Interdisciplinary Education

**THE SCHOOL IS IMPLEMENTING** a number of innovative programs that integrate the latest advances in healthcare knowledge and research, that anticipate changes in the healthcare industry, and that reflect the healthcare needs of the region, commonwealth, and nation.

**Integrating Innovation Across the Curriculum**

**EVIDENCE-BASED PRACTICE**

Evidence-based practice (EBP) is a process by which nurses make clinical decisions using the best available research evidence and their clinical expertise as well as the preferences and values of the patient and family. Research has shown that clinical decisions based on best evidence, either from the research literature or clinical expertise, can improve the quality of care and the patient’s quality of life.

Students are taught EBP as a total process, beginning with identifying what clinical questions to ask. Then, students are taught how to search and evaluate the most current literature to find and evaluate relevant studies. EBP is unique because it includes the preferences and values of the patient and family in the process. Because application and outcomes of the best evidence will differ based on the values, preferences, concerns, and/or expectations of the patient, the final steps students learn in the EBP process are to evaluate the effectiveness of care and continue to improve the process.

The faculty has given special attention to incorporate the process at each level of the program to ensure the curriculum prepares our graduates to remain current and apply new information wisely and systematically throughout their careers.
**SIMULATION TRAINING**

The School of Nursing is a leader in offering human simulation experiences to facilitate full context learning within all programs. Simulation training enables students to develop clinical skills in an environment that is safe for both the students and for potential patients.

The School has been involved in simulation education since 1994. Beginning with our anesthesia program, this educational approach has been increasingly applied as the technology has become readily accessible. More than 22 simulators, AV systems, and 14 simulation theaters are available for students both at the School’s simulation laboratory and at the nearby Peter M. Winter Institute for Simulation, Education, and Research (WISER) Institute. The skills lab is equipped with 15 skills mannequins and a variety of task trainers, including a pelvic exam simulator and a virtual IV insertion simulator. The simulation theaters at the School and WISER can be configured to resemble operating rooms, intensive care units, basic patient rooms, airway management training laboratories, ED trauma bays, ambulance/helicopter treatment areas, outdoor disaster scenes, or patient exam rooms.

Simulation is now used for students at all levels of the curriculum, enabling students to critically think through clinical cases, apply the nursing process, and actively engage in nursing care. Simulation scenarios have been developed for a wide range of events, from simple to complex, to give students an opportunity to experience situations they might never see on their clinicals and to apply problem-based learning in a simulated environment.

Obstetrics is one of the more exciting applications for simulation training. In the past, students learned obstetrics nursing largely through observation. Due to the specialized nature of obstetrics nursing practice and the need for consistent high-quality patient care, obstetric nursing practice for undergraduate students at most schools consists primarily of observation of care with minimal hands-on interaction.

Using SimMan, SimBaby, and a pregnant simulator, students at the School have a hands-on learning opportunity to face rare and challenging scenarios including hemorrhage, sepsis, thromboembolic disease, uncontrolled hypertension, and amniotic fluid embolism. In addition, our students are the first teams of undergraduate nursing students in the United States to use full-scale clinical simulation with SimBaby.

The end result of simulation training is better nurses and safer patients. Instructors and students know early on through objective data which students are performing at a high level and which ones need additional training.

You can read more about simulation training at the School in the summer 2004 issue of *Pitt Nurse*, available online at our Web site, www.nursing.pitt.edu.

**HONORS COLLEGE**

Through the School’s new program of study at the University Honors College (UHC), qualified nursing students can pursue a unique, competency-based undergraduate degree, the Bachelor of Philosophy (BPhil). To earn the BPhil, students must complete the general degree requirements for the School of Nursing and an approved UHC program of study that demonstrates they have gone beyond the requirements for a standard undergraduate degree.

The University Honors College makes it possible for eligible School of Nursing students to take courses of particular depth and challenge beyond the nursing curriculum, participate in cocurricular and extracurricular activities, and benefit from concentrated academic advising as well as undergraduate teaching and research fellowships. Students, who are required to do a thesis to earn the BPhil, will find many other intellectual opportunities available for those who want them.
Clinical Nurse Leader

OPENING IN FALL 2005

THE UNIVERSITY OF PITTSBURGH SCHOOL OF NURSING is partnering with 11 UPMC practice partners and the Public Health Department to offer a clinical nurse leader (CNL) master’s program. The School was selected as one of more than 70 colleges of nursing across the country to pilot this new specialty that will prepare direct-care nurses to assume leadership of direct nursing care management. Unlike the nurse manager role, which is largely administrative, the CNL brings a high level of clinical competence and knowledge to the point of nursing care and serves as a resource for the nursing team.

American Association of Colleges of Nursing (AACN) plans call for the CNL to be the only clinical nurse master’s degree to be offered after 2015.

LAUREN VARIAN

LAUREN VARIAN (2009), the first University Honors College (UHC) student from the School of Nursing, calls joining the UHC “the best decision I ever made. It made the adjustment to college life much easier for me.” Varian, who came to the School with an SAT score of 1510, could have gone anywhere. She chose the University of Pittsburgh School of Nursing partly because it was the only school offering a dual BPhil and BSN degree. Varian appreciates all the opportunities available to her through the UHC and enjoys living in an atmosphere that is more conducive to learning. “I love that you can find people discussing philosophy in the halls at 2:00 in the morning,” she says.

Q&A

QUESTION: WHAT IS A CLINICAL NURSE LEADER?

The clinical nurse leader (CNL) is a generalist clinician with education at the master’s degree level. Graduate education is necessary because the CNL must bring a high level of clinical competence and knowledge to the point of care and to serve as a resource for the nursing team.

WHAT DOES A CNL DO?

The CNL’s role is not one of administration or management. The CNL provides and manages care at the point of care to individuals, clinical populations, and communities. The role of the CNL encompasses the following broad areas:

- **Clinician**: designer, coordinator, and evaluator of care to individuals, families, groups, communities, and populations. The CNL provides care to individuals across the life span with particular emphasis on health promotion and risk reduction services.
- **Outcomes manager**: synthesizes data, information, and knowledge to evaluate and achieve optimal client outcomes.
- **Client advocate**: adept at ensuring that clients, families, and communities are well informed and included in care planning.
- **Educator**: uses appropriate teaching principles and strategies to teach clients, groups, and other healthcare professionals.
- **Information manager**: able to use information systems and technology that put knowledge at the point of care to improve healthcare outcomes.
- **Systems analyst/risk anticipator**: able to participate in systems review to improve quality of client care delivery, and anticipate risks to client safety with the aim of preventing medical error.
- **Team manager**: able to properly delegate and manage the nursing team resources (human and fiscal) and serve as a leader and partner in the interdisciplinary healthcare team.

WHERE DOES A CNL WORK?

Implementation of this role will vary across settings, but it is not an administration or management function. The CNL is a direct clinical leadership position across all settings in which healthcare is delivered, not just the acute care setting.

HOW DOES A CNL WORK?

This clinician functions as part of an interdisciplinary team. The CNL assumes accountability for patient care outcomes by communicating, planning, and implementing care directly with other healthcare professionals—coordinating, delegating, and supervising the care provided by the entire healthcare team, including physicians, pharmacists, social workers, licensed nurses, technicians, clinical nurse specialists, and nurse practitioners.

You can learn more about the CNL program at the AACN Web site, www.aacn.nche.edu.
Doctor of Nursing Practice
OPENING IN 2006

IN A MOVE THAT RECOGNIZES AND VALIDATES the unique expertise of nurses engaged in clinical practice at the highest level, the American Association of Colleges of Nursing determined that the level of preparation necessary for advanced nursing practice roles should move from the master’s degree to the doctoral level.

Currently, advanced practice nurses (APNs), including nurse practitioners, clinical nurse specialists, nurse midwives, and nurse anesthetists, are prepared in master’s degree programs that often carry a credit load equivalent to doctoral degrees in the other health professions. The Doctor of Nursing Practice (DNP) degree reflects the level of scientific knowledge and practice expertise required for nurses in these roles to assure high-quality patient outcomes.

Nurses graduating from this program will be prepared with a blend of clinical, organizational, economic, and leadership skills. While other/existing practice disciplines focus on research, education, or practice, the DNP combines all three for advanced patient care and leadership. The DNP is designed for nurses seeking a terminal degree in advanced nursing practice, and offers an alternative to research-focused doctoral (PhD) programs.

The University of Pittsburgh will be the first school of nursing in Pennsylvania to offer a DNP for advanced practice. A faculty work group, with representatives from each department, developed a curriculum for the program. Pending approval from Faculty Council and the University Council on Graduate Study, the School anticipates accepting students into this program in January 2006.

Q&A

QUESTION: DOES IMPLEMENTATION OF THE DOCTOR OF NURSING PRACTICE (DNP) PROGRAM MEAN ADVANCED PRACTICE NURSES (APNS) WILL NO LONGER BE PERMITTED TO PRACTICE WITHOUT A DOCTORATE?

No. At the present time, nurses with master’s degrees will continue to practice in their current capacities. Recommendations will be forthcoming from the Roadmap task force on how to facilitate rapid transition to the DNP for master’s-level nurses seeking this credential.

WON’T ADDING ANOTHER NURSING CREDENTIAL ONLY CREATE MORE CONFUSION ABOUT NURSING DEGREES?

In the position statement, the American Association of Colleges of Nursing (AACN) Task Force on the Practice Doctorate was clear that all practice doctorates should convert to the DNP designation to reduce confusion and differentiate these programs from research-focused degrees.

I’M STARTING A NEW MASTER’S PROGRAM. SHOULD I CONTINUE?

Yes. The availability of master’s-prepared clinicians is essential to the health of our nation. The transition date of 2015 for the DNP was set far enough in the future to give programs enough time to make a smooth transition.

IS THIS DEGREE MEANT ONLY FOR NURSE PRACTITIONERS (NPS) OR OTHER APN ROLES?

This conversation is currently under way. At the School of Nursing, we have elected to move just the advanced practice programs to the DNP at the present time.

WHAT GRADUATE PROGRAMS WILL THE SCHOOL OF NURSING CONTINUE TO OFFER?

The School of Nursing will continue to offer programs in advanced practice, including nurse practitioner programs with acute care, family, adult, child, psychiatric, and a new neonatal emphasis; clinical nurse specialist programs with acute care and psychiatric emphasis; and nurse anesthesia. In addition, master’s degree programs in informatics, education, administration, and clinical research will continue.

ARE THERE ANY NEW PROGRAMS AT THE SCHOOL OF NURSING?

Yes. A new neonatal nurse practitioner program is in the planning process.

You can learn more about the DNP degree program at the AACN Web site, www.aacn.nche.edu.
Simulation training allows students to develop clinical skills in an environment that is safe for both the students and potential patients.

BSN to PhD

THE PHD PROGRAM at the University of Pittsburgh School of Nursing opened in 1954, one of the first three schools in the nation to offer doctoral preparation in nursing. The School continues to keep pace with the changing demands of healthcare and the nursing profession with a wide variety of options, including MSN to PhD and BSN to PhD programs.

The BSN to PhD program offers students an opportunity to accelerate their research career. Students are guided to achieve early success obtaining funded grants, publish in peer-reviewed journals, and complete their dissertation. The School of Nursing offers students an opportunity to study with a multidisciplinary faculty and be mentored by outstanding nurse researchers who focus on biobehavioral research, technology, and genetics.

Both the traditional MSN to PhD and the BSN to PhD programs prepare scholars to extend scientific knowledge that advances the science and practice of nursing and contributes to the scientific base of other disciplines.

Research

The University of Pittsburgh is recognized as a major nursing research center and has attracted national, state, and local recognition for its commitment to high-quality, innovative research and its multidisciplinary, collaborative process. Ranked seventh in the amount of funding received from the National Institutes of Health, the School of Nursing has been designated a Research Intensive Environment by the National Institute of Nursing Research.

Faculty at the School are engaged in both clinical and basic science research that provides a scientific basis for the care of individuals across the life span. Current faculty research initiatives include:

- **BIOBEHAVIORAL RESEARCH**, including adherence, adolescent health, chronic disorders, critical care, oncology, and women’s health
- **TECHNOLOGY**, including person-technology interactions and information technology
- **GENETICS**

For years, the School of Nursing has been a leader in biobehavioral research. Now, with additional grants focusing on emerging areas such as information technology and genetics, the School remains on the cutting edge of nursing research.