

Proposal for WOX Grant

Xavier Nursing Informatics Institute (XNII)

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Xavier University School of Nursing

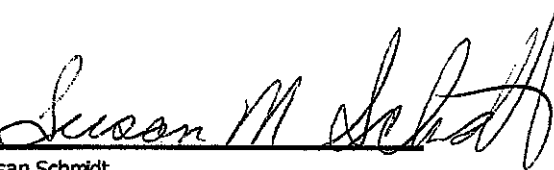
Xavier Nursing Informatics Institute (XNII)

Abstract

Amount Requested: \$19,996

Nursing informatics competency is the ability to integrate knowledge, skills, and attitudes into nursing practice using technology. Almost 90% of the nursing workforce is comprised of women who frequently report a lack of competency to perform even basic computer functions. The aim of the Xavier Nursing Informatics Institute (XNII) is to increase the number of nurses who possess the knowledge, skills and attitudes to engage in evidence based practice supported by informatics. Students participating in the XNII will spend approximately one academic year engaged in enhanced informatics educational opportunities which: 1) meet the criteria for a graduate level capstone project, 2) meet the identified informatics need of a participating healthcare partner, and 3) result in certification as a Nurse Informaticist. The XNII will engage approximately 300 nursing students, 15 nursing faculty, and approximately 12 community healthcare partners in activities that promote the application of informatics competencies among the nursing profession.

Required Signatures:

X 

Dr. Susan Schmidt
Director

X 

Dr. Dennis Long
Associate Dean

Budget Overview

BUDGET ITEM	DESCRIPTION	TOTAL	# STUDENTS
Graduate Student/ Project Coordinator	Year I: \$3328 Year II: \$3328 \$13.00/hr x 8 hr/wk x 32 wks	\$6656	1
SOLO in a DELTA Informatics Training Consultant	Year I: \$2,000 Year II: \$2000	\$4000	Approx. 180 BSN and 40 MSN
Nurse Informatics Certification Review Course	Year I: \$395 x 5 MSN students= \$1975 Year II: \$395 x 5 MSN students = \$1975	\$3950	10 MSN students
Poster Printing	Year I: \$60 x 10 posters=\$600 Year II: \$60 x 10 posters= \$600	\$1200	20 MSN
Celebration of Nursing Poster Reception Catering and Conference Expenses	Year I: \$1195 Year II: \$1195	\$2390	Approx. 40 MSN (including the 20 MSN students listed above) and 30 BSN plus approx. 12 community leaders
Informatics Conference Attendance for the PD	\$1800	\$1800	
TOTAL Requested		\$19,996	Approx 300

Budget Justification

Project Coordinator:

8 hours per week for (32 weeks over a two year period) @ \$ 13.00 per hour = **\$6656.00**

Project Coordinator will be a nursing student. Duties will include administrative assistance with all grant related activities, outreach to community health care agencies, and attendance with Project Director at Nursing Research Council meetings sponsored by participating healthcare agencies (in person and via videoconferencing technology). Responsibilities also include record keeping, event planning, continuing education application procedures, poster development and printing, management and oversight of Nursing Informatics (NI) Certification Review Course enrollments and exam passage rates; assistance with project evaluation and monitoring project outcomes.

SOLO in a DELTA Informatics Consultant

The Informatics Consultant will provide interactive support to moderate, grade, maintain, and implement the SOLO Informatics Training Course. The Consultant will be responsible for ensuring that the latest technologies are implemented within the course. \$2000 x 2 years= **\$4000**

Nurse Informatics Certification Review Course:

This online, self-directed course is offered through the American Nursing Credentialing Center (ANCC). It is designed to help prepare nurses to sit for and pass the Nurse Informaticist (NI) Certificate that is offered through the ANCC.

\$395 x 5 students= \$1975 x 2 years= **\$3950**

Poster Presentation Printing:

Graphic set up, printing costs, and supplies are \$14.00 per posters (36" wide by 48" long). Cost are \$60 x 20 (for two years) participants = **\$1200** total cost.

Catering for Celebration of Nursing Research Poster Reception:

Hors d' oeuvres	\$1100
Tab Bar	\$95 set up

\$1,195 per year x 2 years= **\$2,390**

Informatics Conference:

TechMentor Conference, Las Vegas, Nevada- October 2013- Registration \$500
 Flamingo Hotel- \$200 x 4 nights= \$800
 Flight- \$500

Total \$1800

Grant Narrative

Introduction

Nursing informatics competency (IC) is the ability to integrate knowledge, skills, and attitudes into nursing using technology (Staggers & Gassert, 2000). Almost 90% of the nursing workforce is comprised of women (NLN, 2012) who frequently report a lack of competency to perform even the most basic computer functions, outside of those required within their work environment (Thede & Sewell, 2009).

Purpose and Alignment of Project with WOX

The purpose of the Xavier Nursing Informatics Institute (XNII) is to address the significant lack of nurses who possess the knowledge, skills and attitudes to engage in evidenced based practice supported by informatics. This pilot project is consistent with The Women of Excellence mission and vision to advance the legacy of Xavier's extraordinary women graduates, since the XNII will increase the number of Registered Nurses (RNs) in the Greater Cincinnati area who are educationally prepared to use informatics competently in the interprofessional clinical, community, or educational setting.

Alignment of Project with XU

This project furthers the mission and vision of Xavier University to "engage and form students intellectually, morally, and spiritually with rigor and compassion, toward lives of solidarity, service and success". As a result of this initiative, an academic-community partnership will be developed with healthcare agencies in the Greater Cincinnati/Northern Kentucky and outlying areas. Xavier School of Nursing and participating community agencies will jointly identify problems that can be addressed through the competent application of informatics by XU nursing students. Students will spend approximately one academic year engaging in practicum activities that result in the completion of a comprehensive informatics related project that 1) meets the criteria for a graduate level capstone project, and 2) simultaneously meets an informatics need of one of the healthcare partners participating in this project.

Significance of Project

Technology provides opportunities for nurses and other health professionals to improve the quality of healthcare and ensure patient safety (IOM, 2003, 2011). In *The Future of Nursing: Focus on Education*, the Institutes of Medicine (IOM) reinforced its position that nurses should be involved in healthcare initiatives that incorporate informatics as an essential tool for improving health outcomes (2011). The proliferation of health research and the exponential expansion of information available to nursing professionals has dramatically affected how nurses "access, process, and use information" (IOM, 2011, p. 191). Nursing education must prepare current and future generations of nurses to function as competent users of the information technologies that support evidence based practice (Desjardins, Cook, Jenkins, & Bakken, 2005; Marshall, 2010; Waters, Rochester, & McMillan, 2012). Despite research findings consistently describing nursing's lack of informatics competency, only half of nursing programs teach IL skills (McNeil, Elfrink, Pierce, Beyea, Bickford, & Averill (2005).

Project Outcomes/Measures of Success:

The XNII will help to increase the number of Registered Nurses in the Greater Cincinnati area who possess the knowledge, skills and attitudes to engage in evidenced based practice supported by informatics. During the next two academic years, the XNII will engage a minimum of 300 graduate and undergraduate nursing students, 15 nursing faculty, and approximately 12 community healthcare partners. The XNII will consist of the following activities:

- a. **SOLO in a DELTA (approx. 120 BSN and MSN students).** An online nursing informatics training course, called *SOLO in a DELTA* (Successful Online Learning and Orientation in a Digitally Enhanced Learning and Technological Arena) will be offered to all new, incoming nursing students at the graduate and undergraduate levels. Additionally, nurses from partnering hospitals will be offered the opportunity to complete SOLO in a DELTA and outcomes between the academic and clinical setting will be compared and reported (see Appendix A for course content). A total of four (4) continuing education units (CEUs) will be awarded to individuals who successfully complete the course (see Appendix A for an outline of the course). A “DELTA Nurse” certificate of completion will be provided to students who demonstrate specific NI competencies measured in SOLO (see Appendix B). Grant funds will help offset the costs currently associated with SOLO consultation, outcomes tracking, and program quality monitoring.
- b. **NI Certification (10 MSN students).** Certification as a Nurse Informaticist (NI) demonstrates that a nurse can use and apply informatics competently in an interprofessional healthcare setting. Support will be provided for the PD, and a total of ten (10) graduate nursing students enrolled in the Informatics Track of the Masters of Science in Nursing (MSN) Program to complete the Informatics Certification Review Course, sponsored by the American Nurses’ Credentialing Center (ANCC) (see Appendix C). This review course is offered completely online and can be completed at the student’s own pace. Completion of the Informatics concentration of the MSN Program at Xavier University, along with successful completion of the NI certification review course, will prepare students for success on the NI Certification Exam and will improve their employment prospects for a career in NI. Data will be collected and tracked to monitor student progress and measure program outcomes.
- c. **Celebration of Nursing Research Poster Reception (approx. 70 BSN and MSN students).** Nursing students will complete informatics related research and activities at partnering institutions as part of their MSN Scholarly Project. Students will complete a comprehensive report and will develop and present approximately 20 informatics related project/research posters during a Celebration of Research Poster Reception that provides continuing education units (CEUs) and is supported by grant funds. Participating community partners, healthcare leaders, and WOX members will be invited to attend the Celebration of Nursing Research which will feature the posters of students engaged in the XNII Project, as well as the Scholarly Projects of all other graduating MSN students.
- d. **Grant Coordinator (1 BSN or MSN student).** A graduate or undergraduate nursing student who wishes to pursue a career in NI will be hired to work as a Grant Coordinator for eight (8) hours each week during the academic year. The student will work under the direct supervision of the Project Director in a manner that supports all the activities of the grant. The opportunity to work as a Grant Coordinator on a NI focused project will result in significant learning experiences for the student who will necessarily use and apply informatics at the clinical and educational levels as part of her leadership role.
- e. **Conference Attendance for PD.** Grant support will make it possible for the Grant’s Project Director (PD) to attend a national informatics conference. Information gleaned from this conference will be shared with nursing faculty and will be incorporated, as appropriate, into the XNII.

Outcomes Reporting and WOX Recognition

All reports and posters generated as a result of WOX funding will include the statement that support was provided by the WOX and The Giving Circle Grant. At least one publication and approximately 20 posters will result from this project. Lastly, grant funds will support the Celebration of Nursing Research Poster Reception in which WOX support will be announced on event brochures and announcements, as well as printed on all posters funded by this project.

Appendix A
Successful Online Learning and Orientation (SOLO)
in a DELTA (Digitally Enhanced Learning and Technological Arena)

The foundational intent of SOLO in a DELTA (SOLO) is to be a repository of easily accessible, digitally based resources where professional students can learn and develop as competent informatics users. SOLO consists of the following six modules:

- **Module I: Introduction to SOLO:** Introduces nursing students to the features of SOLO and the Blackboard platform. The objectives for this module include:
 1. Demonstrate the ability to navigate Blackboard
 2. Describe the purpose of the Successful Online Learning Orientation (SOLO) course
 3. Perform a browser and software check in order to enable the necessary functions for successful course completion

- **Module II- Navigating the Computer and Web:** Introduces nursing students to the parts and functions of the computer and presents practice exercises for browsing the web. The objectives for this module include:
 1. Describe the parts and functions of a personal computer
 2. Explore the use of the internet as a tool to inform nursing practice
 3. Demonstrate the ability to use and manage an email account
 4. Demonstrate understanding of the importance of anti-virus protection
 5. Demonstrate the ability to back up computer files

- **Module III- Computer Applications:** Presents computer applications commonly used by nurses, including spreadsheets, documents, and presentation software. The objectives for this module include:
 1. Apply the document construction principles of Microsoft Word, Excel, and Power Point
 2. Demonstrate the ability to save and edit documents
 3. Demonstrate the ability to create a folder for document organization

4. Demonstrate the ability to create and use Excel spreadsheets
 5. Create a PowerPoint slide presentation
- **Module IV- Information Literacy:** Presents library and web based research tools that support information literacy and evidence based practice. The objectives for this module include:
 1. Explain the nursing research process
 2. Demonstrate effective use of search engines, such as Google Scholar
 3. Locate scholarly articles and journals that support nursing research and evidence based practice
 4. Demonstrate the process for locating and evaluating scholarly articles and websites
 5. Discuss safeguards that should be applied when using social media
 - **Module V- Preparation for Research:** Presents an overview of professional writing and publication principles. The objectives for this module include:
 1. Describe plagiarism avoidance and copyright issues
 2. Demonstrate the principles of scholarly writing using American Psychological Association (APA) format
 - **Module VI-Issues for the Professional e-Nurse:** Introduces future e-nurses to professional issues encountered in the clinical setting. The objectives for this module include:
 1. Explore the role of nursing informatics in health care
 2. Describe how Information Technology (IT) is transforming healthcare
 3. Describe upcoming changes to healthcare due to the American Recovery and Reinvestment Act (ARRA) and the Accountable Care Act (ACA)
 4. Describe the roles and responsibilities of nursing in the area of health IT and Personal Health Information (PHI).
 5. Explain the difference between the electronic health record (EHR) and the electronic medical record (EMR).
 6. Outline opportunities for nursing in today's technology rich healthcare environment

Appendix B: Self-Assessment Nursing Informatics Competency Scale

For each statement, indicate your current level of competency on the scale of 1 to 5, where:
1 = Not competent, 2 = Somewhat competent, 3 = Competent, 4 = Proficient, and 5 = Expert.

	Not competent	Somewhat competent	Competent	Proficient	Expert
1. As a clinician (nurse), participate in the selection process, design, implementation and evaluation of systems	1	2	3	4	5
2. Market self, system, or application to others	1	2	3	4	5
3. Promote the integrity of and access to information to include but not limited to confidentiality, legal, ethical, and security issues	1	2	3	4	5
4. Seek available resources to help formulate ethical decisions in computing	1	2	3	4	5
5. Act as advocate of leaders for incorporating innovations and informatics concepts into their area of specialty	1	2	3	4	5
6. Use different options for connecting to the internet (phone line, mobile phone, cable, wireless, satellite) to communicate with other systems (e.g., access data, upload, download)	1	2	3	4	5
7. Use the Internet to locate (e-learning, teleworking), download items of interest	1	2	3	4	5
8. Use database management program to develop a simple database and/or table	1	2	3	4	5
9. Use database applications to enter and retrieve information	1	2	3	4	5
10. Conduct on-line literature searches	1	2	3	4	5
11. Use presentation graphics (e.g., PowerPoint) to create slides, displays	1	2	3	4	5
12. Use multimedia presentations	1	2	3	4	5
13. Use word processing	1	2	3	4	5
14. Use networks to navigate systems (e.g., LAN, WLAN, WAN)	1	2	3	4	5
15. Use operating systems (e.g., copy, delete, change directories)	1	2	3	4	5
16. Use existing external storage devices (e.g., network drive, CD, DVD, USB flash drive, memory card, online file storage)	1	2	3	4	5
17. Use computer technology safely	1	2	3	4	5
18. Navigate Windows (e.g., manipulate files using file manager, determine active printer, access installed applications, create and delete directories)	1	2	3	4	5
19. Identify the basic components of the computer system (e.g., features of a PC, workstation)	1	2	3	4	5
20. Perform basic trouble-shooting in applications	1	2	3	4	5
21. Use applications for diagnostic coding	1	2	3	4	5
22. Use applications to develop testing materials (e.g., e-learning)	1	2	3	4	5
23. Access shared data sets (e.g., Clinical Log Database, Minimum Data Set)	1	2	3	4	5
24. Extract data from clinical data sets (e.g., Clinical Log Database, Minimum Data Set)	1	2	3	4	5
25. Recognize that health computing will become more common	1	2	3	4	5
26. Recognize that the computer is only a tool to provide better nursing care and that there are human functions that cannot be performed by computer	1	2	3	4	5
27. Recognize that one does not have to be a computer programmer to make effective use of the computer in nursing	1	2	3	4	5
28. Recognize the value of clinician involvement in the design, selection, implementation, and evaluation of applications, systems in health care	1	2	3	4	5
29. Use wireless device (PDA or cellular telephone) to locate and download resources for patient safety and quality care	1	2	3	4	5
30. Use wireless device (PDA or cellular telephone) to enter data	1	2	3	4	5

Appendix C: ANCC Nurse Informatics Certification Review Course



Credential Awarded: RN-BC

Once you complete eligibility requirements to take the certification examination and successfully pass the exam, you are awarded the credential: Registered Nurse-Board Certified (RN-BC). The National Commission for Certifying Agencies and the Accreditation Board for Specialty Nursing Certification accredits this ANCC certification.

APPLY MAINTAIN RENEW

APPLY FOR CERTIFICATION

Initial Certification Application

Read Eligibility Criteria. Choose to apply online or by mail; not both. You may apply for this computer-based test year round and test during a 90-day window at a time and location convenient to you. The exam allows 3.5 hours to answer 175 questions (150 scored plus 25 pretest questions that are not scored). For exam prep resources, scroll to view Study Aids in the left sidebar of this page! If you do not pass a certification exam, learn about retesting.

2013 Pricing & Discounts

INITIAL CERTIFICATION

Non-member

\$395

American Nurses Association member

\$270

- *Prices above include \$140 non-refundable administrative fee. Additional fees for special services may apply. See application for details.*
- *Discounts may be claimed for up to 5 business days after ANCC receives your application. Discount claims received after this time will not be honored and refunds will not be issued.*

VA/DoD: Save \$55 on initial certification until 05-31-13. Download VA/DOD coupon [pdf]

Required with Online & Mail Applications

1. Final, degree conferred transcripts
2. Mail to: ANCC
PO Box 8785
Silver Spring, MD 20907-8785

Apply Online

1. Read Eligibility Criteria for how to qualify
2. Click Apply Online at right.
3. Questions? Refer to General Testing & Renewal Handbook [pdf]
Email Customer Care or call 1.800.284.2378

Apply by Mail

1. Read Eligibility Criteria for how to qualify
2. Download Application Form [pdf]
This is a fillable PDF form. Type directly into the application, then save to your computer. The latest version of Adobe Reader is required.
Download Adobe Reader (Free)
3. Print and mail with required attachments and payment to the address on the application.
4. Questions? Refer to General Testing & Renewal Handbook [pdf]
Email Customer Care or call 1.800.284.2378

MAINTAIN CERTIFICATION

To maintain certification, complete professional development requirements between the start and end dates of your certification, and provide this information on your renewal application.

Calendar Your Renewal Date

Certifications are renewed every 5 years. You must submit a renewal application at least 8 weeks before the expiration. You may be ineligible to practice beyond your expiration date.

Create an ANCC Account

Track professional development, mail preferences and purchases in one place. Online applications are also stored in your account. Visit Access My Account

Update Contact Information

If you move, change names or acquire a new phone or email, please update contact details in your account. Or email Customer Care or call 1.800.284.2378.

Track Professional Development with ANCC

Online renewal is simpler when you store professional development activities in your ANCC account immediately upon completion. At renewal, you can transfer stored information to the renewal application, saving time. Note: To renew online, you must store professional development activities *before* starting the online renewal application.

1. After each activity, gather proof of professional development.
2. Click Track Professional Development to the right.
3. Enter and save professional development activities.
4. From account summary, top right column, under Professional Development find links to enter continuing education (contact hours), academic credits, presentations, publications/research, preceptorship and professional service.
5. Log out. Questions? Email Customer Care or call 1.800.284.2378

**TRACK
PROFESSIONAL
DEVELOPMENT**