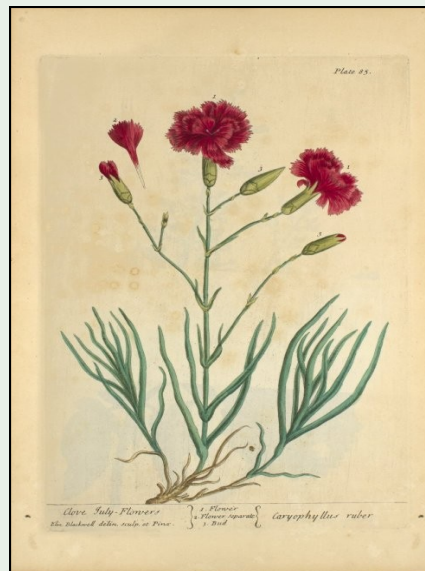
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\* Peer-Reviewed

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# EDITORIAL

## ***HYPOTHESIS*' ROLE IN LIBRARY RESEARCH**

### **I. Diane Cooper, MSLS, AHIP**

*Hypothesis* is changing – growing – we hope, to be more useful and interesting to you, our readers.

*Hypothesis* began as a newsletter for MLA Research Section members. Later, articles from members were added, and an editorial review team was established to review the articles. However, as years went by, the peer review process dropped out. Recently, the editorial board was re-established to help assure the publication's quality. Now, we are modifying our format to better support our readers.

Most of our readers are not full time researchers, but nevertheless, are directly or indirectly involved in research. We support research projects, we work with researchers, we participate in research projects. We develop new library procedures, and we want them evaluated. We conduct our own research, we create multidisciplinary research teams, or we ask someone else to do research. In all cases, we benefit by understanding research processes and analyses. Further, we have a responsibility to understand the implications of research results, and to be able to apply results to our own situations. We are involved in research, one way or another.

We should be comfortable planning, participating in, and interpreting library research. To be helpful towards that goal, *Hypothesis* will now feature four themes.

#### ***Hypothesis* Themes**

1. *Brief Research Reports*
2. *Collected Items of Interest*
3. *Research Section News*
4. *Letters to the Editor*

The lead theme is *Brief Research Reports*. This section has two purposes. First, it provides a venue for reporting interesting results that might not be submitted elsewhere. For example, a project may be presented as a poster at a conference, but for one reason or another, will not be written up as a full-length journal manuscript. Yet it could be formatted as an abstract, with some discussion added, and, *voila!* – it would be suitable for submission to *Hypothesis*. Besides the value of the research itself, the authors would gain appropriate credit for publishing in a peer-reviewed, indexed journal (which *Hypothesis* is).

The second purpose of the *Brief Research Reports* section is to highlight and demonstrate research issues. These articles will focus on some aspect of research methodology, and illustrate it with an actual project. New data will be presented. For example, in this issue, Jon Eldredge et al. looks into the issue of describing a study population. They state that many research reports fail to define or describe the study population adequately. They describe the challenges of defining a study population based on their study objective of identifying the faculty population of a major health sciences center who were affiliated with a translational sciences center.

The second theme is *Collected Items of Interest*. This is a collection of articles aimed at and by MLA Research Section members. Here, popular and longstanding columns will be presented. For example, Jon Eldredge's, *The Research Mentor*, and Ellen Detlefsen's, *Dissertation and Thesis Round-Up*, columns will continue in this section. Ellen's column lists current doctoral dissertations and master's theses on topics of interest to health sciences librarians and medical information professionals. The topics and methods may be of interest to readers.

Other articles in this section will support understanding of research methods. An example in this issue is *Mixed Methods Research*, which

provides a basic description of the topic, illustrated with several examples, but no new data.

The *Research Section News* theme covers news or items of interest from the MLA Research Section.

Finally, *Letters to the Editor* is self-explanatory. Please send comments, corrections, and suggestions.

We hope this issue is interesting to read and provides something useful to you on research processes and methods.

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## Defining and Identifying Members of a Research Study Population: CTSA-Affiliated Faculty Members

Peer-Reviewed

Jonathan D. Eldredge, PhD<sup>1</sup>; Edward F. Weagel, PhD<sup>2</sup>; and Philip J. Kroth, MD<sup>1</sup>

### Background

An early step in research projects that involve humans consists of composing a clear and detailed definition of the study population. All experimental, observational, and qualitative research designs involving human subjects should define the study population in order to determine the eligibility of individuals for a study. The defined population then will become the basis for applying the research results to other relevant populations. Clearly defining a study population early in the research process also helps assure the overall validity of the study results.

Many research reports fail to define or describe a study population adequately. The Consolidated Standards of Reporting Trials (CONSORT) represent perhaps the most rigorous set of standards for reporting research results in a transparent and uniform manner. The CONSORT Guidelines observe that, "Despite their importance, eligibility criteria are often not reported adequately" [1]. Defining the study population in a research project involves inductive reasoning, critical thinking, and pragmatic project management skills. Yet, few research methods books or articles explicitly address the many issues related to rigorously defining and identifying members of study populations.

This research methods article provides guidance on defining a study population. The authors hope to fill a gap in the literature by describing the particular challenges of defining a study population of faculty members affiliated with a translational sciences center at a major health sciences center in the US. The National Institutes of Health's (NIH) Clinical & Translational Sciences Award (CTSA) program funds (NIH Award # UL1TR000041) the University of New Mexico's Clinical and Translational Sciences

Center (CTSC). The authors briefly describe their methodology and results. They include examples from their own research, as well as from other research studies involving a variety of study populations, to illustrate key points. Finally, the authors reflect on their "lessons learned" from their experiences with this research project.

### Methods

During April through July 2012, the authors sought to compile a complete and accurate list of *all faculty members* currently employed by the University of New Mexico with a formal affiliation with its CTSA-funded CTSC. All faculty members eligible for the study had an "affiliated" role with the CTSC while maintaining a formal appointed role(s), primarily with individual academic departments such as Advanced Nurse Practice, Biochemistry, Radiopharmaceutical Sciences, or Pediatrics. There were no formal or uniformly standardized faculty roles within the CTSC, simply an undefined "affiliated" status.

### Inclusion and Exclusion Criteria

The CTSC maintained four lists used primarily for email notifications to individuals to keep them informed about various CTSC activities. None of these lists met the requirements for the project due to a lack of accuracy or completeness. One "Publicity" list used for distributing general public affairs announcements included individuals both affiliated and unaffiliated with the university. The affiliated individuals included non-faculty members as well as faculty members. A second "Teaching" list for faculty members who taught in CTSC-sponsored courses was both accurate and current, but it excluded many faculty members with non-teaching roles, such as clinicians or investigators. A third "Funded" list included only individuals who had received research funds, primarily pilot grants,

directly from the CTSC. This third list of researchers excluded many others with formal CTSC teaching or administrative roles. The third list also included faculty members no longer employed by the university. A fourth “Administrative” list included mostly staff, although it contained some individual faculty members with administrative roles whose names did not necessarily appear on the other three lists.

The authors followed several iterative steps to compile a complete and accurate list by drawing selectively from all of the aforementioned lists with the goal of identifying faculty members associated with the CTSC. The inductive definition and identification phases of the study reported here consisted of dual, interactive processes.

The target population needed to consist of currently employed tenured or tenure track full-time faculty members at the University of New Mexico who fulfilled *at least one* of the following qualifications:

- Receiving funds from the CTSC for research projects
- Teaching in the CTSC-sponsored graduate curricula
- Holding administrative positions within the CTSC

For each successive phase of the inductive analytic process the authors more precisely defined their study population of currently employed CTSC-affiliated university faculty members. The authors verified current faculty employment status with the health sciences center’s contracts offices in the appropriate school or administrative units, such as the School of Medicine, College of Nursing, or

College of Pharmacy. The authors also verified the current employment status of potentially eligible university faculty members outside the health sciences center, but still within the same institution’s departments, such as Psychology and Sociology.

The final list *excluded* all formerly affiliated faculty who had left the university, past or present staff members, part-time or adjunct faculty members, research faculty members no longer funded by the CTSC, and others appearing on the various lists who, for a number of reasons, did not meet the inclusion criteria.

**Affiliated Master List**

The list of “Teaching” faculty members affiliated with the CTSC provided the most accurate and complete account, so it became the starting point for this target population-identification phase.

Truth tables [2-4] usually are used for disentangling more complex relationships or potentially causal variables, but they seemed well suited for this more fundamental purpose of identifying a target population. The truth table depicted in Table 1 gauged the strengths and weaknesses of the four different existing CTSC lists against the emerging definition of what constituted a member of the new fifth “Affiliated” (shaded far right-hand column on Table 1) study population list. The three authors had 17 combined years of experience in working with the CTSC. The first and third authors were among the founding leaders who designed the graduate CTSC-sponsored curricula. The second author has held a senior administrative informatics post in the CTSC for the past three years. These roles helped the

	Publicity	Teaching	Funded	Administra- tive	Affiliated
<b>Study Population Features: Inclusion Criteria:</b>					
Current employment only	N	Y	N	Y	Y
Tenured or tenure track only	N	Y	N	N	Y
Full-time employment only	N	N	N	Y	Y
University affiliation only	N	Y	Y	Y	Y
All study target population members	N	N	N	N	Y

**Table 1. Truth Table for Identifying CTSA-Affiliated Faculty Members**  
 The “Affiliated” list emerged from the process described in this methods article. All other lists on this table already existed and were used for consultation in arriving at the “Affiliated” list in the far right-hand column.

authors evaluate the accuracy and completeness of these CTSC lists.

## Results

The authors compiled a complete and accurate list of 108 CTSC-affiliated faculty members following several months of investigation using the process outlined above. The authors were highly confident that the list included all faculty members who belonged in the study population, while excluding all others. This “Affiliated” list was stratified by (1) clinical, (2) basic science, (3) pharmacy, or (4) nursing and other faculty members, before a random selection process began for the subsequent study process.

## Discussion

### *Inductive Processes*

Plato and Aristotle, as well as many early physical scientists in more recent centuries such as Bacon and Mill, pioneered inductive approaches [5]. In its purest form, an inductivist approach begins “with a collection of data, empirical observations or measurements of some kind, and build[s] theoretical categories and propositions from [the] relationships discovered among the data” [6]. Pure inductivism tends to introduce biases, however [7]. More modern forms of inductivism have emerged in the form of techniques for developing clearly delineated categorizations and classifications that have high fidelity with describing logical groupings in the real world.

Induction contrasts with the other major form of logical reasoning known as deduction. Whereas induction assembles more and more specific observations in order to form a generalization, deduction begins with a generalization and then applies this generalization to specific instances [8]. Deduction assumes that the generalization of interest consists of an agreed-upon fact, principle, or theory [9].

Inductive approaches are more common than might be recognized immediately. While rarely noted explicitly, investigators often employ inductive approaches at different junctures of the research process. Investigators might use inductive processes, for example, to generate hypotheses or

research questions. Investigators also apply inductive approaches to define study populations. Clinicians use inductive techniques when formulating patient diagnoses. Librarians and information science professionals, moreover, use inductive processes while engaged in classification processes, such as indexing or meta-tagging.

### *Analytic Induction*

The analytic induction approach “involves an iterative testing and retesting of theoretical ideas using the data” [10]. Investigators use analytic induction to develop more clearly defined concepts or categories by examining individual cases against emerging concepts [11]. It seeks to remain faithful to empirical observations of a limited number of cases as any categorizations take shape, while ensuring that investigators avoid jumping to premature conclusions. It abstracts from some detailed observations and then, in a quasi-deductive way, it tests those abstractions against more and more cases. The abstractions are revised if they prove too inflexible or too narrow to incorporate any apparent deviant cases [12].

Analytic inductive approaches orient one unfamiliar with a new phenomenon to make sense out of it. In a way, analytic inductivism creates order out of disorder, or at least order amidst relative confusion. A zoologist, for example, upon encountering a new species, might initially categorize the animal by color. Eventually the zoologist finds this narrow color categorization scheme to be insufficient over successive cases to accurately describe additional examples of the new species, which are otherwise similar, except for the different colors. The zoologist instead shifts focus to the presence of vertebrae in the new species as a possibly more precise categorization system for uniquely defining the species [13].

Becker illustrated the similar use of analytic inductivism in the social sciences when he wrote: “Once we have isolated ... a generic feature of some social relation or process and given it a name, and thus created a concept, we can look for the same phenomenon in places other than where we found it” [14]. Inductive analysis in a broader sense offers great flexibility in defining previously nebulous categories and classifications, whether in the physical sciences, in the social sciences, or in



clinical settings [15]. Inductive analysis can only serve as a starting point that initiates further exploration to validate concepts or systems in the real world. Neither inductive nor deductive logic approaches alone will suffice in the research process [16]. Yet, inductivism offers the advantage of viewing even a familiar research problem from a fresh perspective [17].

In this study, the analytic inductive aspect of defining a study population relied on reacting to existing lists in order to more precisely define the final criteria for identifying all members of the study population. Questions arose about the current employment status of certain faculty members who had left the university when their names still appeared on a list of faculty members funded through the CTSC, to cite one example. As noted already, the simplified truth table displayed in Table 1 guided the dual definitional and identification processes.

### ***Inclusion and Exclusion Criteria***

The study population description needs to offer a clear definition as to who belongs to the study population and who should be excluded from the study population. The *Uniform Requirements for Manuscripts Submitted to Biomedical Journals* remind investigators to be explicit about the selection criteria for inclusion and exclusion that define a study population, adding that “The guiding principle should be clarity about how and why a study was done in a particular way” [18]. Some researchers recommend including a table that delineates inclusion criteria [19]. The left-hand column in Table 1 provides an example of such inclusion criteria.

Investigators should employ standardized, commonly understood definitions of groups whenever possible in developing a study population description. The population of affiliated faculty members described in this article adhered to common conceptions of faculty members. Imagine the potential complexity of defining a study population associated with more nebulous concepts. Comstock et al. reveal, in their analysis of multiple epidemiological studies, how different investigators employed their own operational definitions for the concepts of race and ethnicity, rather than standardized definitions of these concepts [20]. The

net result of these multiple definitions undermined the utility of comparing the studies. Gobbens et al. similarly discovered that the commonly referenced phrase “medical frailty in the elderly” did not have a standard definition, despite some investigators’ misconceptions to the contrary [21]. The research community in such circumstances might need to convene a consensus conference to arrive at a commonly understood definition [22].

Investigators need to be alert to (and, if necessary, to correct for) the possibility that their inclusion and exclusion criteria reflect gender, racial, ethnic, economic, or information disparities biases [23]. The first author made such a mistake, years ago while conducting a study of rural health care providers. The author assumed that most rural inhabitants had access to the same high-quality Internet connections as urban residents. Not much later, the field informants for the study population fortunately corrected this misunderstanding [24]. Attitudes, behaviors, or skills within a study population might change over time in other circumstances. If that change itself serves as a focus of the study, this dynamic needs to be addressed in the research strategy. For example, if a research study wishes to gauge the effectiveness of library or informatics training on a defined population, but some members of the initial study population acquire the training via different venues, then the investigators need to identify and exclude these individuals from the study population.

Who applies the stated inclusion criteria to determine eligibility? The authors defined the study population and then recruited participants directly from that defined population in every study that they have conducted. One experiment involving first-year medical students used enrollment lists of students in good academic standing to define the study population [25]. What if a study recruits individuals by asking prospective participants to self-identify? In such circumstances, study population members’ own self-definitions might not align with investigators’ definitions. One study found that immigrant and refugee youth self-defined themselves in ways within the contexts of their own experiences [26]. Investigators must clearly define and promulgate their definition of a study population early in the study to avoid enrollment of ineligible individuals either later in the study or at other study sites [27].

## Validity

Validity refers to the close proximity of a defined concept and what the investigators are measuring [28]. For the central example in this article, a poorly defined or recruited study population of putatively CTSC-affiliated faculty members that includes ineligible individuals such as staff members who are not engaged in the same types of roles will jeopardize the credibility of the study. The inadvertent inclusion of faculty not affiliated with the CTSC or retired faculty members would have similarly threatened the integrity of the study. Critics could justifiably deem this, or any other study, to be flawed due to sloppiness in the assembling of the study population.

## Verification

The authors implemented this study in a highly controlled university environment where many resources were available to verify the accuracy of individual members of the defined study population. The authors had an online employee directory, a faculty contracts office, and departmental administrators who often could quickly resolve identity or status issues. The authors additionally had their own extensive 17 years of cumulated experience with the CTSC to aid in the resolution of identity issues with a high degree of fidelity. Many research studies occur in less-controlled “field” contexts that lack such verification resources or expert knowledge.

## Exemplars

Simpson et al. have noted that “Although it is recommended that study eligibility criteria should be clear, objective and precise, they are often complex and open to interpretation” [29]. The authors hope that the recommendations in this article will help others to streamline and lend greater credibility to their own studies involving human populations. The authors could not locate a study to serve as an exemplar of a perfectly defined and identified study population. Instead, they identified a series of large scale cohort studies in the *International Journal of Epidemiology* that do offer definitions of study populations that are both concise and precise. The cohorts involve study populations as diverse as Japanese diabetics, Danish nurses, secondary school students in Amsterdam, twins, German

uranium miners, and Thai university students [30-35]. Readers might find these examples helpful for their own research studies.

## Lessons Learned

Institutions and organizations often function and build decisions on definitions of groups that are not well defined. Such definitions will serve episodic needs connected with an initiative or program in the short-run, rather than as master lists capable of serving long-term institutional needs. In the example at the University of New Mexico, many official CTSC communications contain the words “affiliated” or “affiliation” when referring to faculty with an institutional relationship, when no definition exists to guide one in interpreting what these words mean. All organizations reflect at least some ambiguity when defining affiliated faculty groups. Still, many investigators wanting to conduct organizationally related research often assume, at least initially, that the organizations have rigorously defined all group definitions.

Real world experience reveals wide gaps between aspirational goals and actual practices when defining populations. Motivating organizations to construct well-thought-out definitions poses challenges, since doing so might force these organizations to confront very difficult structural, hierarchal, political, or cultural conflicts. Some examples of these myriad conflicts may involve resolving ambiguities about budgeting, organizational authority, or political problems. As an example, defining who is affiliated with a CTSA at an institution may impact the authority academic departments or other research centers have over their own primarily affiliated faculty members. These kinds of probing discussions are often difficult to pursue smoothly and might be politically charged.

Despite these challenges, organizations that invest the time and resources to more rigorously define these group definitions will reap the previously described long-term benefits. Perhaps analogous to swallowing bad-tasting medicine, working out important group definitions will improve organizational health by helping the organization to engage in difficult, complex, or otherwise unpleasant issues.

## Conclusion

Defining a study population early in the design stages of a research project will help to facilitate a smooth implementation phase. Clear definitions inform the value of applying research results to relevant populations for real world purposes. Importantly, a carefully and accurately defined study population enhances the completed study's validity. This article describes the many challenges in defining a research study population and their potential solutions.

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# COLLECTED ITEMS OF INTEREST

## MIXED METHODS RESEARCH

### I. Diane Cooper, MSLS, AHIP

Maybe to answer your question, you need to do some qualitative research (what people say or feel) and some number crunching too. You will need to do mixed methods research (MMR). Mixed methods research combines quantitative and qualitative research methods into one study.

Qualitative research uses a less structured approach to collect data. Often results are collected into common themes. Quantitative research uses a structured approach to collect data with a statistical analysis of the data.

For example, in your qualitative research approach, you may want to find out what people say or do, or how they feel about a tutorial you developed. You might observe or interview study participants. Your questions would be open-ended. From the observations or interviews, you could organize the results into themes. With the quantitative method, you might use a multiple choice survey of a group of students' attitudes regarding the tutorial. In each of these examples, the method used produces results that can be interpreted.

If you used an MMR approach in the example we just described, you could conduct interviews with a small number of students on the online tutorial they just completed and also conduct a survey. The comments of the students (qualitative) might enhance the meaning of the survey (quantitative) results. Using both research methods together could improve the value and quality of your study. MMR provides a more in-depth look into the problem or question being studied than using one method alone. The value of mixing the two methods is that biases, limitations, and weaknesses of a study using one method can be offset by the integration of the other method [1].

A relatively new approach to research, and often considered the third method of research, MMR is frequently used in social and behavior sciences. It began to evolve in the 1970s in reaction to polarization between the qualitative and quantitative

approaches [1]. In the library and information science field, this method has not yet been fully established as a research method concept, but a review of the health sciences library literature showed some use of MMR. Here are five selected examples of how MMR was used.

The necessity of data management in research is growing. White describes the integration of scientific data sets into repository collections as a continuing challenge. Using a mixed methods approach, White gathered basic quantitative and qualitative data about how 11 information professionals and 16 scientists organized data sets for personal and repository use. The results included comments from the study participants that elaborated on various data curation styles, preferences, and uses [2].

Asher et al. studied database use of researchers at Bucknell University and Illinois Wesleyan University. Using a mixed methods approach, qualitative and quantitative data were gathered on students' usage of Serial Solutions' Summon, EBSCO Discovery Service, Google Scholar, and other conventional library databases. Regardless of the search system, students exhibited a marked inability to effectively evaluate sources and a heavy reliance on default search settings. The results were used to make recommendations for libraries considering these tools [3].

Creaser et al. investigated the awareness of scholarly authors toward open access repositories and the factors that motivate their use of these repositories. They reported findings obtained from a mixed methods approach that involved a questionnaire returned by over 3,000 respondents and supplemented by four focus groups. Their research forms the first part of a longitudinal study that will track the changing behaviors and attitudes of authors toward open access repositories [4].

Torabi studied the prevalence of liaison work in academic library job advertisements and investigated whether current library and information



science students were aware of liaison duties. Mixed methods were used: an analysis of job postings and an online survey [5].

A mixed methods evaluation was also used by Fitzpatrick in her study of the preferences of reference librarians at the reference desk in an academic library's Learning Commons. Surveys, a focus group, and reference question transcriptions were analyzed to determine what library users preferred [6].

These are only samples of how MMR has been used in library and information research. Has MMR shaped library and information science research? Not much. In a 2008 study, Fidel analyzed 465 articles published in four major library and information science journals. The *Journal of the Medical Library Association* was not one of the journals analyzed, though. Only 22 articles (5%) used MMR. Yet none of the 22 articles referred to MMR by name. Some of the articles did mention that qualitative and quantitative methods were used [1].

MMR can be used to ensure value and quality of research study results. Awareness of MMR usefulness in library research might lead us to more applications in our studies. It is not needed for every study done and certainly not needed just to throw in a new method. But if a study is well thought out and designed to include MMR, it may lend more credibility to the research.

Books that offer more detailed information on MMR as a research method include:

- Axinn WG & Pearce LD. 2006. **Mixed Method Data Collection Strategies**. Cambridge, UK: Cambridge University Press.
- Brewer J & Hunter A. 2006. **Foundations of Multi-method Research: Synthesizing Styles**. Thousand Oaks, CA: Sage.
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# THE LONG REACH OF A MENTOR'S INFLUENCE

*The Research Mentor*

**Jonathan D. Eldredge, PhD**

In the next issue, we will return to the practicalities of conducting applied research. For this issue, I'd like to focus instead on the kind of mentor who makes a significant difference in the career of his or her protégé. During my career, I have had some wonderful mentors, other generally helpful mentors, and a few mentors who meant well, but who probably did more harm than good for my career.

This column will be presented in two parts. The first part describes in personal, and even sometimes sentimental, terms a long-term mentoring relationship. The second provides an analysis of the defining characteristics of such a special mentor.

## **A Special Mentor**

Greta Renborg (October 6, 1921-August 19, 2005) was my professor while I was on exchange for a semester from the University of Michigan's School of Information at the College of Librarianship Wales in Aberystwyth. The dean at Michigan had alerted me to this opportunity since, at the time, I intended to pursue a career overseas for the United States Information Service in a consulate or embassy. Greta was a visiting professor from Sweden teaching in Wales.

Those familiar with the guiding principles of higher education curricula know that "Active Learning" has become the most popular new approach to teaching [1]. Beloit College, where I received my undergraduate education, had pioneered active learning approaches. At that time, active learning was considered radical and controversial, although it felt natural and effective to me as a student. Professor Renborg's Swedish variation of democratic active learning immediately resonated with my own active learning approach to education. Greta expected fully engaged participation from her students. Even prior to our arrival in Wales, Greta already had assigned to her students a major project based on a library in our own country for us to complete. Once we were in Wales, we spent our time outside of class reading and busily preparing individual or group assignments that we worked on further during our face-to-face classroom time. Her course became my favorite course during my professional education.

Greta was such an inspiring professor that many of us found ourselves discussing the course content with her in groups outside of class. She had what we could call now a remarkably 21<sup>st</sup> century vision for our profession. Even during our tea times (we were in the UK, after all) the conversations continued. We sometimes would engage in hours-long discussions and even debates during our free time that included Greta if she happened to be passing by our group. When her husband Ulf (a professor as well) would visit from Sweden, he also sometimes would join our discussions. When students from the Caribbean or the Middle East would host parties featuring food and music from their countries, Greta would join in and even sometimes try to learn the dances of those countries.

The only clear photo that I have of Greta from my time in Wales appears as Figure 1. Two Dutch students and I joined Greta for a daylong road trip in her old Saab into the Welsh mountains northeast of Aberystwyth. Figure 2 includes others so the image of Greta is not as clear. At the farewell party at the end of the semester, Greta gave me a medicine bundle that she had received when visiting a tribe in Kenya. I still treasure this gift. When we all said our goodbyes, I seriously thought that I would never hear from Greta again. I was surprised, upon returning to the US a few weeks later, to find a letter waiting for me postmarked August 28, 1977 from Greta.



**Figure 1.**



**Figure 2.**

### **Correspondence**

Our conversations continued through our letters for many years. Until she died in 2005, Greta and I corresponded regularly. In many ways, the aforementioned letter set the tone for much of the subsequent correspondence. Previously, back in Wales, I had enjoyed the many discussions involving Greta because she was so brutally honest. I was not fully prepared for Greta's frank narratives about her conflicts with her colleagues, her career disappointments, or her unmet expectations for our profession that she continued to relate in that letter.

Greta and I corresponded for over two decades on a variety of subjects. Early in my career when I was involved heavily with the American Library Association (ALA), we discussed the politics and personalities of ALA, since she knew quite a few prominent individuals. When she had it to share, she gave me helpful advice. I had a number of challenges in my career, so Greta and I regularly discussed those "learning" experiences. She always sympathized with my frustrations. Early in my career, for example, I unexpectedly encountered sexual discrimination and even some instances of sexual harassment. Greta always had helpful advice and empathy for my circumstances.

Greta's advice was not limited to my career. When my first wife's health was declining rapidly, Greta wrote a sympathetic card that meant a lot to me, since I felt very isolated and emotionally overwhelmed. On the happier occasions of the births of my two children, Nicolas and Gabriela, she

sent cards with thoughtful personal messages. We always exchanged winter holiday cards. Her cards were usually accompanied by lengthy letters, whereas my holiday cards consisted of scribbled notes on photo greeting cards.

The correspondence now seems, in retrospect, to have been lopsided with my dashing off quick handwritten notes, while Greta's letters were much longer. Her letters were reflective of her deep thinking about issues. Greta began almost all of her letters with unusual greetings such as "My dear most unforgettable Jonathan" or some other phrase that did not quite translate to English from Swedish. After a number of years, I eventually began to notice that Greta sent me two types of letters: either (1) handwritten, less formal accounts; or (2) more formal, typewritten letters. What I did not realize until after her death was that Greta was making carbon copies of the typewritten letters. She was preserving and filing away that more formal correspondence.

### **Postscript**

Greta's devoted widower Ulf greeted me at the train station in Uppsala early on a June 2009 morning. The day before, I had given the opening keynote speech for the 5<sup>th</sup> International Evidence Based Library and Information Practice Conference (EBLIP5) in Stockholm [2]. I had never made it to Sweden before Greta died, so the train trip to Uppsala that morning filled me with a sense of melancholy.

Ulf took me immediately to the archive at Uppsala University. There, the archivists showed us the Greta Renborg archive consisting of many boxes of files. I asked if she had kept any of my correspondence. After a few moments of searching, they presented me with a box that contained my correspondence to Greta. The box included carbon copies of her typewritten letters to me. Greta seemed to have excluded the more personal correspondence between us, particularly those involving career problems or life crises. I looked over the box full of an adult lifetime of correspondence, and I gradually felt sad.

The archivist possibly sensed my sadness and asked me if looking over the contents reminded me of my own mortality. I thought about his question for a long seven or eight seconds. "No..." I slowly



replied, "It makes me feel sad that I was not a better correspondent. She wrote such thought-provoking and authentic letters, whereas I often jotted just quick and superficial notes to her." I told the archivists that I still had many of the originals of the typewritten letters for which they had only copies and promised to send them the originals.

Ulf treated me to a memorable stay in Uppsala. We visited a former Viking settlement, wandered the streets of this beautiful university town, ate reindeer meat in a restaurant, and spent a lot of time hanging out at his house as depicted in Figure 3. He had preserved Greta's study much as it had been while she was alive. At about 11:00 pm, with the light fading in the Swedish sky, I gave Ulf a heartfelt hug and hopped on the train back to Stockholm. It had been a much happier visit than expected. I started to conduct a mental inventory of the many files where I had stowed away Greta's letters.

It took me four years to assemble Greta's letters. They were distributed across an entire career of files, most of them in boxes kept in storage and at my parents' house. During June 2013, I had an opportunity to return to Sweden to give the keynote speech at the European Association of Health Information and Libraries (EAHIL) workshops conference [3]. I arranged with the chief conference organizer, Anna Kågedal, for her to deliver the letters to the Uppsala University archive following EAHIL 2013. Ulf had died earlier that year, so it turned out that my hurried late-night farewell at the train platform four years before meant that I never saw Ulf again.



**Figure 3.**

## **Greta's Contributions to Our Profession**

Greta Renborg's bibliography consists of over 900 items [4]. She was a passionate advocate for libraries. We never conducted a research project together, perhaps because of the geographic distance and the differences between how our different societies interacted with library and information practitioners. It also took me years to understand one of Greta's core principles about human-to-human interactions [5]. Toward the end of her life, I discussed at length with Greta an idea of mine for a co-authored article on the application of the related education concept of social presence using technology, but her failing health prevented us from pursuing the research project.

Greta Renborg was a giant in our profession in Europe [6-7], while she was only a peripheral figure in the US. She began her career as a health sciences librarian, but quickly became enamored with public libraries. When she became an academic, her research interests focused almost exclusively upon public libraries. Only a small fraction of her publishing output was published in the English language, which might explain her not becoming better known in the US. Her English-language articles on the development of marketing [8] and outcome measures [9] are still accessible readings to US readers. Academic health sciences librarians might enjoy her essay on research libraries [10], whereas her article on applied research in our profession [11], which vaguely anticipates Evidence Based Library and Information Practice (EBLIP), will resonate with many *Hypothesis* readers.

## **What Makes a Mentor Special?**

### **Lessons Learned about Mentoring**

Johnson defines a mentor as one who "provides the protégé with knowledge, advice, counsel, challenge, and support in the protégé's pursuit of becoming a full member of a particular profession" [12]. Godshalk and Sosik acknowledge this aspect and expand this definition to include "an intense, sometimes intimate, professional relationship devoted to providing social support and development for the protégé's career" [13]. My relationship with Greta more closely resembled this second definition. There are at least four (4)

elements that contributed to my special mentoring relationship with Greta Renborg:

- The Importance of Relationship
- Mentor's Unwavering Belief in the Protégé
- A Mentor's Initiative
- It Cannot be Formalized Easily

### ***The Importance of Relationship***

Traditional mentoring relationships are hierarchal with the mentor having vastly more experience, knowledge, or skills than the protégé. Less traditional mentoring relationships might involve a mentor bringing a narrowly defined skill set to the relationship whereas the mentor and protégé are more equal in other regards. Peer mentoring occurs frequently among colleagues who are further along in their careers and who are more or less equals. Virtual Peer Mentoring represents a 21<sup>st</sup> century twist to peer mentoring [14].

My unique mentoring relationship with Greta was neither purely a professional nor a personal friendship. Greta and I began our relationship reflecting a more traditional professional mentoring framework. We actually did not call it a "mentoring" relationship because the contemporary vocabulary for and conceptual understanding of mentoring did not yet exist. She was my former professor and I was her former student in our understanding of the relationship. Over time, it became a far more equal relationship.

While it was "intimate," it never could be described as a "romantic" relationship. I simply never felt romantically toward her, although some famous mentor-protégé relationships have included romantic dimensions. Greta impressed me when she was my professor in Wales for her utmost authenticity and spontaneity. She continued to be very earnest with me from her first letter onward until the year she died. It amuses me now, in retrospect, to recall that my girlfriend at Michigan was jealous of my relationship with Greta after my return to Ann Arbor. My girlfriend obviously sensed the special quality of this friendship and once called Greta my "Swedish girlfriend" even though Greta was more than twice my age. At the time, it was a challenge to convince my girlfriend that it was just a special friendship that I had with Greta.

Greta and I certainly had disagreements and

tensions in our relationship. Early in the relationship Greta and Ulf wanted for me to take a leave of absence to live with them while I worked in Uppsala. This plan seemed impossible given the conventions of academic professional employment in the US at that time. One time I wrote a formal letter to Greta on stationary that outlined some ideas I had for a formal collaboration. Greta was very hurt by the formality of the letter until I explained the US etiquette surrounding such communications. Toward the end of her life, Greta and I disagreed again on the place of professionals' use of social presence in their advocacy communications.

### ***Mentor's Unwavering Belief in the Protégé***

Until the day she died in 2005, Greta believed in my potential in our profession far more than any belief I had in my own potential. She told me on a number of occasions that I was one of the best two or three students that she had ever had during her career. Deep in my heart I did not believe her. During my first year at Michigan, an alumna gave a speech to the students, faculty, and a few alumni. To paraphrase a line that she directed toward the Michigan faculty in her speech, she stated, "Thank you for believing in me long before I began to believe in myself." I remember feeling at the time that she was relating something profound that I might someday understand. Greta made me understand that feeling after many years of our mentoring relationship. Greta believed in me despite the personal or professional crises in my life. She never wavered and instead encouraged me at every turn. When I faced an existential career threat in the form of an effort to thwart my faculty tenure process, Greta supported me and urged me to not give up. She was correct, as I eventually did become tenured in the University of New Mexico (UNM) School of Medicine.

### ***More Likely to Take the Initiative***

Greta continued our relationship following my exchange program with her lengthy and disclosing letter. I seriously doubt that I would have ever thought to write her if she had not taken the initiative first. When I reviewed the many files of correspondence in the Uppsala University archive, and later as I looked over the many pieces of mail in my own possession not included in that archive, I was struck by the unequal effort expended by Greta



and me to the relationship. Until far later in her life, Greta almost always poured more effort and thought into her communications than I normally dedicated to my own communications with her. Greta continuously took the initiative.

### ***It Cannot be Formalized Easily***

I feel grateful that the University of New Mexico celebrates the importance of mentoring in career development. Each year UNM sponsors a national conference on mentoring through its Mentoring Institute [15]. The UNM School of Medicine has codified mentoring through its promotion policies as a recognized contribution made by senior faculty members to facilitate the success of junior faculty members [16]. Over the years, I have mentored several junior faculty members. I think that these formal arrangements have been productive mentoring relationships. That said, they did not begin to approach the intensity or emotional supportiveness of my long-term status as Greta's protégé. These experiences lead me now to suggest that while formal mentoring programs might always hold out the potential for fostering such a special mentorship, formal programs cannot assure the likelihood of such unique and satisfying mentorships.

Greta's greatest gift might be that I am now dedicated to serving as a mentor to others in a variety of capacities. Most of my mentoring nowadays revolves around teaching or conducting research. This regular column, "The Research Mentor," in *Hypothesis* represents yet another form of passing along Greta's dedication to our profession to the next generation.

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# THE 2011-2013 DISSERTATION AND THESIS ROUND-UP

Ellen Detlefsen, DLS

What follows is a list of doctoral dissertations and master's theses on topics presumed to be of interest to health sciences librarians and medical information professionals; this set of 150-plus papers represents work completed between October 2011 and December 2013. The last such list appeared in *Hypothesis* in the Winter 2012 issue [1]. These papers were identified through a search of the *PQDT (ProQuest Dissertation & Theses)* database [2] and a regular scan of the medical and library literature. The searches were made using truncated forms of the key words "librar" and "informa" and "medic" and "healt" and "behav" in various combinations. The papers were done by both doctoral scholars (primarily individuals earning PhD, EdD, and DNP degrees) and master's degree recipients (primarily those earning MLIS, MSIS, MPH, and MSW degrees). The new 'Dissertations into practice' series in *Health Information and Libraries Journal* [3], begun in June 2012, yielded information on seven dissertations and theses from colleagues in the UK; these papers are identified with an \* and the citations include the MEDLINE PMIDs for the articles reporting the research.

The topics range widely: among my personal favorites are papers on the impact of cyberchondria on doctor-patient communication; on crowdsourcing health information; on telehealth usage in First Nations communities; on a digital reminiscing system for older adults; on nutritional informatics and mining supermarket sales data; on life information in seventeenth-century Englishwomen's household manuals; on the use of fiction in the young adult drug curriculum; and on classifying paraphilias and sexual deviance at the Library of Congress.

To obtain copies of any of the papers, or to read the abstract for any item, search the *PDQT* database with the LAST NAME of the researcher, in order to access the abstract and link to a PDF of the thesis or dissertation.

By far the largest number of theses and dissertations are studies on issues related to consumer and patient information practice and behaviors. A smaller set of papers reports research on the information practices of health professionals and health professions students. Other groups of

papers focus on informatics and topics in technology, and on information resources. As in the past, much of this work has been done in universities, schools, and departments that do not have Library and Information Science programs or iSchools.

The sorting and organizing of the list is entirely and arbitrarily mine, as are the choices of broad topic areas into which these papers have been placed. The order within any topic cluster is alphabetical by author surname.

## **Studies on the General Information Behaviors/Practices of Adult Health Consumers**

Allen Catellier, J. R. 2012. Understanding the effects of emotion on information seeking and health behaviors: Improving communication to promote healthy lifestyles. State University of New York at Buffalo.

Bissonnette, A. 2012. Depression and herbal medicines: Seeking the cure on the Internet. Southern Connecticut State University.

Bourgoin, A. 2013. The use of the internet for alternative views on health. University of Pennsylvania.

Briones, R. L. 2013. Examining the Get Yourself Tested campaign: How online information seeking and sexual health perceptions influence efficacy and communicative action. University of Maryland, College Park.

Chee, B. W. K. 2011. Exploring machine learning techniques using patient interactions in online health forums to classify drug safety. University of Illinois at Urbana-Champaign.

Como, J. M. 2013. Health literacy and self-efficacy: Impact on medication adherence and health outcomes in urban cardiology practices. Teachers College, Columbia University.

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Yi, Y. J. 2012. Consumer health information behavior in public libraries: A mixed methods study. The Florida State University.

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### ***Communities Experiencing Health Disparities***

Earl, A. N. 2012. Health disparities and attention to health information by disenfranchised groups. University of Illinois at Urbana-Champaign.

Huntington, S. J. 2012. "Roadblocks, stop signs": Health literacy, education and communication at a free medical clinic. Syracuse University.

Moore, S. L. 2013. Consumer health informatics and the medically underserved: The role of information technology in health information access and health communication in the United States. University of Colorado at Denver.

Rikard, R. V. 2013. Looking upstream, downstream, and between: Examining health literacy in the stream of health disparities research. North Carolina State University.

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Alsip, M. K. 2011. Is television the new stimulant drug? Physiological responses to video clips in participants with Attention-Deficit/Hyperactivity Disorder. The University of Alabama.

Daraz, L. 2011. Information availability and needs of people living with fibromyalgia. McMaster University (Canada).

Milewski, J. 2012. An interactive health technology for type-2 diabetes self-maintenance. University of California, Irvine.

Rayhanabad, J. J. 2012. Information-seeking and

coping behaviors of patients having elective hernia surgery. Alliant International University.

Tan, A. S. L. 2013. Cancer-related direct-to-consumer advertising—A study of its antecedents, influence on patient information seeking behaviors, and contingent effects. University of Pennsylvania.

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Zhang, C. 2013. The effects of narrative exemplars and fear appeals on promoting preventive skin cancer behaviors. The University of Alabama.

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Ferguson, R. D. 2012. Crowdsourcing health information: An ethnographic exploration of public and private health information on PatientsLikeMe.com. York University (Canada).

Forsman, C. A. 2011. When a patient leaves the clinical environment: Technology and chronic illness in HCI literature. University of California, Irvine.

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Souden, M. L. 2011. Narrowing the gap: Chronic illness information as experienced in everyday life and healthcare contexts. University of Michigan.

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Allen, S. 2013. Development and validation of a survey instrument to assess health information-seeking behaviors among African American young professionals. The University of Alabama at Birmingham.

Baguso, G. N. 2013. Information seeking in Asians-Pacific Islanders with HIV/AIDS. University of California, San Francisco.

Chandler, C. C. M. 2013. Knowledge and

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Connolly, K. K. 2013. The digital divide and health outcomes: A teleretinal imaging study. University of Hawai'i at Manoa.

Kim, W. 2013. The role of social support and social networks in health information seeking behavior among Korean Americans. George Mason University.

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Sanchez Brana, E. 2011. Sources of information and HIV/AIDS in minority communities of Broward County. University of Miami.

Shanklin-Flowers, L. G. 2012. The self-care perceptions and practices of contemporary black women leaders. Cardinal Stretch University.

Watson, A. M. C. 2013. Alzheimer's disease literacy in the African American community. North Carolina Agricultural and Technical State University.

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Brobst, J. L. 2012. United States federal health care websites: A multimethod evaluation of website accessibility for individuals with disabilities. The Florida State University.

Copeland, C. A. 2012. Equity of access to information: A comparative exploration of library accessibility and information access from differently-able patrons' perspectives. University of South Carolina.

Hanson-Baldauf, D. 2013. Exploring the everyday life information needs, practices, and challenges of emerging adults with intellectual disabilities. The University of North Carolina at Chapel Hill.



Hughes, J. L. 2012. Implementation of disability compliance for patron services in post-secondary education libraries. University of California, Los Angeles.

### **The Aging Community**

Berkowsky, R. W. 2012. Internet use, social integration, and psychological well-being in older adults. The University of Alabama at Birmingham.

Depatie, A. 2013. Rural older adult readiness to adopt mobile health technology: A descriptive study. University of California, Davis.

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Smith, S. T. 2013. The online social networking experiences of older individuals: A phenomenological study. Capella University.

Thiry, E. A. 2013. Scenario-based design of a digital reminiscing system for older adults. The Pennsylvania State University.

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Hawkins, L. A. 2013. Health literacy, cognitive impairment, and medication adherence in veterans with heart failure. University of San Diego.

McCaster, J. 2012. Connect A Vet: Extended services program for reentry of veterans into society. California State University, Long Beach.

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Fresques, A. D. 2013. Nutrition information in a high school cafeteria: The effect of point of purchase nutrition information during lunch in grades 9-12. Arizona State University.

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Pan, X. 2012. The role of tasks in the internet health information searching of Chinese graduate students. University of North Texas.

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Das, A. 2013. Information-seeking among pregnant women: A mixed method approach. The Florida State University.

Marton, C. 2011. Understanding how women seek health information on the web. University of Toronto (Canada).

Rodriguez-Barrera, A. 2011. The effect of prenatal education regarding delivery choices on the incidence of cesarean sections. Weill Medical College of Cornell University.

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Weissman, P. L. 2013. Where does news about prescription drugs come from? Exploring how organizations built and framed the national news media agenda for hormone therapy from 1995 to 2011. University of Maryland, College Park.

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### **Nurses**

Belcik, K. D. 2011. Information literacy competencies of registered nurses at magnet hospitals. The University of Texas at Austin.

Branchini, A. Z. 2012. Leadership of the pioneers of nursing informatics: A multiple case study analysis. University of Connecticut.

Ferrara-Love, R. 2013. Does Facebook have a role in helping "high-risk" nursing students in a diploma program? A pilot study. Carlow University.

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Jackson, A. S. 2013. Impact of electronic health records on nurses' information seeking and discriminating skills for critical thinking. Capella University.

Kleib, M. 2012. Integration of health informatics in baccalaureate nursing education: Effectiveness of face-to-face vs. online teaching methods. University of Alberta (Canada).

Lalley, C. 2013. A narrative study of nurses' interactions when using health information technology. Arizona State University.

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Ellington, V. B. E. 2012. Defining the eHealth information niche in the family physician/patient examination and knowledge transfer process. The University of North Carolina at Chapel Hill.

Frazier, A. P. 2012. An evaluation of physician-to-patient communication training in medical schools across the United States: A status report on the nation's efforts to promote health literacy by adding health literacy courses to medical school curriculum. Lindenwood University.

Gurdin, B. N. 2012. From visit to visit: Information needs of primary care physicians providing continuity of care. University of California, Irvine.

Reich, L. J. 2011. On or off the record: The physician experience of the transition to electronic health record. University of California, Irvine.

Robinson, R. B. 2011. A prescription for change: Physicians' perceptions of moving to an electronic health record. University of Pennsylvania.

Shneyderman, Y. 2012. The internet-informed patient and cancer screening adherence: The role of patient-physician communication. University of Miami.

Turkiewicz, K. L. 2012. The impact of cyberchondria on doctor-patient communication. The University of Wisconsin - Milwaukee.

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Fouladi, N. 2012. Translating knowledge into action: Information needs of decision-makers in healthcare. The University of Texas School of Public Health.

Garcia, E. P. 2012. Information seeking behaviors of the school social worker: What is the librarian's role

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Iyer, A. K. 2011. Drug information-seeking behavior among healthcare professionals within the University of Utah community clinics. The University of Utah.

Ruan, L. J. 2011. Information-seeking and sharing behaviors among fire service field staff instructors: A qualitative study. University of Illinois at Urbana-Champaign.

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Abaluck, J. 2011. Information, decision-making and health. Massachusetts Institute of Technology.

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Berg, K. A. 2011. Health management in the age of the internet. University of Toronto (Canada).

Brinkerhoff, K. M. 2012. Nutritional informatics: Mining supermarket sales data as a nutritional assessment method. The University of Utah.

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Khamisani, A. 2012. Assessing demand for health informatics education in Karachi, Pakistan. University of Victoria (Canada).

Lan, L. 2012. Data mining algorithms for classification of complex biomedical data. Temple University.

Lopez-Gutierrez, L. 2013. A figure-based system for extracting, archiving, and retrieving protein-protein

interactions (PPIS) from biomedical literature. University of Delaware.

Malbasa, V. 2011. Disease mapping on a moving population. Temple University.

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Ngafeeson, M. N. 2013. Understanding user resistance to information technology: Toward a comprehensive model in health information technology. The University of Texas - Pan American.

Shi, J. 2013. The conceptual extension of clinical reasoning models in clinical narrative visualization. University of California, Irvine.

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Goldstein, I. 2011. Automated classification of the narrative of medical reports using natural language processing. State University of New York at Albany.

Liu, L. S. 2011. Challenges to the use of collaborative electronic health records. University of California, Irvine.

Lloyd-Fitzgerald, J. 2012. Improving guideline adherence: Embedding clinical decision support

within the electronic health record. University of Virginia.

Natarajan, K. 2012. Analysis of search on clinical narrative within the EHR. Columbia University.

Smith, M. A. 2013. Implementation of electronic medical records in a rural healthcare setting. State University of New York at Binghamton.

Taha, J. 2012. The effects of age, cognition, and health numeracy on use of a patient portal of an electronic medical record (EMR). University of Miami.

Tannan, R. 2012. Acceptance and usage of electronic health record systems in small medical practices. Walden University.

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Aaltonen, P. M. 2013. Use of local health department websites: A study of e-government adoption and diffusion. Purdue University.

Adler, M. A. 2012. For sexual perversion see paraphilias: Disciplining sexual deviance at the Library of Congress. The University of Wisconsin – Madison.

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Kowalchuk, K. 2012. Recipes for life: Seventeenth-century Englishwomen's household manuals. University of Alberta (Canada).

Mages, K. C. 2011. Identity from the shelves: Nurses, libraries, and the Bellevue classification system, 1934-1969. University of Pennsylvania.

Reynolds, C. 2012. A content analysis of sex

articles in women's and men's lifestyle and health magazines. University of Missouri - Columbia.

Sharp, M. E. 2011. Dimensions of drug information. Rutgers, The State University of New Jersey - New Brunswick.

Svensson, P. A. 2013. Enhancing biomedical terminologies to include behavioral health: A prerequisite to improving the quality of healthcare. University of Minnesota.

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Flaherty, M. G. 2013. The public library as health information resource? Syracuse University.

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Hernandez, M. A. 2013. An interactive iterative method for electronic searching of large literature databases. Pace University.

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Philbrick, J. L. 2012. A study of the competencies needed of entry-level academic health sciences librarians. University of North Texas.

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-- **Ellen Detlefsen, DLS**. Ellen is a tenured faculty member in the School of Information Sciences at the University of Pittsburgh, with a joint appointment in the Department of Bio-medical Informatics in the School of Medicine. Her column, "Dissertation & Thesis Round-Up," is a regular feature of *Hypothesis*.



# MLA RESEARCH SECTION NEWS

## SECTION CHAIR'S COLUMN

**Terrie R. Wheeler, AMLS**

*MLA Research Section Chair, 2013-2014*

Spring is my favorite time of year. On the National Institutes of Health (NIH) campus, we are greeted with crocuses and daffodils swaying gently in the spring breeze, as well as flowering crabapple trees—in the southeast corner of the campus. The NIH Clinical Center gardens and the National Library of Medicine's herb garden burst with new color and aroma. At the tidal basin in downtown DC, the cherry blossoms are in their finest bloom. The perennials I planted in years past spring forth with fresh scent and bright color, reminding me of the genesis of each plant. As an avid gardener, my garden is ready for the new seedlings that I start over the winter under indoor lights. The labor of the winter blossoms at springtime.

Likewise the labor of the MLA Research Section is appropriately recognized this spring, as we prepare to gather for our annual meeting next month. Like perennial plants, some initiatives are ongoing, producing renewed efforts worthy of recognition, while others are new initiatives, similar to newly planted annuals.

The MLA Meeting Poster and Paper Awards program is one way we identify MLA researchers who may wish to engage with our section—for 2013, six of the nine first authors whose posters or papers won awards were not already Research Section members. Of those six, two had dropped their MLA memberships; the remaining four received free one-year memberships to the section. Beatriz Varman, Membership Committee Chair, sent these new memberships.

Brooke Billman, Web Site Editor, is taking the lead in moving the Research Section web site to WordPress. To do this, she is first reviewing current pages and eliminating old or duplicate pages. Once she has gone through all the pages, she will migrate the current ones to WordPress. After that time, she will be looking for one or two volunteers to assist her with web site usability testing to ensure that the new site is functional and easy to navigate. If you would

be willing to assist with this effort, please let me or Brooke know!

Under Co-Editors Diane Cooper and Deidra Woodson's direction, this was a transition year for the *Hypothesis*. Most work this year went into strategic planning for a new type of publication. Although the *Hypothesis* has grown into a professional journal within the Research Section, it remains undiscovered beyond the realm of MLA. The *Hypothesis* team wants to change this. This year, they worked on a renewed scope with new submission requirements along with an official peer review process. Articles will now focus on some aspect of research methodology, whether the author's intent is to educate or to analyze his or her original research. Educational articles will encompass research methods, statistical designs, and data analyses. Authors are encouraged to discuss theory and the practical application of their work. In addition to traditional instruction in research, other types of beneficial articles, such as reviews of statistical software packages, advice about grant writing, and the ethics of social and behavioral research on humans, are invited. The issue of *Hypothesis* you are reading is the first with the new scope.

Aileen McCrillis and Sandy DeGroot, Awards Committee Co-Chairs, along with the Awards Committee, finalized and posted criteria for the Best Biennial *JMLA* Research Paper: <http://research.mlanet.org/awards/RSawardbestJMLApaper.pdf>. The first award will be given in 2014 based on papers published in the *Journal of the Medical Library Association (JMLA)* from 2012-2013. Judging for the first Best Biennial *JMLA* Research Paper, as well as for the MLA Meeting Paper and Poster Awards, is underway. The Research Section will announce award winners in the summer issue of *Hypothesis*. Coordinating judges for all the papers and posters meeting research criteria is a massive job, and I'd like to extend my personal thanks to Sandy and

Aileen and their army of volunteers for another successful year. If you are a judge, please plan to meet them to review criteria for judging on Sunday morning at MLA '14. Bring your coffee!

Beatriz Varman redesigned the Research Section's welcome letter and sent it out to 29 new section members. Beatriz also sent a basic interview questionnaire to 40 Research Section members who joined in 2013 as a way to engage members in the section. Two responses were received. Beatriz' efforts have enhanced Research Section communications with our new members.

Susan Lessick, Strategic Planning Committee Chair and Mentoring Coordinator, reports that the Strategic Planning Committee is in the final stages of preparing the strategic planning survey results for publication. This was a complex effort, but should be submitted for publication by the end of May. Many strategic planning efforts have been adopted into the objectives of the MLA Research Task Force.

Beatriz Varman addressed the strategic planning objective for recruitment and retention, as described in the paragraph above. Sandy and Aileen have continued to improve the process for research-designated papers/presentations to be identified and judged at the MLA annual meeting.

Susan Lessick further reports that informal mentee/mentor matching continues to take place. Three members contacted her in her capacity as the Research Section's Mentoring Coordinator this past year seeking more information about the mentorship program. More formal mentoring efforts proposed to MLA will be considered by the MLA Research Task Force appointed in Summer 2013. These efforts include: 1) working with MLA headquarters to enhance information related to research mentoring, 2) updating the 'research expertise areas' on the MLA mentor website, 3) expanding the recruitment of mentors, and 4) adding research mentor as a distinct option with guidelines and rewards that can be used to encourage MLA's Medical Library Education Section and Association for Library and Information Science Education members to serve as research mentors.

Under the leadership of Jonathan Eldredge, the Research Agenda Committee developed a plan for teams of librarian researchers to conduct systematic

reviews on 15 top-ranked research questions produced by the Delphi study published in *JMLA* in July 2012. Over 200 volunteers, including librarians from Australia, Canada, and the UK, responded. The 15 chairs of the teams have been appointed. The Committee will provide minimal oversight and recommends use of existing widely-accepted guidelines. Teams will refine their respective research questions and conduct literature reviews and critical appraisals. Each team will publish its systematic review in the peer-reviewed literature.

Jonathan Eldredge presented on the Research Agenda systematic review project at the 7<sup>th</sup> International Evidence Based Library and Information Practice (EBLIP7) Conference, July 15-18, 2013, in Saskatoon, Saskatchewan, Canada. He represented the Research Section on the Programme Committee for this conference; the full program is available at: [http://eblip7.library.usask.ca/-program/at\\_a\\_glance](http://eblip7.library.usask.ca/-program/at_a_glance). The Research Section provided \$500 in financial support for the EBLIP7 conference.

Kris Alpi, Immediate Past Chair, and others on the Research Section Executive Committee oversaw an effort early in the year to nominate the MLA Research Agenda Project for MLA's Section Project of the Year Award. While our project was not selected this year, this is a worthy effort for future consideration.

Looking forward to our MLA '14 section programming, Merle Rosenzweig has lined up some excellent programming that you will not want to miss! The Research Section will be lead sponsor on a program entitled *Systematic Review: The Librarian's Role*. The co-sponsor is the Informationist SIG. The program description follows:

Cochrane defines a systematic review as one that "attempts to identify, appraise and synthesize all the empirical evidence that meets pre-specified eligibility criteria to answer a given research question. Researchers conducting systematic reviews use explicit methods aimed at minimizing bias, in order to produce more reliable findings that can be used to inform decision making." As librarians with skills in searching, organizing, and analyzing information, we can play a vital role in the systematic review process. We invite contributed

papers describing experiences with supporting and conducting systematic reviews, increasing awareness of systematic reviews, and enhancing library involvement and collaboration.

The Research Section will also be co-sponsoring a program with the Cancer Librarians Section titled *Research Survey Design for Librarians*. This program is a panel discussion to address survey design and ways to create a survey that is credible and suitable for publication. Members of the panel are:

- Jodi Philbrick, Course Coordinator, Health Informatics Program, University of North Texas Department of Library and Information Sciences
- Jonathan Eldredge, Associate Professor, School of Medicine Health Sciences Library and Informatics Center Evidence Based Practice and Translational Sciences Collaboration Coordinator, Associate Professor of Family and Community Medicine, University of New Mexico
- Joanne Gard Marshall, Alumni Distinguished Professor, School of Information and Library Science, University of North Carolina–Chapel Hill

The many members and committees of the Research Section have been very active this year, and like the flowers that bloom in the spring, we can see their efforts in this column. As there is not a lot of garden space in New York City, my new position may require me to put my green thumb on hold. However, there will always be opportunities to cultivate meaningful research, or to aid colleagues in growing their research skills. Consider the Research Section a place where you may sow some seeds of effort and see the return for your labor benefit the section and the profession!



-- **Terrie R. Wheeler, AMLS** is the Director of the Samuel J. Wood Library and C.V. Starr Biomedical Information Center, Weill Cornell Medical College. She is the *MLA Research Section Chair, 2013-2014*.



# RESEARCH SECTION PROGRAMS

## *MEDICAL LIBRARY ASSOCIATION 2014 ANNUAL MEETING, CHICAGO, IL*

Coordinated by Merle Rosenzweig, Chair-elect, the Research Section is sponsoring two outstanding programs at MLA '14 in Chicago.

On Monday, May 19<sup>th</sup> from 2-3:25 pm, there will be a panel discussion titled **Research Survey Design for Librarians**. Three panel members will present on the following topics and lead a discussion on ways to create surveys that are credible and suitable for publication.

- ◆ *Planning for Effective Survey Design*

Jodi Philbrick, Course Coordinator, Health Informatics Program, University of North Texas Department of Library and Information Sciences

- ◆ *Managing Bias in Survey Research*

Jonathan Eldredge, Associate Professor, School of Medicine Health Sciences Library and Informatics Center Evidence Based Practice and Translational Sciences Collaboration Coordinator, Associate Professor of Family and Community Medicine, University of New Mexico

- ◆ *The Value Study: An Example of Community-Based Collaborative Survey Design*

Joanne Gard Marshall, Alumni Distinguished Professor, School of Information and Library Science, University of North Carolina–Chapel Hill

On Tuesday, May 20<sup>th</sup> from 2-3:25 pm, the Research Section is sponsoring **Systematic Review: The Librarian's Role**, featuring four outstanding paper presentations.

- ◆ *Evaluating the Usability of Systematic Review Software Tools*
- ◆ *Reproducibility of Systematic Review Strategies in Cardiology, Surgery, and Pediatrics Journals*
- ◆ *A Pipeline of Informatics Tools to Accelerate the Writing of Systematic Reviews*
- ◆ *Flipping the Classroom: Developing and Piloting a Successful Systematic Review Course for Librarians Utilizing Online and In-Person Instruction*

Please join the Research Section for these two programs if you are attending MLA '14 in Chicago.

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## ERRATUM

In the Summer 2013 issue of *Hypothesis* (Volume 25, Issue 1), Tara Brigham, MLS, Librarian, Mayo Clinic, Jacksonville, FL, was omitted as the 4<sup>th</sup> author of the 1<sup>st</sup> place winning contributed paper at the MLA Annual Meeting 2013 in Boston. The winning paper was “*Systematic Review Reporting Quality in General Medical Journals: The Influence of Librarian Authorship*.” The authors are Melissa Rethlefsen, Ann Farrell, Leah C. Osterhaus Trzaskao, and Tara Brigham.

*HYPOTHESIS* (ISSN 1093-5665) is the official journal of the Research Section of the Medical Library Association. Published since 1987, all issues are available online at <http://research.mlanet.org/hypothesis.html>.

