# **Gabriel M. Peterson**

Assistant Professor

North Carolina Central University School of Library and Information Science Shepard Library 1801 Fayetteville Street, Durham, NC 27707 Durham, North Carolina 27511 United States

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## **Education:**

Ph.D., University of Missouri-Columbia, University of Missouri-Columbia, Information Science, 2006
M.S., University of Texas at San Antonio, University of Texas at San Antonio, Biotechnology, 1999
B.S., New Mexico State University, New Mexico State University, Biochemistry, 1995
B.A., New Mexico State University, New Mexico State University, Chemistry, 1995
B.A., New Mexico State University, New Mexico State University, Spanish, 1995

#### **Professional Experience:**

North Carolina Central University, School of Library and Information Science, Assistant Professor Appointed: 2007-present 2006-2007, Research Assistant, University of Missouri-Columbia, Medicine, School of, Health Science Library, Information Services 2004-2005, Graduate Research Assistant, University of Missouri-Columbia, Information Science & Learning Technologies 2000-2004, National Library of Medicine Pre-doctoral Fellow, University of Missouri-Columbia, Information Science and Learning Technologies 1999-2000, Research Specialist, University of Missouri-Columbia, Agriculture 1996-1999, Teaching Assistant, University of Texas at San Antonio

## **Current Position:**

I am an assistant professor in the School of Library and Information Science at North Carolina Central University in Durham, NC.

## **Current Research Projects:**

I am currently involved with a number of research projects focused on information retrieval & use in the area of the health sciences & biomedical literature. Specifically, my research focuses on the information behaviors and needs of underserved populations. Other areas of research include studies of the integrity of scholarly literature and the growing role of open access practices in scientific communications, and information policy.

## **Previous Research Experience:**

During my time at NCCU I have been involved in research in numerous areas of Library & Information Science. These projects have explored problems from an array of topics in the fields of

information science and informatics, including studies regarding e-health literacy, user information needs & behavior, informatics, and academic communication.

## **Doctoral Research:**

#### Title:

The effect of correction and republication in the biomedical literature - a bibliometric analysis Published in: J Med Libr Assoc. 2010 Apr;98(2):135-9

**Description:** My doctoral work was an evaluation of the effectiveness of the phenomenon of correction and republication in the biomedical literature by measuring the extent to which republications replace original articles as a source for citing authors. The research does so by evaluating bibliographic information for indicators of user awareness of post-publication changes to the biomedical literature.

#### **Presentations:**

2005 ALISE Annual Conference The effect of correction and republication in the biomedical literature - a bibliometric analysis Doctoral Student Poster Session- Honorable mention

## **Funding Received:**

2010 - North Carolina Central University Office of International Affairs: A comparative eHealth needs and literacy assessment for under-served populations in North Carolina and Puerto Rico, \$5000

National Library of Medicine: BHIRT Fellowship, \$30,000/annum, from Aug 1, 2000 to Jul 31, 2004

## **Publications:**

- Peterson (2012) Book Review: The Global Flow of Information Legal, Social and Cultural Perspectives. Published in: JASIST, 63(4):843-844, 2012
- Peterson (2011) Information Policy Chapter #7 In Shaw (eds), Introduction to Information Science and Technology - First Edition, ISBN-10: 157387423X, Pub: Information Today, Inc. (August 29, 2011)
- Peterson (2010) The Effectiveness of Correction and Republication on the Biomedical Literature, Journal of the Medical Library Association, Published in: J Med Libr Assoc. 2010 Apr;98(2):135-9
- D. Swain, G Peterson, L. Smith-Romocki (2008) Disseminating National Library of Medicine Knowledge into Communities: Fighting Health Disparities, American Library Association, American Library Association, American Library Association
- S. Erdelez, G. M. Peterson, M. E. Sievert, and J. W. Hale, An Exploratory Study of the Characteristics of User Studies of the Electronic Medical Record, Medinfo 2004 POSTER, , 8 Aug 2004
- Gabriel M. Peterson MS, J. Wade Davis, K Su, An examination of term evolution upon natural language as a query formation tool for retrieving e-health information on Medline, B/ITE Bulletin of the Special Libraries Association, 21(Jan/Feb 2004), January 2004
- Su KC, Sievert ME, Peterson GM, Searching PubMed to Examine the Effectiveness of Retrieving Relevant Information about Electronic Healthcare/Health Care, Proceedings of Annual Conference of the Medical Library Association, May 2001

- Ries J, Su KC, Peterson GM, Sievert ME, Patrick TB, Moxley DE., Frequency of Content-Bearing Words in Abstracts and Texts in Articles from Four Medical Journals, MEDINFO 2001, 2001
- Su K, Ries JE, Peterson GM, Sievert MC, Patrick TB, Moxley DE, Ries LD, Comparing Frequency of Content Bearing Words in Abstracts and Texts in Articles from Four Medical Journals Using Two Stop Word Lists, AMIA 2001 Fall Conference Proceedings, , 2001
- Gabriel M. Peterson MS, Kuichun Su, MLIS James E. Ries, MS Mary Ellen C. Sievert, PhD, An examination of natural language as a query formation tool for retrieving information on e-health from Pub Med, ASIST 2002 Proceedings(39:):214-219
- Sanda Erdelez PhD, Gabriel Peterson MS, Mary Ellen Sievert PhD, The Characteristics of Electronic Medical Records (EMR) User Studies: An Exploratory Review. Accepted for presentation to MEDINFO 2004
- Sievert, MaryEllen, Budd, John M., Peterson, Gabriel, Su, K, Effects of Published Erratum on Subsequent Publications, 4th International Congress on Peer Review in Biomedical Publication September 15, 2001
- Monga, HK, Patrick TB, Longo DR, Sievert MC, Peterson GM., An Evaluation of the NLM Gateway Using the European Commission Glossary: A Descriptive Study, American Medical Informatics Association Fall Conference, 2001. POSTER
- Timothy B. Patrick PhD, Gabriel Peterson MS, David Moxley MLS, A Pitfall in Accessing the Genbank Sequence Literature, AMIA 2002 Conference POSTER
- Springer GK, Ries JE, Guillen A, Spollen WG, Bradshaw PC, Peterson GM., Designing A Gene Sequence Analysis Pipeline to Facilitate Scientific Discovery: A Case Study, IN PROGRESS

# **Teaching Experience:**

I have extensive face-to-face and online teaching experience in a variety of Information Science's subdisciplines. I teach a broad range of subjects, including Health Reference Librarianship, Information Policy, Communication Sciences, Databases, Intellectual Property and Network Security.

As Distance Learning has become a more important part of the education process, I have focused on developing skills and materials to align the classroom experiences of the two modes. Specifically, face to face courses make heavy use of online materials and classroom management tools, and online classes have regular synchronous online class sessions. Further, teaching was an important part of my Masters program. I was employed as a Graduate Teaching Assistant for five semesters, teaching a 2-credit undergraduate Genetics practicum and the graduate-level Techniques in Electron Microscopy.

# **Honors and Awards Information:**

- 2007, Gabriel Peterson, Mid-Continental Medical Library Association, University of Missouri-Columbia, A comparison of the "find similar" features of Pubmed/Medline and OVID/Medline
- 2005, Association for Library and Information Science in Education (ALISE), Annual Conference Doctoral Poster Session Honorable Mention, A bibliometric analysis
- 2003-2003, Student Paper Award Honorable Mention, Special Libraries Association
- 2001-2001, ISI Citation Analysis Research Grant, American Society for Information Science and Technology (ASIST), University of Missouri-Columbia
- 2004-2000, NLM BHIRT Pre-doctoral fellowship, National Library of Medicine, University of Missouri-Columbia
- 1993-1993, Aztec Lodge Scholarship, Aztec Lodge, Las Cruces, NM, New Mexico State University

• 1992-1990, NMSU Crimson Scholarship, New Mexico State University

## **Membership Information:**

- American Medical Informatics Association
- American Society for Information Science and Technology
- American Society for Information Science and Technology Carolina Chapter
- Association for Library and Information Science Education

## **Other Expertise:**

- NCCU IRB training, Spring 2012, Fall 2007
- Duke IRB training, Spring, 2012
- Training in Ethical Conduct of Research, HIPAA Training June 2003
- IRB Training-Campus June 2003
- IRB Training-Health Sciences June 2003

## Natural Language Skills:

- Spanish: Reading: Functional, Writing: Fluent, Speaking: Functional
- French: Reading: Functional, Writing: Basic, Speaking: Basic

## **Technical Skills:**

Information

- LINUX
- SQL
- Apache/php/MySql
- HTML/XML
- Access
- SAS/SPSS/Minitab
- LaTeX
- Prezi
- Wordpress, Joomla

## Biotechnology

- Electron Microscopy
- Gene Sequencing
- Fermentation Biology
- Analytical Chemistry

## Other Technical Skills

I am the Webmaster for SLIS and have developed numerous websites and webpages as part of those duties. I was a part of the University of Missouri Swine Genome and Maize Mapping Projects as well as other research projects in the areas of bioinformatics and information science. The last year of my Master's education included some inquiry into fermentation microbiology, bioinformatics, and considerable use of statistical and open-source software. In addition, my career trajectory has often demanded data entry and statistical analysis, and a concomitant degree of computer literacy regarding trouble shooting and software management. My bench laboratory expertise includes most basic

molecular biology techniques, including cloning, automated and manual sequencing, sterile cell culture and electron microscopy. Other areas of technical proficiency include computer & electronics hardware, repair & modification, including the use of Arduino-based technologies.

## **Research Relevance:**

High quality health information is an important resource. Unequal access and unreliable information are two pitfalls to the appropriate use of health literature. The presence of erroneous information in the biomedical literature may have significant human & social health impacts; it is imperative that users have the best information for making clinical and research decisions. Maintaining the integrity of the scientific literature is crucial: use & citation of flawed literature can lead to delay, increased costs, propagation of error or the elimination of potentially valid research from the literature.

My research evaluates the effectiveness of biblioremediation, the post-publication correction or republication of articles. The degree to which one version of a corrected and republished article pair has become authoritative is evaluated as is the degree to which author ignorance of authoritative versions of documents is evaluated as a possible explanation for post-republication citation. Improved understanding will lead to improved information retrieval & delivery systems and thus improved biomedical research and health care.

Additionally, I have an ongoing interest in questions of information policy. In particular, my work focuses on the transformative role that pervasive information is playing at the individual, collective and transnational levels of society.