

Student Nurses' Use of Mobile Devices for
Decision Making within a Clinical Simulation Lab

Application to
International Nursing Association for
Clinical Simulation and Learning

“Debra Spunt” Research Mini-Grant 2012

Heather D. Carter-Templeton, PhD, RN

Alice L. March, PhD, RN, FNP-C, CNE

Abstract

Nurses must be prepared to access evidence-based resources at the point-of-care to provide high quality, safe patient care. Simulated clinical experiences provide realistic opportunities for teaching problem identification and decision making in an environment that is controlled. Generic nursing students are a rich source of data because of their unique perspective on the use of technology and familiarity with the evidence-based applications required to support quality patient care. This qualitative study seeks to describe how generic baccalaureate nursing students use mobile devices within simulated clinical experiences, and to determine what additional pedagogical strategies support the use of mobile devices in the simulation lab. This study targets upper division nursing students in a baccalaureate nursing program (BSN) during the 4th semester of the curriculum (N=96). Qualitative studies reflecting student nurses' perspectives on using information and evidence-based resources via mobile devices during simulated clinical experiences are, for the most part, non-existent. This study will address the current gap in literature. Understanding learners' perceptions about the utility of mobile device technology helps reveal observations of end users accessing evidence-based information at the point-of-care.

Significance

It has been posited that handheld computer use may alter the way healthcare is taught and provided (Farrell & Rose, 2008). However, limited published research exists examining the impact of mobile device use by nursing students (Morris & Maynard, 2010). Findings from this study will illuminate how students use handheld computers within the simulated clinical experience. Student nurses can offer a rich description of the perceived benefits and barriers to actual use of handheld computers which offer access to evidence-based information at the point-of-care during simulation scenarios. In addition, students can offer insight into what educational strategies can assist learners to maximize the use of handheld computers.

Research Questions

The research questions are: 1) How are handheld computers used by nursing students during simulated clinical experiences? and 2) What educational strategies help maximize the use of handheld computers in the simulation environment?

Methods

Design

Because little is known about the use of handheld computers within simulated clinical experiences, a qualitative, interpretive description design (Thorne, 2008) will be used. This study will explore and describe nursing students' use of required handheld computers within simulation scenarios at The University of Alabama Capstone College of Nursing's Simulation Center for Clinical Excellence (SCCE). This study provides insights into nursing students' experiences with handheld computers during simulation to support clinical decision making.

Two researchers will conduct this study. Dr. Carter-Templeton and Dr. March both have diverse clinical backgrounds and have published and presented nationally and internationally. Dr. Carter-Templeton's research interest is in the areas of informatics, information literacy, and evidence-based practice, and she has experience conducting research in the area of information technology using qualitative research methods. Dr. March's research interest is in the area of students' perceptions of knowledge and confidence changes related to simulation. She has experience conducting quantitative and mixed methods research projects. Dr. March will provide the expertise related to the use of the SCCE, where she has trained undergraduate nursing students and is co-chair of the Simulation Research Committee.

Data Collection

Data collection will take place during one semester after institutional review board approval is obtained. Students will receive a link to the online survey after the second clinical simulation scenario during the 4th semester of upper division nursing. Students will receive written and verbal explanations of this study and an invitation to participate. No identifiers will be collected, and confidentiality will be maintained. The PIs will obtain informed consent from the participant prior to the student accessing the online questionnaire. The research team will be responsible for handling and storing all study data. Only de-identified data will be shared.

Data collection will occur in two phases. First, the research team will collect qualitative data employing the use of an online, investigator-developed, open-ended questionnaire informed by expert faculty opinion. The questionnaire is estimated to take about 10 to 15 minutes to complete. Questions will focus on students' use of handheld devices during a simulated clinical experience. Student suggestions regarding how to teach the proficient use of handheld computers during a scenario, and student opinions about electronic information resources, will be elicited. In addition, demographic data will be collected from participants. Consistent with qualitative research practices, it is anticipated that the questionnaire will undergo minor revisions upon initial use with participants (Krueger, 1998).

Next, participants will be assigned to one of three follow-up member checking group meetings after preliminary data analysis to ensure validity of initial findings (Lincoln & Guba, 1985). Participants will receive a smart phone app that supports reference management (PubMed on Tap[®]) and refreshments as an incentive for attending this group meeting. To avoid perceived coercion, Dr. Carter-Templeton will be responsible for facilitating all follow-up member checking group meetings, since she is not assigned student instruction hours within the SCCE, whereas Dr. March is.

Open-Ended Questions
1. Think back to your recent simulation experiences this semester when you used your handheld computer to find more information to care for your simulated patient. Describe this situation in the textbox below.
2. Describe how you located the additional information you needed. For example, what resources did you use?
3. What are your preferred electronic resources for a handheld computer?
4. What type of learning experience(s) would help you to maximize the use of your handheld computer?

Analysis

The researchers will examine the online questionnaire responses. The researchers will discuss initial impressions and identify emerging themes and appropriate codes (Patton, 2002). ATLAS.ti (qualitative research software) will assist in managing and organizing data. Demographic data will be analyzed using SPSS,TM and descriptive statistics will summarize participant information.

Sample

A purposeful sample of 4th semester baccalaureate nursing students will be invited to participate (N= 96). All students in the BSN program are mandated to purchase a handheld computer or smart phone with Skyscape[®] Nursing ConstellationTM package downloaded for use in the clinical and simulation lab setting. Students are required to bring their handheld computers to all simulated clinical experiences. This student group was selected because of their previous experience (at least two semesters) with the simulation scenarios, as well as in-patient clinical experiences, and should therefore be more adept with the device and use of the software.

Additionally, these students are expected to have less performance anxiety associated with the experience. Inclusion criteria include 4th semester BSN student status, age over 19 years old, and ability to read English.

Limitations

This study has several potential limitations. First, data will be collected using an online questionnaire. Technical issues related to accessing the online questionnaire may be experienced by some participants. In addition, PIs will not be able to follow up on unclear statements at the time of data collection. This study is qualitative and has limited generalizability.

Outcomes

Findings from this study will be disseminated in the form of presentations and manuscripts in an effort to inform future research surrounding the use of handheld computers in simulated clinical experiences. Additionally, this study will provide insight regarding how nursing students use handheld devices. Furthermore, a list of helpful electronic resources to be used in actual and simulated clinical settings will be developed, and pedagogical strategies to assist in maximizing the use of handheld devices will be identified.

Evaluation

This descriptive research study is designed to help inform faculty using clinical simulation as a teaching method. Follow-up member checking group meetings after preliminary data analysis will ensure validity of preliminary findings (Lincoln & Guba, 1985). It is expected that findings from this study will assist in modifying teaching strategies surrounding the use of handheld devices in the clinical setting and simulation laboratory.

Project Description and Timeline

Calendar Months:	June	July	Aug	Sep	Oct	Nov	Dec	Jan
Study Planning								
1. IRB Solicitation		X						
Empirical Phase								
4. Data Collection					X	X		
5. Data preparation						X	X	
Analytic Phase								
6. Data analysis								X
7. Final Interpretation								X
Dissemination Phase								
8. Presentations/reports								->

References

- Farrell, M., & Rose, L., (2008). Use of mobile handheld computers in clinical nursing education. *Journal of Nursing Education*, 47(1), 13-19.
- Krueger, R. A. (1998). *Developing Questions for Focus Groups*. Thousand Oaks, CA: Sage Publications.
- Lincoln, Y., & Guba, E. (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage Publications.
- Morris, J., & Maynard, V. (2010). Pilot study to test the use of a mobile device in the clinical setting to access evidence-based practice resources. *Worldviews on Evidence-Based Nursing*, 7(4), 205-213.
- Patton, M. (2002). *Qualitative Research & Evaluation Methods* (3rd ed.). Thousand Oaks, CA: Sage Publications
- Thorne, S. (2008). *Interpretive Description*. Walnut Creek, CA: Left Coast Press.

Budget

Total Amount Requested: **\$500**

Supplies **\$287**

Funds in the amount of \$287 are requested to purchase the PubMed on Tap[®] app, for each of 96 students, at \$2.99 each. PubMed on Tap[®] is a reference management application of value to nurses that can be loaded on their personal mobile devices.

Participant Incentives **\$213**

Funds in the amount of \$213 are requested to provide participant incentives in the form of refreshments for students attending a follow-up member checking discussion.

Qualifications and Contact Information of INACSL Member Who is Submitting Mini-grant Proposal

Name Heather D. Carter-Templeton Credentials PhD, RN
 Place of Employment The University of Alabama
 Position Assistant Professor
 Work Address Box 870358, Tuscaloosa, AL 35487-0358
 Work Email hcartertempleton@ua.edu Work Phone 205-348-2725
 Home Address 2581 W. Lakeshore Dr., Starkville, MS 39759
 Preferred Email hcartertempleton@ua.edu
 Home or Cell Phone 662-341-0070

Title of Grant Proposal Student Nurses' Use of Mobile Devices for Decision Making with a Clinical Simulation Lab

Please answer these questions about yourself so that we may know a bit more about you and your background:

Please limit your responses to 2 pages only.

INACSL Membership Status:

Individual Member Institutional Member 8/7/2012 Exp date
 (exp 3/2012)

1. Please provide the following information regarding your previous research experience and/or experience in the area of your research interest.

Research topic	Type: Quantitative /Qualitative	Findings
Nurses' Information Appraisal	Qualitative	Nurses address information need by way of an unspoken algorithm considering the urgency of the situation. Most nurses look to human resources for information in most situations.
Assessing Information Literacy, Information Technology, and Nursing Informatics Competencies	Quantitative	Objective measures collected (F2F & online scenario) varied greatly within different competency categories & among the specific learning outcomes
Perspectives of Nurse Managers and IT Staff about Nurses' Information Literacy	Qualitative	All participants agreed that increased knowledge related to online information resources would improve patient care outcomes.
Nursing Faculty and Student Experiences with Information Literacy	Quantitative	Study participants recognized value in information literacy skills, indicating it was necessary to use online information resources for patient care. Predominantly, participants selected time & no computer access as major barriers to using online databases.

2. Describe your experience in simulation and/or work in the simulation lab.

Years of Experience	Simulation type (SP vs. HPS)	Job Title	Briefly list duties
3	Online Simulation	Project Coordinator	Responsible for research and development of online simulation development to support teaching information literacy skills to nurses at all levels.
3	SP	Nursing Instructor	Offered instruction and demonstration of nursing skills and procedures. Assisted in nursing student skills check-offs.

3. If you are participating with a team of researchers or with a research partner, please describe how your research will be supported by the other researchers or team. The Co-PI and I will work in tandem complementing each other's research skills and expertise. I will provide expertise in qualitative research data collection and analysis and knowledge related to information technology issues (handheld computer use). The Co-PI will provide knowledge about the simulation lab, planned student experiences, and quantitative demographic analysis.

4. Please provide any additional information about your skills, knowledge base or overall experiences that you believe will be helpful to the mini-grant review team.

I have experience working with research teams collecting and analyzing quantitative and qualitative data from nurses at all levels regarding the use and implementation of technology and evidenced-based information at the point-of-care. This experience will aid the project team in data collection, data management, and data analysis and dissemination of findings.

Qualifications and Contact Information of INACSL Member Who is Submitting Mini-grant Proposal

Name Alice L. March Credentials PhD, RN, FNP-C, CNE
 Place of Employment The University of Alabama
 Position Assistant Professor
 Work Address Box 870358, Tuscaloosa, AL 35487-0358
 Work Email almarch@ua.edu Work Phone (205) 348-0422
 Home Address 1934 Rock Mountain Drive, McCalla, AL 35111
 Preferred Email almarch@ua.edu
 Home or Cell Phone (607) 725-2788

Title of Grant Proposal Student Nurses' Use of Mobile Devices for Decision Making within a Clinical Simulation Lab

Please answer these questions about yourself so that we may know a bit more about you and your background: **Please limit your responses to 2 pages only.**

INACSL Membership Status:

 Individual Member x Institutional Member 8/7/2012 Exp date

1. Please provide the following information regarding your previous research experience and/or experience in the area of your research interest.

Research topic	Type: Quantitative /Qualitative	Findings
Perceived effectiveness of human patient simulation training	Quantitative	Students perceived increases in learning and self-confidence as they progressed through a five-semester upper division nursing program
Mock trial as a strategy for teaching legal and ethical concepts	Mixed: Quantitative/Qualitative	Scores on the post-test increased from the pre-test; scores for the DVD viewing group were higher than the "live" viewing group; students reported that the mock trial affected their views of the legal and ethical aspects of nursing
Religiosity and factors affecting health risk behaviors among adolescents; Secondary data analysis	Quantitative	No significant findings
Factors affecting health risk behaviors among adolescents in Alabama Secondary data analysis	Quantitative	Cluster analysis indicated that certain risk and protective factors were associated with membership in a particular cluster or group of adolescents

2. Describe your experience in simulation and/or work in the simulation lab.

Years of Experience	Simulation type (SP vs. HPS)	Job Title	Briefly list duties
Five	HPS	Assistant Professor	Pre-brief and guide students during scenarios. Complete debriefing activities.

3. If you are participating with a team of researchers or with a research partner, please describe how your research will be supported by the other researchers or team.

My task in this project is to provide the simulation expertise and quantitative analysis of demographic data. My counterpart will support the team as the expert in qualitative analysis and information technology issues (the use of handheld computers).

4. Please provide any additional information about your skills, knowledge base or overall experiences that you believe will be helpful to the mini-grant review team.

I have the skills and experience to put students at ease during the scenario. This will optimize their learning and allow them to explore and reflect more deeply on how the handheld devices contribute to learning.

Capstone College of Nursing

February 21, 2012



Patricia Ravert, RN, PhD, CNE
Research Advisor
International Nursing Association for
Clinical Nursing Simulation and Learning
Brigham Young University
College of Nursing
500D SWKT
Provo, UT 84602

Dear Dr. Ravert:

I am very pleased to provide this letter supporting Dr. Heather Carter-Templeton and Dr. Alice March in their application to the International Nursing Association for Clinical Nursing Simulation and Learning for mini-grant funding for the project, "Student Nurses' Use of Mobile Devices for Decision Making within a Clinical Simulation Lab."

Studying students' own perceptions about the use of mobile devices in simulation is an important step in determining best practices in education that will prepare new nurses to provide high quality, safe patient care. Currently, qualitative studies on student nurses' views on using mobile devices during clinical simulation are almost nonexistent. I believe the proposed research will inform the literature on best practices, which will in turn impact end users accessing evidence-based information at the point-of-care.



The University of Alabama College of Nursing will provide space, secretarial, and computer support for Dr. Carter-Templeton and Dr. March to conduct their research. Therefore, they have my support and that of the Capstone College of Nursing in implementing the project.

Sincerely,

Box 870358
Tuscaloosa, AL 35487-0358
(205) 348-6639
FAX (205) 348-5559
<http://nursing.ua.edu/>

Sara E. Barger, DPA, RN, FAAN
Dean and Professor

Heather Carter-Templeton, PhD, RN

PRACTICE/PROFESSIONAL EXPERIENCE

Aug 2010–Present Assistant Professor; University of Alabama, Tuscaloosa, AL
 Aug 2007–Jun 2010 Project Coordinator: LISTEN Grant; University of Tennessee, Memphis, TN
 Aug 2003–Aug 2007 Nursing Instructor; Mississippi University for Women, Columbus, MS
 Jul 2002–July 2003 Research Nurse; Vanderbilt University Medical Center, Nashville, TN
 May 1999–Jun 2002 House Supervisor & PACU Nurse; Crestwood Medical Center, Huntsville, AL
 Aug 1998–Jan 1999 SICU Nurse; Huntsville Hospital, Huntsville, AL
 Oct 1997–Jul 1998 SICU/Trauma Nurse; University Hospital, Syracuse, NY
 Mar 1996–Sep 1997 Med-Surg Nurse; East Alabama Medical Center, Opelika, AL

EDUCATION

Institution	Degree	Major	Year
University of Tennessee Memphis	PhD	Nursing	2011
Indiana University	<i>Teaching in Nursing Certification</i>		2004
Vanderbilt University	M.S.N.	Nursing	2000
University of Alabama-Huntsville	B.S.N.	Nursing	1999
Southern Union State	A.D.N.	Nursing	1995

PUBLICATIONS

McQueen, L., **Carter-Templeton, H.**, & McCormick, K. (2011). Translation of evidence into nursing practice. In Saba, V. & McCormick, K. (Eds.), *Essentials of nursing informatics (5th ed.)*. Columbus, Ohio: McGraw-Hill.

Carter-Templeton, H., & McCoy, T. (2008). Are we on the same page? A review of intramuscular injection techniques in nursing fundamental texts. *Med-Surg Nursing 14*(4), 237-240.

RESEARCH SUPPORT

Nurses' Information Appraisal within the Clinical Setting, 3/2010-10/2011. Funded by Sigma Theta Tau, Epsilon Omega chapter for \$500. Study Role: Primary Investigator (Completed)

Individualized Information Literacy Skills Improvement (LISTEN), 7/2007- 6/2010. Funded by the Health Resources and Services Administration (HRSA) for \$974,294. Study Role: Project Coordinator (Completed)

Nursing Faculty and Student Experiences with Information Literacy: A Pilot, , 5/2007- 8/2007. Funded by Mississippi University for Women Faculty Research Grant Award for \$3000. Study Role: Primary Investigator (completed).

AWARDS AND HONORS

Sigma Theta Tau International Honor Society, Inducted Spring 2000, Vanderbilt University, Iota Chapter
 Awarded Partial Nursing Scholarship, Vanderbilt University, Academic Year 1999-2000

CURRENT PROFESSIONAL MEMBERSHIPS

Member, American Nursing Informatics Association
Member, Healthcare Information and Management Systems Society

Member, International Nursing Association for Clinical Simulation and Learning
Member, Southern Nursing Research Society (State Liaison for Mississippi)
Member, Sigma Theta Tau

PRESENTATIONS

- Carter-Templeton, H.** (2011, November 5). *Using social bookmarking to assist in information diffusion at three program levels*. Poster presented at The National League for Nursing Sixth Annual Technology Conference, Durham, NC.
- Turner, T., Miles, S., **Carter-Templeton, H.**, & Russell, C. (2010). *Improving patient safety by improving nurses' information competencies: The LISTEN Project*. Paper presented at the VA Nurse Managers Conference.
- Wu, L., Nollan, R., Miles, S., Russell, C., & **Carter-Templeton, H.** (2010). *LISTEN, BOLT, and connect*. Paper presented at the Medical Librarian Association Conference.
- Wu, L., Nollan, R., Miles, S., Russell, C., & **Carter-Templeton, H.** (2010). *LISTEN, BOLT, and reflect*. Paper presented at the 2010 SC/MLA Annual Meeting.
- Miles, S. B., Russell, C. K., **Carter-Templeton, H.**, Clayton, S., Connor, P., Nollan, R., Patterson, R. B., Thorn, S. A., Wu, L., Johnson-Joy, C., & Turner, T. (2010, April). *Assessing information literacy, information technology, and nursing informatics competencies*. Paper presented at the American Nursing Informatics Association Conference, Boston, MA.
- Thorn, S. A., Russell, C. K., **Carter-Templeton, H.**, Clayton, S., & Miles, S. (2010, April). *Developing multidisciplinary online simulation modules for nurses*. Paper presented at the American Nursing Informatics Association Conference, Boston, MA.
- Carter-Templeton, H.**, Miles, S., Nollan, R., Wu, L., & Patterson, R. B. (2010, April). *Using learning objects to support a continuing education intervention for nurses*. Paper presented at the 15th Annual Technology, Colleges, and Community Worldwide Online Conference, Honolulu, HI.
- Carter-Templeton, H.**, Patterson, R. B., & Russell, C. K. (2010, April). *Nursing faculty and student experiences with information literacy: A pilot study*. Paper presented at the Mississippi Delta Alliance 3rd Annual Healthcare Conference, Coahoma Community College, Clarksdale, MS.
- Carter-Templeton, H.**, Miles, S. B., Patterson, R. B., Thorn, S. A. & Russell, C. K. (2010, April). *Improving information literacy, nursing informatics, and information technology competencies in student and professional nurses*. Paper presented at the Mississippi Delta Alliance 3rd Annual Healthcare Conference, Coahoma Community College, Clarksdale, MS.
- Johnson-Joy, C., Patterson, R. B., **Carter-Templeton, H.**, Miles, S., Thorn, S., & Russell, C. K. (2009, November). *Information literacy education: Strategies for BSN student success*. Paper presented at the 2009 AACN Conference, Chicago, IL.
- Carter-Templeton, H.**, Patterson, R., & Russell, C. (2009). *An Analysis of Published Nursing Informatics Competencies*. Paper presented at the 10th International Congress on Nursing Informatics.
- Patterson, R., **Carter-Templeton, H.**, & Russell, C. (2009). *Information literacy: Using LISTEN project strategies to equip nurses worldwide*. Paper presented at the 10th International Congress on Nursing Informatics.
- Russell, C., **Carter-Templeton, H.**, Clayton, S., Connor, P., Miles, S., Nollan, R., & Wu, L. (2009, April). *Interactive simulations provide realistic venues to improve student and nurse*

information literacy, information technology, and informatics competencies. Paper presented at the American Nursing Informatics Association, Las Vegas, NV.

Carter-Templeton, H. (2009). *Using the Diffusion of Innovation Theory to Further Understand Information Literacy in Nursing.* Paper presented at the 14th Annual Technology, Colleges, and Community Worldwide Online Conference.

Nollan, R., Wu, L., Russell, C., Connor, P., **Carter-Templeton, H.**, Clayton, S., Patterson, R. (2008). *LISTEN: The Librarians' Role.* Paper presented at the Southern Chapter Medical Librarian Association Conference.

Carter-Templeton, H., Russell, C., Clayton, S., Connor, P., Miles, S., Nollan, R., Patterson, R., & Wu, L. . (2008). *Using Evidence to Teach Information Technology and Information Literacy: A Multidisciplinary Approach.* Poster presented at the 2008 Summer Institute of Nursing Informatics.

Carter-Templeton, H., Russell, C., Connor, P., & Wu, L. (2008, April). *Using a Social Bookmark Site to Assist in Diffusion of Online Information to Support Professional Practices.* Paper presented at the 13th Annual Technology, Colleges, and Community Worldwide Online Conference, Honolulu, HI.

Carter-Templeton, H., & Russell, C. (2008, February 12). *Perspectives of nurse managers and information technology staff about nurses' information literacy.* Paper presented at the Southern Nursing Research Society, Birmingham, AL.

Carter-Templeton, H., & Russell, C. (2007, October). *Nursing students' information literacy: An examination of the literature.* Paper presented at the Mississippi Nurses Association Conference, Tupelo, MS.

Russell, C., **Carter-Templeton, H.**, Likes, W., Nwokeji, S., Umberger, R., & Gilbert, S. (2007, April). *Maximizing classroom collaboration using web 2.0 technology.* Paper presented at the 12th Annual Technology, Colleges, and Community Worldwide Online Conference, Honolulu, HI.

Carter-Templeton, H., & Russell, C. (2007 February). *Nursing students' information literacy: An examination of the literature.* Paper presented at the Southern Nursing Research Society, Galveston, TX.

Carter-Templeton, H., Russell, C., Burchum, J., Cowan, P., Jacob, S., Nollan, R., Norris, T., & Wu, L. (2006, April). *College students' information literacy: Integrative literature review and programmatic solutions.* Paper presented at the 11th Annual Technology, Colleges, and Community Worldwide Online Conference, Honolulu, HI.

Carter-Templeton, H., & McCoy, T. (2005, October). *What evidence do you have?* Paper presented at the Mississippi Student Nurses Association Conference, Choctaw, MS.

Alice Louise March

PROFESSIONAL EXPERIENCE

<u>Years</u>	<u>Title/Institution</u>	<u>Functional Area</u>
2007- 2012	Assistant Professor, University of Alabama	Undergraduate
2007	Lecturer, SUNY Binghamton	Undergraduate
2006-2007	Instructor, Mansfield University	Undergraduate
2004-2005	Adjunct Clinical, SUNY Binghamton	Undergraduate
1995-2007	Family NP, United Medical Assoc.	Urgent Care, Family, Women's Health, Geriatrics
2001	DON, Waters of Endicott	Director of Nursing geriatric facility
1997- 1999	Family NP, Endwell Family Care	Urgent Care
1997- 1998	Family NP, Veteran's Adm.	Adult Care
1993- 1997	Family NP, Chenango Memorial	Family Practice
1984- 1989	Childbirth Educator, Chenango Memorial	
1981- 1992	BLS Instructor, Chenango Memorial	
1977- 1993	Registered Nurse, Chenango Memorial	OB, OR, Home Care, ER
1977- 1979	Consultant, Genesee Nsg Home	Utilization Review
1976- 1977	Inservice Coordinator, Genesee Nsg Home	Geriatrics
1975- 1976	Registered Nurse, Genesee Nsg Home	Geriatrics
1973-1975	Nurse Aide, Genesee Nsg Home	Geriatrics

EDUCATION

<u>Institution</u>	<u>Degree</u>	<u>Major</u>	<u>Year</u>
State University of NY at Binghamton	PhD	Rural Nursing	2006
State University of NY at Binghamton	MS	Community Health Nursing	2002
Functional Role: Administrator			
State University of NY at Binghamton	BS	Nursing	1999
Community General Hospital, Syracuse	FNP	Family Nurse Practitioner	1993
Mohawk Valley Community College	AAS	Nursing	1975

PUBLICATIONS

- Rush, A-L & **March, A. L.** (in press). Parental attachment and eating behaviors among late adolescent females. *Journal of Youth Development*.
- Palardy, L. G. & **March, A. L.** (2011). Applying the circle of caring model to increase medication adherence in cardiac transplant patients. *Nursing Science Quarterly*, 24, 120-125. doi:10.1177/0894318411399463
- March, A. L.**, Ford, C. D., Adams, M., Cheshire, M., & Collins, A. (2011). The mock trial: A collaborative interdisciplinary approach to understanding legal and ethical issues. *Nurse Educator*, 36(2), 66-69. doi: 10.1097/NNE.0b013e31820b5029.
- March, A. L.** (2011). Integrative literature review of adolescent risk and health compromising behaviors guided by the problem behavior theory. *Journal of Youth Development*, 6(1), 92-104.
- March, A. L.** & Knol, L. L. (2010). Cluster analysis of Alabama adolescent health risk and health compromising behaviors. *Southern Online Journal of Nursing Research*, 10(4), 187-207.

- March, A. L.** & Atav, A. S. (2010). Perceived school safety and sexual debut among rural, suburban, and urban adolescents. *Journal of School Nursing, 26*(2), 121-130. First published online August 24, 2009: doi: 10.1177/1059840509343112.
- March, A. L.** (2009). Perinatal loss: Impacting family grieving and nurse's self-fulfillment. *American Journal of Hospice and Palliative Medicine, 26*(5), 331-333. First published online April 24, 2009. doi: 10.1177/0123456789123456.
- March, A. L.** (2009). Concept analysis of risk behavior in the context of adolescent development. *Journal of Youth Development, 4*(1). Retrieved from <http://www.nae4ha.org/directory/jyd/index.html>

RESEARCH

Funded Research:

- 2011 **March, A. L.**, Adams, M., Wynn, S., & Bigham, A. Enhancing Clinical Judgment Using Targeted Debriefing. (Funding approval pending, University of Alabama Research Grants Committee, \$5,980)
- 2011 **March, A. L.**, Adams, M., Wynn, S., & Bigham, A. Effectiveness of Human Patient Simulation Training Among Baccalaureate Nursing Students. Funded by Capstone College of Nursing for \$2,500.
- 2008 **March, A. L.** The Relationship Between Risk Factors, Protective Factors, and Health Risk Behaviors Among Adolescents in Alabama: A Secondary Data Analysis of Youth Risk Behavior Survey Data. Funded for \$3,000.

Unfunded Research:

- 2012 **March, A. L.**, Robinson, C., & Robinson, S. Examination of the Role of Hopeful Thinking and Goal Orientation in Nursing Education.
- 2010 Ford, C. D., **March, A. L.**, & Cheshire, M. Teaching Students About Shades of Gray: A Mock Trial Teaching Methodology for the Nursing Legal Interface.
- 2010 Rush, A-L, & **March, A. L.** Parental Attachment Styles and Eating Behaviors Among Female College Students.
- 2010 **March, A.L.** Religiosity and the Relationship Between Protective/Promotive Factors, Risk Factors, and Health Risk Behaviors Among Adolescents: Secondary Data Analysis.
- 2006 **March, A. L.** Adolescent Sexual Debut, Risk Factors, Protective Factors, and Health Risk Behaviors: Rural, Suburban, and Urban Differences. (Doctoral dissertation, State University of New York at Binghamton). AAT 3211255.
- 2003 **March, A. L.** & Wells, M. Rural People and Communities in Metropolitan Society: A Community Assessment of Triangle.
- 2003 **March, A. L.** & Atav, A. S. Rural Same Sex Households in New York: An Analysis of Demographic and Socio-Economic Characteristics from Census 2000.
- 2003 **March, A. L.**, Klesh, J., Ambrogne, J., Chiu, T., Dawood, E. & Morgan, L. L. Baccalaureate Nursing Students' Perceptions of Rural Nursing.
- 2000 **March, A. L.** & Dean, K. Tioga County Adolescent Driver Awareness Program.

HONORS AND AWARDS

- 2011 CCN External Research Mentorship Award. The University of Alabama.
- 2011 CCN Faculty Research Award. The University of Alabama
- 2008 Junior Investigator Training Program. The University of Alabama.
- 2006 Zeta Iota Chapter- Thesis/Dissertation Award. Sigma Theta Tau.
- 2005 Decker School of Nursing Dissertation Year Scholarship. State University of New York at Binghamton.
- 2002 - 2005 Graduate Tuition Scholarship - Binghamton University
- 2002 Teaching Assistantship - Binghamton University
- 2002 Decker Scholarship - Binghamton University
- 2000 - 2007 Clinical Associate - Decker School of Nursing
- 2000 Inducted - Sigma Theta Tau
- 1999 High Honors at Binghamton University

PROFESSIONAL ACTIVITIES

- 2010 - 2012 Sigma Theta Tau, Epsilon Omega Chapter: President Elect
- 2010 - 2012 Sigma Theta Tau, Epsilon Omega Chapter: Delegate
- 2008 - 2010 Sigma Theta Tau, Epsilon Omega Chapter- Leadership Succession Committee: chair
- 2011 - 2012 Consultant to Professional Nurse Writers, Inc. Developed entire obstetrical and pediatric specialty chapter content reviews for comprehensive NCLEX style exam review book being prepared for publication by F. A. Davis.
- 2011 - 2012 Consultant to Professional Nurse Writers. Inc. Item writer of 110 obstetric and 110 pediatric specialty chapter questions for comprehensive NCLEX style exam review book being prepared for publication by F. A. Davis.
- 2011 Consultant to Professional Nurse Writers. Inc. Developed obstetric and pediatric specialty chapter outlines for NCLEX style exam review book being prepared for publication by F. A. Davis.
- 2011 Consultant to Pearson Education. Data and item reviewer for statistical results of pharmacology and specialty predictive exit exam.
- 2011 Consultant to Pearson Education. Chapter reviewer for electronic pharmacology book
- 2009 - 2010 Consultant to Pearson Education. Subject matter expert item reviewer, bias reviewer, item writer, and item editor for content on specialty exams (pharmacology, maternal/child), and comprehensive exit exams.

COMMUNITY SERVICE

- 2009 - 2012 Volunteers of American, Board of Human Rights Protection: member
- 2008 - 2009 Holt Initiative: member
- 2003 Red Hot Mamas: facilitator, menopause support group
- 1995 - 1996 Oxford Academy Health Committee: member
- 1993 Sunrise Adult Day Care- member: Board of Directors
- 1992 Chenango County Lead Prevention Program: member

SELECTED PRESENTATIONS, SPEECHES, AND PROGRAMS

- March, A. L.** (2011, October). *The effect of low perceived life chances on odds of adolescent participation in fighting, stabbing, and shooting.* Paper presentation for Sigma Theta Tau International 41st Biennial Convention, Grapevine, TX. Refereed.

- March, A. L.,** Carter, M. R. & Cheshire, M. (2011, February). *Smallpox or varicella? You decide*. Oral presentation for immersive sessions with simulator; HPSN 2011, Tampa, FL. Refereed.
- March, A. L.,** & Ford, C. D. (2009, November). *Judging Sara: Mock trial collaborative learning in nursing*. Paper presentation for American Association of College Nurses 2009 Baccalaureate Education Conference, Chicago, IL. Refereed.
- March, A. L.** (2009, June). *Risky sexual and non-sexual behaviors of adolescents*. Paper presented at Southern College Health Association, Tuscaloosa, AL. Invited.
- March, A. L.** (2008, October). *Age at sexual debut and the effect of the conceptual borders created by rural, suburban, and urban living among adolescent females*. Paper presented at American Public Health Association 136th Annual Meeting and Expo, San Diego, CA. Refereed.
- March, A.** (2006, September). *Rural, suburban, and urban differences in age at sexual debut*. Oral Presentation at District Five New York State Nurses' Association meeting. Invited.
- March, A.** (2006, July). *Sexual debut in United States adolescents and the correlation of health risk behaviors*. Paper presented at the 17th International Nursing Research Congress Focusing on Evidence-Based Practice, Montreal, QC. Refereed.
- March, A.** & Atav, A. S. (2005, December). *Sexual debut among adolescents: Rural, suburban, and urban differences*. Paper presented at American Public Health Association 133rd Annual Meeting and Exposition, Philadelphia. Refereed.

Poster Sessions:

- March, A. L.,** Adams, M. H., Wynn, S. D., & Bigham, A. B. (2012, January). *Students' perceptions of learning and confidence acquisition from simulation experiences*. Poster session presented at International Meeting for Simulation in Healthcare 2012, San Diego, CA. Refereed.
- Ford, C. D., **March, A. L.,** Adams, M. H., & Cheshire, M. (2012, January). *Cognitive and affective changes of learners participating in a mock trial*. Poster session presented at International Meeting for Simulation in Healthcare 2012, San Diego, CA. Refereed.
- March, A. L.** (2008, October). *Perceived school safety and age at sexual debut among rural, suburban, and urban adolescents*. Poster session presented at American Public Health Association 136th Annual Meeting and Expo, San Diego, CA. Refereed.
- March, A. L.** (2008, October). *Location of residence and the effects of the conceptual borders imposed by rural, suburban, and urban living on adolescent males as related to age at sexual debut*. Poster session presented at American Public Health Association 136th Annual Meeting and Expo, San Diego, CA. Refereed.
- March, A. L.** (2008, October). *Prevalence of alcohol use and age at sexual debut among rural, suburban, and urban adolescents*. Poster session presented at American Public Health Association 136th Annual Meeting and Expo, San Diego, CA. Refereed.
- March, A. L.** (2008, October). *Violence and age at sexual debut: Does location of residence affect rural, suburban, and urban adolescents differently*. Poster session presented at American Public Health Association 136th Annual Meeting and Expo, San Diego, CA. Refereed.
- March, A.,** Chiu, T-I., Dawood, E., Klesh, J., Ambrogne, J., & Morgan, L. L. (2004, November). *A qualitative study of undergraduate nursing students' perceptions of rural*

- nursing*. Poster session presented at American Public Health Association 132nd Annual Meeting and Exposition, Washington, DC. Refereed.
- Atav, A. S., & **March, A.** (2004, November). *Rural same sex households in New York: An analysis of demographic and socio-economic characteristics from Census 2000*. Poster session presented at American Public Health Association 132nd Annual Meeting and Exposition, Washington, DC. Refereed.
- Klesh, J., Ambrogne, J., Chiu, T-I., Dawood, E., **March, A.**, & Morgan, L. L. (2004, April). *Baccalaureate nursing students' perceptions of rural nursing*. Poster session presented at Conversations in the Discipline: Sustaining Rural Populations, Binghamton, NY. Invited.
- March, A.** & Dean, K. (2001, May). *Tioga county adolescent driver awareness program*. Poster session presented at Sigma Theta Tau, Zeta Iota Chapter, Binghamton, NY. Invited.