In the 2005 issue of *The UAB Nurse Scientist*, we introduce you to Duck-Hee Kang, PhD, RN, FAAN, who was recently appointed to the position of professor and Marie L. O’Koren Endowed Chair in the School of Nursing by the University of Alabama Board of Trustees.

This endowed chair, named for the second dean of the School of Nursing, was established to recruit an outstanding nurse scholar who would advance practice from the perspective of the tripartite missions of research, education, and service. Dr. Kang possesses an international reputation and significant experience in psychoneuroimmunology and biobehavioral research. We are fortunate to have such an outstanding scholar as the second holder of the O’Koren Chair.

We invite you to read about UAB nursing that touches the world through the work of the scientist, clinician, and educator. We spotlight those who follow the path of bench to bedside, local community to foreign countries, birth to death, health to illness, and student to faculty.

The tripartite mission and interdisciplinary culture of the UAB campus provide the framework for developing and fulfilling all of these pursuits. The credentials to participate in interdisciplinary initiatives are held by numerous faculty who have appointments in multiple universitywide interdisciplinary research centers, seven of which the School of Nursing serves as cosponsor, six with the School of Medicine and one with the School of Public Health.

Students join faculty and clinicians in pursuing scholarly activities in either the Undergraduate Honors Program or specific course projects in the master’s or doctoral programs. Honors students study alongside a mentor and present their research at regional and national conferences and publish in refereed journals. Their impressive accomplishments have caught the attention of a generous donor who has funded a perpetual endowment to support expenses associated with their scholarly work.

The School of Nursing’s mission embraces the mission of UAB to be known as an internationally renowned research university—a first choice for education and health care. The World Health Collaborating Center for International Nursing, together with direct connections to universities around the globe, serves as the venue for interaction with international colleagues in research and education.

In this edition of *The UAB Nurse Scientist*, we give you a glimpse of some of the scholarly activities of our faculty while they collaborate with colleagues in Asia and South America. Even though our activities extend around the globe, our faculty and students are committed to improving the quality of life in our local communities, especially those in the underserved areas of Alabama. Several programs are being offered in these underserved areas in the hope that nurses who are educated while in their communities will remain there to practice. Likewise, investigations are under way to recognize illness and treat disease while helping our communities remain healthy.

We hope you enjoy reading about activities that permeate the professional lives of nurses at UAB while providing a milieu for scholarly and professional growth. It is, indeed, an environment that cultivates and rewards nursing that touches the world.

Rachel Z. Booth, PhD, RN
Dean and Professor

From the Dean
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Results & Rewards
Nursing Science That Touches the World
By Anita Smith

From the UAB campus to sites around the globe, nurse scientists are involved in research initiatives that connect directly to health and lifestyle issues people face in today’s world.

Through studies that have real-world applications, nurse scientists at the School of Nursing at UAB are following an approach that has come to be known as translational research. It’s a concept that is drawing strong emphasis in nursing, including federal support for the development of regional translational research centers.

The term translational research carries many meanings. In essence, they all boil down to one goal—a timely translation of research findings into practice and policy to address human needs.

BENCH TO BEDSIDE
Reaching that goal is not a simple matter. It means closing the gap between research and health outcomes. It means sharing knowledge among scientific communities and strengthening interaction between bench scientists and clinical scientists. And it means charting a journey that effectively navigates the terrain from bench to bedside.

The School of Nursing is engaged in a number of translational-research efforts:

• Duck-Hee Kang, PhD, is studying the impact of stress and stress-reducing techniques on women undergoing treatment for breast cancer. This research focuses on women who recently learned they have breast cancer and then quickly faced the additional stress of taking often grueling cancer-fighting treatments.

• Lynda Harrison, PhD, is consulting with nursing faculty in Chile to study the impact of a program in Chile to teach mothers gentle massage for their babies.

• Pamela Fordham, DSN, is developing an online course to teach palliative care to nurse practitioners in underserved areas of Alabama.

A CALL TO COORDINATION
“For years, nurse scientists in our School of Nursing and elsewhere have used approaches that we now refer to as translational research,” says Rachel Z. Booth, PhD, dean of the School of Nursing. “We have been focusing on research that could be translated into practice and policy. While widespread use of the term translational research might be relatively new, the theory behind it is not new.

“But I believe the current emphasis on translational research is positive. We’re experiencing new packaging and heightened visibility for many of our research goals.

“It can be beneficial to the research process, and to research support, to have renewed focus on the importance of proceeding in a coordinated, cooperative, orderly fashion—from bench research and clinical findings to bedside applications.

“The current emphasis on translational research encourages further cooperation between bench scientists and clinical researchers. Also, it’s constructive to explain the concept of translational research to the public—to inform and reassure a public that is paying for much of this research through tax dollars.”

A BEHAVIORAL BASE
Duck-Hee Kang, PhD, says her research with breast-cancer patients is a “good example of translational research moving from bench work to clinical application.”

In this project, funded by the National Institute of Nursing Research, Dr. Kang is studying various interventions, such as exercise and relaxation techniques, to see if they help reduce stress among recently diagnosed breast-cancer patients. (See related story on page 4.)

“Preliminary findings indicate that these interventions help women show positive changes over time, such as decreased psychological stress and increased functional well-being,” Dr. Kang says.

“Based on bench work, we have seen findings of many negative immune changes caused by psychological stress. We have developed a clinical intervention of stress management, and it is being tested for its efficacy.

“Nurses can take a leadership role in behavioral aspects of translational research, particularly when equipped with biobehavioral knowledge and skills.”

CROSSING CULTURES
Lynda Harrison, PhD, conducts translational research with an international flavor. She is deputy director of the School of Nursing’s World Health Organization Collaborating Center for International Nursing and has worked on several projects to improve Latino health in North and South America. Also, she is a leader and former president of the Alabama-Guatemala Project.
within the Partners of the Americas organization.

Dr. Harrison has extensive experience in Chile. She worked there as a Fulbright Visiting Scholar to help develop online nursing education and developed a research project in Chile to study the effects of gentle touch and massage on newborns. A Chilean physician approached Dr. Harrison after the mayor of a low-income community in Chile began searching for ways to increase mother-child bonding and reduce child abuse. Dr. Harrison responded by training nurses in community health centers to teach mothers massage for their newborns. She also helped develop gentle-massage research projects in two Chilean hospitals. “We can bring down barriers by sharing cross-nationally and cross-culturally,” Dr. Harrison says.

REACHING THE UNDERSERVED

Back in Birmingham, Pamela Fordham, DSN, is principal investigator on a project to teach nurses palliative care online. The project is funded by the Health Resources and Services Administration of the U.S. Department of Health and Human Services. Dr. Fordham’s project builds on an existing online master’s degree program that educates family nurse practitioners in rural and underserved areas. The palliative-care students will use their knowledge to deliver caregiving and teach caregiving to family members of individuals who are chronically and/or terminally ill.

“This is an example of education-based translational research that can produce immediate help for people as soon as students master the knowledge,” Dr. Fordham says. “This program addresses caregiving needs of aging populations, needs of underserved communities, and the need to make education accessible—in this case, by using online technology.

“Through this course, enhanced caregiving will be available to individuals suffering from conditions such as cancer, end-stage heart failure, Alzheimer’s, and ALS [Lou Gehrig’s Disease].”

CROSSING THE BRIDGE

Barbara Woodring, EdD, views translational work from both a research and an educational perspective. “To me, translational research is the bridge between the actual research and the clinical application or evidence-based practice,” Dr. Woodring says.

Dr. Woodring’s view grows from her experience filling several roles inside and outside the School of Nursing. She is associate dean for undergraduate studies and co-deputy director of the World Health Organization Collaborating Center for International Nursing at the School of Nursing. She also is president of the Society of Pediatric Nurses.

Dr. Woodring recently consulted with university faculty in Kampala, Uganda, to assess how they could integrate research into their nursing programs. Back home at the School of Nursing, Dr. Woodring strives to expose nursing students to research concepts in an orderly, planned fashion. This includes teaching undergraduates to become good consumers of research, teaching master’s students to take research concepts and prove them and apply them in practice settings, and guiding doctoral students in creating new knowledge.

Dr. Woodring is pleased that the School of Nursing is able to expose selected undergraduate nursing students to research concepts, including concepts embodied in translational research. That opportunity comes through the School of Nursing Undergraduate Honors Program. The school is among the nation’s few schools of nursing that have progressive undergraduate honors programs specific to the discipline of nursing, Dr. Woodring says. “We have honors students who become involved in research projects at the undergraduate level and emerge from that program thinking of research as just being a part of the normal practice process. That experience should help them build on the knowledge generated through translational research.”
**THE HEART OF THE MATTER: SEEKING DATA TO MAKE A DIFFERENCE**

By Cindy Riley

Between 44,000 and 98,000 Americans die each year due to medical error. This sobering estimate from the Institute of Medicine is based on a study that also shows that all seven of the most frequent mistakes listed were due to impaired access to information, primarily through system-design faults. The numbers are unacceptable to Jacqueline Moss, PhD, an assistant professor at the School of Nursing at UAB.

“Health-care workers collect, analyze, and communicate vast amounts of information during the course of caring for patients,” Dr. Moss says. “Enhancing information delivery has the potential to save lives.”

Dr. Moss, a former critical-care nurse, is conducting a two-year, $100,000 study that examines how health-care teams use information to coordinate care in the clinical setting. The issue is particularly important in highly technical specialties, where the rate of adverse events is much higher than in other areas of health care. Dr. Moss’s study is funded by the National Library of Medicine, a branch of the National Institutes of Health.

“This research is in the area of clinical informatics, which is a new field,” Dr. Moss says. “First, I developed information categories based on previous research and observations in this critical-care unit. Then I developed a tablet-based systems-analysis tool based on those categories. The third phase is to take this tool and document the communication and information-seeking patterns of health-care workers. The current study happens to be carried out in the cardiovascular ICU, but I hope to apply this method to different contexts.”

Information is at the heart of her research, Dr. Moss says. “If you’re buying a car and you don’t have all the facts, then you can’t make an informed decision. That also applies to health care, where you also have the danger of not getting information in a timely fashion—or getting way too much information, making it impossible to wade through.

“The traditional information systems designed for businesses don’t really work in our field because when you’re dealing with patients, things rarely go the same way twice. This research can help design systems that will allow health-care workers to take better care of their patients.”

**BREAST CANCER: PROVIDING SUPPORT AT A CRITICAL TIME**

By Cindy Riley

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**KANG IS NEW HOLDER OF O’KOREN ENDOWED CHAIR**

Duck-Hee Kang, PhD, professor of nursing at UAB, has been named to the Marie L. O’Koren Endowed Chair in Nursing by the Board of Trustees of the University of Alabama.

The chair, funded by the Hillcrest Foundation and friends and alumni of the School of Nursing at UAB, was established in 1992 by the Board of Trustees in honor of O’Koren, the school’s dean from 1970 to 1987. Dr. Kang is the second individual to occupy the chair since its inception.

Dr. Kang’s primary research interests are psychoneuroimmunology—the study of interactions between the nervous system and the immune system and the relationship between behavior and health—and biobehavioral research in patients with breast cancer.

In addition to her professorship in the School of Nursing, Dr. Kang is an associate scientist with the UAB Comprehensive Cancer Center.
SECONDHAND SMOKE
REDUCING EXPOSURE IN CHILDREN
By Christina Crowe

Parents who smoke in their homes are negatively affecting their kids’ health, probably more than the adults realize, says Anne Turner-Henson, DSN, professor at the School of Nursing.

Dr. Turner-Henson hopes her recent study at Jefferson County Committee for Economic Opportunity (JCCCEO) Head Start sites in Birmingham will help change that.

“Secondhand smoke is a major problem for young children and infants who can’t get away from it and move out of the room,” she says. “In our study we found high rates of secondhand-smoke exposure among children, and rates of smoking among adults who are parents is increasing, especially in minority populations.”

Exposure to secondhand smoke has been found to exacerbate the symptoms of asthma and other respiratory illnesses.

Dr. Turner-Henson collaborated on the study with Connie Kohler, PhD, and Nalini Sathiakumar, MD, DrPH, both associate professors in UAB’s School of Public Health, and Roni Grad, MD, associate professor of pediatrics in the School of Medicine at UAB. They recently completed a two-year study on the effects of intervention—with both parents and young children—in reducing kids’ exposure to secondhand smoke.

The study was sponsored by the Centers for Disease Control and Prevention and was a special-interest project for the UAB School of Public Health’s Center for Health Promotion.

By using parental report surveys and measuring cotinine levels in Head Start students’ urine, Dr. Turner-Henson and her team found that approximately 60 percent of children tested were exposed to secondhand smoke, and 25 percent of them had asthma (by parental report).

Dr. Turner-Henson’s team then conducted sessions with parents and children in the classroom, teaching them how to reduce secondhand-smoke exposure in the home and car.

“We’re hoping to develop ways to better address the problem,” Dr. Turner-Henson says. “We want to develop innovative ways to promote healthier lives for young children and to reduce the consequences of secondhand smoke.”

One approach is to teach children about the dangers of secondhand smoke and teach them effective ways to avoid secondhand-smoke exposure. Initial review of the collected data shows that children who participated in the program had significant reductions in cotinine levels after intervention, indicating their exposure to secondhand smoke had declined.

As a message to smokers with kids, Dr. Turner-Henson suggests, “We know it’s really hard to quit, but if you can do one thing, smoke outside—and never smoke in the car. All children deserve to grow up in a healthy and smoke-free environment.”

URINARY INCONTINENCE
STUDYING THE ROLE OF MUSCLE FUNCTION
By Christina Crowe

Urinary incontinence is not a popular conversation topic—it’s not something sufferers generally wish to talk about. But if the number of advertisements for prescription drugs designed to treat it are any indication, quite a few people—especially women—experience the often-embarrassing effects of urinary incontinence.

Vicki Johnson, PhD, assistant professor at the School of Nursing at UAB, has developed a device to help study the role of muscle function in controlling urinary incontinence in women.

The instrument, called a vaginal imaging device, is a probe that works as an MRI resonator, measuring the strength of contractions of a patient’s pelvic floor and the degree of strain that develops as the muscles contract.

Working with UAB biomedical engineer Edward Walsh, PhD, Dr. Johnson uses a mathematical formula that superimposes gridlines on the images created by the device.

“As the subject contracts, the gridlines deform according to the degree of contraction, and you can actually quantify the degree of strain that has developed and the direction of that strain,” Dr. Johnson says.

Since receiving FDA approval to test the device on humans, Dr. Johnson and her team have been recruiting women to participate in an NIH-sponsored study using the vaginal imaging device. The study includes women who have not borne children but who suffer from urinary incontinence. Joining Johnson and Walsh on the research team are Holly Richter, MD, and Kathryn Burgio, PhD (School of Medicine), and Marti Rice, PhD (School of Nursing).

“We’re hoping to better define the characteristics of the pelvic-floor musculature so we can design better treatments and individualize therapies,” Dr. Johnson says.

Dettol and Ditropan are among the prescription drugs available for treatment of urinary incontinence, but they often induce side effects. Other options include Kegel exercises and behavioral treatments, such as reduction of caffeine consumption and use of estrogen therapy.

“These work for some but not for others,” Dr. Johnson says. “We hope our work can help women learn to control this without using medication.”
When the Division of Nursing at the U.S. Bureau of Health Professions sent out a call for culturally competent-training grants to help eliminate health disparities, four School of Nursing programs were perfect fits. Each program prepares students to work as certified nurse practitioners, and students from underserved areas and cultures are encouraged to enroll in the master’s-level training. The grants also are designed to help address the shortage of minority nurses in advanced education. For those who plan to work with underserved populations, the programs foster a greater depth of understanding so they can care for patients with sensitivity and confidence.

**FAMILY NURSING:** GAIL HILL, PHD

One of Dr. Gail Hill’s cherished possessions is a picture taken with Mother Teresa during Dr. Hill’s four years as a nurse in India. Dr. Hill knows the challenges of connecting with patients whose life experiences are different from her own.

“Culture is so much more than race,” she says. “It’s rural and urban, different beliefs and traditions, age and gender. It can affect the health conditions patients inherit, along with their attitudes toward health care. For example, the Tuskegee Syphilis Study left lingering doubts among Alabama’s African-American population about medical research that are unique to the history of the area. That’s why we meet with community advisory boards to talk about local views and health concerns.”

Nurses who leave underserved areas to receive advanced training often find it difficult to return. But technology has helped address that problem.

“We take the training to the nurses in online courses that allow them to stay in their home counties,” Dr. Hill says. “It’s also good
for nurses whose schedules or family responsibilities don’t allow them to study in traditional settings.”

The program, which has attracted students from surrounding states and even inquiries from other countries, prepares students to be nurse practitioners in primary care, handling everything from flu and minor lacerations to monitoring chronic stable conditions, such as diabetes.

“Our original goal was 20 students, and in the third year of our grant, we have more than 50,” Dr. Hill says. “Students read online content, then complete assignments. A preceptor evaluates progress at their clinical sites, and we travel to evaluate them there. We have a toll-free number, a chat room and bulletin board, and an online seminar where students present and discuss topics.

“It’s more time-consuming to answer questions one at a time instead of telling 52 students at once, but it’s well worth it. We already have eight graduates who are eligible to sit for the national exam.”

NEONATAL NURSING:
LYNDA HARRISON, PHD

Dr. Lynda Harrison is expanding and improving the neonatal-nurse practitioner program to have it ready for the first online class this fall.

“We have leading experts writing modules on specialty topics like neonatal pain, and we’ll have new electives on stimulating neurological development, plus a clinical course in genetics,” Dr. Harrison says. “We’re also collaborating and sharing resources with programs at Arizona State University, the University of Connecticut, and the University of South Alabama.”

Former School of Nursing faculty member Joyce Giger, EdD, now at the UCLA School of Nursing, will consult on cultural-competence issues. She is the author of the book Transcultural Nursing.

“Many high-risk infants are affected by culture, often due to economic disparities,” Dr. Harrison says. “Language can also be a factor, and we have to be aware of cultural values and parenting patterns.

“Most neonatal nurse practitioners, such as our instructors Stephanie Woods and Mary Beth Bodin, work in Level 2 and Level 3 neonatal ICUs,” Dr. Harrison says. “They collaborate with physicians in managing acute care and are trained to perform emergency procedures when physicians are not on duty.

“With so many high-risk infants needing follow-up and special therapies, the role of the neonatal nurse practitioner is expanding into the second year of life. The demand for neonatal nurse practitioners in pediatric practice groups and other settings is growing.”

CHILD/ADOLESCENT NURSING: JEAN B. IVEY, DSN

Seriously ill children and their families require sensitive care, Dr. Jean Ivey says. That’s why it is so important for a nurse to keep a child’s perspective in mind, while understanding the culture of the child and her family.

Dr. Ivey is preparing pediatric nurse practitioners to work in a new role in acute and continuing care. “Hospitals have so many children with acute illnesses, and they need more nurse practitioners to work in pediatric emergency rooms and intensive-care units,” Dr. Ivey says.

Nurse practitioners manage the ongoing treatment of children in the acute-care setting. They implement care plans, perform therapeutic interventions, and oversee complex monitoring in high-acuity situations.

“Our students are outstanding,” Ivey says. “In addition to needing core competencies, pediatric nurse practitioners in the ER or ICU need a different set of abilities and critical thinking. They have to understand the physical and emotional differences in children, and they must be good at problem solving and making quick decisions. They should also know when to ask for help and how to work collaboratively.”

Most pediatric acute care is provided in hospitals, so the program is based in Birmingham, where training includes 75 hours of primary-care experience and at least 555 hours of care to qualify to take the national boards.

“Advanced-practice nurses have a unique role,” Dr. Ivey says. “Patients love the care they receive, and nurses love the work because they get to know people as people.”

PALLIATIVE CARE:
PAMELA FORDHAM, DSN

Perhaps the greatest differences between cultures are in their attitudes and traditions about the end of life.

Palliative-care nurse practitioners are easing the lives of those with chronic, progressive, life-altering illnesses. Through an online format, the School of Nursing is reaching into underserved areas to deliver courses leading to palliative-care nurse practitioner certification.

“We’re building on Dr. Gail Hill’s grant for primary-care nurse practitioners in family medicine,” Dr. Pamela Fordham says. “We teach our students to be aware of differences in cultures, and we give them resources they can use when they need to learn more.”

Palliative care presents a number of challenges, Dr. Fordham says. “Some conditions are more likely to occur in specific populations, and nurses have to be aware of differences in how patients from certain ethnic backgrounds respond to medication. However, in palliative care, the emotional side of cultural differences is particularly important. There are differences in decision-making and who makes the decisions. People view pain and death differently, and they express their grief differently.

“It’s especially important for palliative-care nurse practitioners to learn to work with families and to work as a team.”

Most students enrolling in the program are from rural Alabama and surrounding states. “It’s really exciting to meet such a need,” Dr. Fordham says.

“The population is aging, and the need for palliative care continues to grow. It’s a very rewarding field.”

“Culture is so much more than race. It’s rural and urban, different beliefs and traditions, age and gender. It can affect the health conditions patients inherit, along with their attitudes toward health care.”

— Gail Hill, PhD

7
Nurse scientists know that minority women are an understudied population.

As a coronary-care nurse, Susan J. Appel, PhD, noticed that her patients who had strokes were all too often African-American women in their 50s. Later, as a nurse practitioner, Dr. Appel began to understand the negative impact on health that occurs when a person has low socioeconomic status and resides in an underserved region. As an assistant professor at the School of Nursing at UAB, she has combined these experiences with her interest in diabetes and its impact on the cardiovascular health of African-American women.

In 2003-04, Alabama was ranked number one in the United States for obesity and type 2 diabetes (T2D). National statistics show that African-American women have the highest prevalence, among women, for T2D and cardiovascular disease (CVD). Likewise, a predetermined pathway called the metabolic syndrome (also known as syndrome X) occurs before T2D or CVD is established in these patients.

In an effort to understand how the metabolic syndrome is manifested among African-American women ages 19 to 45, Dr. Appel used her Dean’s Research Award to conduct a pilot study to determine early risk markers for CVD. “We hypothesized that African-American women’s risk was more closely associated with insulin resistance (high blood insulin) than with dyslipidemia (high fat in blood),” Dr. Appel says. “The new criteria that are being applied in clinical practice to diagnose metabolic syndrome identify dyslipidemia as one of its main components and not insulin resistance, which occurs more commonly among African-American women. These new criteria are potentially underestimating these women’s risk for cardiovascular disease.”

Dr. Appel used an acanthosis nigricans (AN) (darkening skin on the back of the neck) scoring scale, a sign that is especially prominent on the necks of individuals with insulin resistance. The mere presence of AN showed a high level of agreement with signs of insulin resistance. AN is easily recognizable by providers and shows promise in foreseeing early risk for T2D and CVD.

HIV: DETERMINING THE VALUE OF COMMUNITY INTERVENTION

By Evelyn M. Outlaw

One might ask, “Why are nurses the most appropriate health-care professionals to study social support and development of peer-supported interventions for people with HIV?”

Nurses have broad educational backgrounds (liberal arts, general science, and nursing science) that prepare them to address both the physical and psychosocial aspects of illness. This holistic approach gives them the expertise needed to manage peer-provided social support interventions for people with HIV.

As an associate professor at the School of Nursing at UAB, Joe Burrage Jr., PhD, examined the effect of a care team on people with HIV. “The idea is that HIV patients with care teams not only receive physical support but also receive emotional, psychological, and social support to help them cope,” Dr. Burrage says. “Psychosocial aspects of any disease are important, and we know there are relationships between psychosocial and physiologic variables in HIV patients. For example, social support can affect the immune system, and that means social support and similar interventions need to be priorities.”

In his effort to measure social support, quality of life, and stress (by measuring salivary cortisol), Dr. Burrage expected to find that involvement in a social-support program such as a care team would result in lower stress levels. Participants self-selected into one of two groups—those who desired a care team and those who did not. Dr. Burrage found that intact care teams, similar to the buddy programs of the 1980s, are rare, and few volunteers were interested in forming a team for an HIV patient who does not need much physical help. The need for care teams decreased as HIV/AIDS became a chronic illness.

Despite the shortage of care teams, the project provided useful results. The salivary cortisol levels were lower in many of those who desired care teams, suggesting that they were less stressed or perceived stress differently. Also, African-American women were the least likely to desire a care team, bringing out interesting differences concerning certain populations and social support. Most important, findings from this study indicate the need to revisit social-support programs on a national level because the needs of people with HIV have changed. Volunteer training, Dr. Burrage says, should emphasize listening and talking with people who have HIV instead of focusing on the physical support previously needed.

Dr. Joe Burrage Jr. found the social-support needs of people with HIV have changed.
MENTAL HEALTH:
SEEKING INSIGHTS FROM THE PATIENT’S PERSPECTIVE

By Evelyn M. Outlaw

What does it mean for people with mental illness to feel truly understood by mental-health nurses?

As an assistant professor teaching psychiatric/mental-health nursing at the School of Nursing at UAB, Mona M. Shattell, PhD, is interested in what nurses can do to better connect with psychiatric patients. She is in the process of using a Dean’s Research Award to conduct a study titled “The Mental Health Patient’s Experience in Being Understood.”

Based on findings from previous studies of the hospital environment, Dr. Shattell found that acute-care patients and psychiatric patients generally experience the hospital very differently, although with some similarities. They are similar in that all patients want to connect with their nurses, and interpersonal relationships are important to both nurses and patients. “In a study of mental-health nurses, I found that nurses did not know how to connect to mental-health patients, although they desperately wanted to do so,” Dr. Shattell says.

In an effort to determine what skills are necessary for nurses to understand mental-health patients, Dr. Shattell’s current project seeks people who have or have had a mental illness diagnosis of any kind, such as depression, anxiety, bipolar disorder, or schizophrenia. Some may have been in the mental-health system for many years while others may be treated by general practitioners.

With expectations of rich, valuable stories and testimonies, Dr. Shattell says, “The goal is to get a clear understanding of what nurses can do to show psychiatric/mental-health patients that they understand them. We’ll be asking people who have been psychiatric/mental-health patients to describe what it’s like to really be understood. I’d like to share our findings with nurses so they can better understand, and therefore connect with, mental-health patients.”

Studying detailed descriptions of patient experiences and their perceptions will be essential in determining what skills are necessary for establishing better interpersonal relationships between psychiatric/mental-health patients and their nurses, Dr. Shattell says. She looks for findings from this study to have implications for other areas of nursing and beyond.

SEXUALITY
STUDYING ISSUES OF CONTROL AND ATTITUDE

By Evelyn M. Outlaw

In 2001-2002, 77 percent of Alabama’s newly diagnosed HIV cases among women of childbearing age were African American.

Jill Allard Ross, PhD, is an assistant professor at the School of Nursing at UAB who wants to help determine why HIV infection in this population is steadily rising. As a sexual-assault nurse examiner (SANE), Dr. Ross is interested in patient rights and patient decision-making. She studies self-determination and how it affects decisions about what happens to one’s own body sexually.

Currently, Dr. Ross is using funds from her Dean’s Research Award for a pilot study titled “Control in Sexual Relationships.” The project ties into a study that is already in progress at the UAB School of Public Health, dealing with sexually active African-American males in a resource-poor environment in a large Southern metropolitan district. The population for Ross’s study is 19- to 24-year-old African-American females from the same community. “My goal is to determine what environmental and social influences affect an African-American female’s decision to have sex, especially unprotected sex,” Dr. Ross says. “The pilot study is set up to discover STD-related practices by determining who is in control of sexual practices in this portion of the African-American population.”

Using semi-structured interviews and written surveys, Dr. Ross incorporates open-ended questions, along with visual analogues regarding actions participants feel are appropriate for different genders during sexual situations. “If these African-American females have no control over their sexuality, that equals no control over their exposure to HIV and other STDs,” Dr. Ross says. “Control over sexuality means responsibility for it.”

“Control in Sexual Relationships” is set up to discover how African-American females have no control over their sexuality, that equals no control over their exposure to HIV and other STDs. Dr. Ross says, “Control over sexuality means responsibility for it.”

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Dr. Ross hopes the project will help healthcare professionals discover ways to encourage healthy behavior among young African-American women.
How do you challenge exceptional undergraduate students and mold them into the type of thinkers who will enhance their future profession?

At the School of Nursing at UAB, the Undergraduate Honors Program in Nursing is the answer, offering high-achieving students the opportunity to explore a broad set of concepts and skills related to improving clinical judgment in nursing. Through studies of their own design, honors students experience all phases of the research process with a goal of influencing patient care by improving nursing practice.

With 39 students currently enrolled, the Undergraduate Honors Program in Nursing is the largest departmental honors program on the UAB campus. Applicants for the program must have a pre-nursing grade-point average of 3.25 or higher. They are selected for the program based on an application, transcript, and interview. Honors students begin their research projects during their first semester in the program, making a commitment that demonstrates strong initiative and a passion for the nursing profession.

Each student in the honors program chooses his or her own research subject and designs a project plan. A look at a few of those projects offers a peek at the talented students who make up the Undergraduate Honors Program in Nursing.

**The Art of Research**

For Elizabeth Day Barrow, the nursing honors program offered a perfect opportunity to explore the connections between her two majors, art and nursing. Her research project is titled “Effects of an Art Therapy Program with At-Risk Adolescents.” Using a self-esteem inventory and interview questions, Ms. Barrow gained qualitative data about 10 students’ experiences with an in-school art-therapy program. Results showed that the program was a “positive experience” for students, helping with anger management, self-discovery, stress relief, and relaxation.

“Being able to design and perform my own research project has given me a much greater appreciation for research as a valuable tool for exploring issues and making improvements in nursing practice,” Ms. Barrow says. “Going through the entire process, from brainstorming ideas and obtaining approval to interviewing participants and presenting my results, has made the phenomenon of research much less intimidating and has motivated me to continue my education and pursue research as part of my nursing career.”
Adolescent with cancer.”

I have an interest in pediatric oncology, and I love working with the adolescent population. They are such a unique group of people who need extra attention, especially with the diagnosis of cancer. I know my research will benefit my future in pediatric oncology because it has given me a special perspective into the life of an adolescent with cancer.”

— Sasha Ramini

With her research project, “An Adolescent’s Adaptation to Cancer,” Ms. Ramini studied the various adaptive strategies used by adolescents diagnosed with cancer. After interviewing four young adults about their experiences with cancer and its treatment, Ramini categorized their answers by themes based on the Roy Adaptation Model.

“I have an interest in pediatric oncology, and I love working with the adolescent population,” Ms. Ramini says. “They are such a unique group of people who need extra attention, especially with the diagnosis of cancer. I know my research will benefit my future in pediatric oncology because it has given me a special perspective into the life of an adolescent with cancer.”

After graduation, Ms. Ramini plans to work in either pediatric oncology or intensive care. In the long term, she hopes to obtain an advanced degree in nursing and teach.

Adolescents and Adherence

Some students might view a research project as a burden in addition to all the regularly required course work and clinical work of nursing school. But Sara McAllister actually sees the honors program as a stress reliever. “I know it sounds ironic, but working on my project and watching it evolve was exciting and fun, and it was a release from the daily grind of lectures and tests,” she says.

Ms. McAllister realized that for a variety of reasons, adolescents are prone to neglecting their medication regimens, and medication non-adherence in post-heart-transplant adolescents can have negative consequences. Through her project, “Medication Adherence Post-Heart Transplant: Adolescents and Their Issues,” she studied adolescents’ motivations for adherence or non-adherence. She found that a supportive environment and knowledge of medications were significant factors in increasing self-responsibility and adherence in adolescent transplant recipients. She also found that experiencing organ rejection early in treatment because of non-adherence led to increased adherence, for fear of further rejections or death.

“My research has helped me not only to learn about heart transplants but also about understanding and interacting with patients who undergo major life crises,” Ms. McAllister says. “It also enhanced my understanding of adolescents and therapeutic communication.

Adaptation Model.

Insights on Adaptation

Sasha Ramini says the honors program has been “an enormous learning experience” for her. “It has not only expanded my knowledge in research, but it has also made me consider nursing research as a possible long-term career goal,” she says.

Practical Knowledge

For Karla Papagni, the honors program offered a chance to conduct further study in obstetrics, an area of special interest for her. “My experience was very fulfilling,” she says. “Because the honors program is tailored to one’s own area of interest, I was able to learn a tremendous amount in the field of obstetrics. I was mentored by a wonderful nurse-midwife and a certified doula. It was after this experience that I decided I also wanted to become a nurse-midwife. So essentially, I owe my future nursing career to this program.”

Through her research project, “Doula Support and Attitudes of Intrapartum Nurses: A Qualitative Study from the Patient’s Perspective,” Mrs. Papagni examined the relationship between doulas and intrapartum nurses. She specifically focused on the level of acceptance shown by nurses toward doula support in laboring mothers. Her research has had immediate practical applications, Mrs. Papagni says. “Now that I am conducting my preceptorship on a labor-and-delivery unit, I am able to actually use the advice I received from my study participants with caring for patients.”

After graduation from the SON, Mrs. Papagni plans to work in a labor-and-delivery unit for a few years and eventually return to graduate school and become a certified nurse-midwife.

Like her contemporaries in the Undergraduate Honors Program in Nursing, Mrs. Papagni says the program’s strong research component has been an essential part of her nursing education. “As baccalaureate-educated nurses, we are responsible for being consumers of research,” she says. “The experience of conducting our own studies should help us understand and apply the latest information. Also, many of us plan to attend graduate school and may one day write grant proposals of our own. I feel like we have an advantage over other students by gaining experience with research at an undergraduate level.”

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— Sasha Ramini

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— Karla Papagni
A connection to South Korea is helping postdoctoral training emerge at the School of Nursing at UAB.

Dr. Chunja Kim, a lecturer at Soonchunhyang University in Seoul, South Korea, completed her postdoctoral training at the UASON in December 2004. Kyunghae An, also from South Korea, is expected to begin her postdoctoral fellowship in fall 2005.

SON faculty member Duck-Hee Kang, PhD, is the UAB connection for both postdocs. Dr. Kang completed her bachelor’s and master’s degrees in nursing at Yonsei University in Seoul, and she has maintained close ties to her native country.

Linkages and Learning

Carol Dashiff, PhD, chair of graduate studies and director of the doctoral program at the School of Nursing, hopes Dr. Kang’s work will help spark more opportunities for nursing postdocs at UAB. “Postdocs are attracted to an institution because they want to study with a faculty member who is known for expertise in a certain area of research,” Dr. Dashiff says. “Dr. Kang’s expertise is in psychoneuroimmunology, which is a very marketable area. And she did a sabbatical in Korea, where she worked to foster that country’s research efforts. Those linkages led to postdocs coming to work with her.”

Postdocs normally are funded in one of two ways, Dr. Dashiff says. In some instances, a faculty member has a grant that includes support for a postdoc, and the student might supplement that with funding from her home government. That has been the funding mechanism for Dr. Kang’s postdocs.

But postdoctoral programs also can be supported by targeted funding from the National Institute for Nursing Research. “These federal grants usually focus on a particular area of research, and the institution recruits students to work in that area,” Dr. Dashiff says. “We don’t have such a federal grant right now, but in the future I think we would like to provide that kind of postdoctoral training.”

Sharpening the Cutting Edge

Why is postdoctoral training important? “It’s a jump start for a research career,” Dr. Dashiff says. “After you have received basic research skills in a doctoral program, postdoctoral training allows you to specialize in an area and work with a renowned researcher who can foster your linkages to others who are conducting cutting-edge work in your field.

“Most postdocs become faculty members at academic institutions with strong research thrusts. They generally carve out a large portion of their time for research.”

“Our PhD program was developed to move us more strongly into the area of research, and providing more postdoc opportunities is the next logical step.”

— Dr. Carol Dashiff

Dr. Kang’s postdocs are following such a career path. Dr. Kim’s research, prior to her two years of postdoctoral training, had focused on exercise physiology, particularly in individuals with chronic illnesses. “While working as part of my research team during her postdoctoral fellowship period,” Dr. Kang says, “she extended her research skills to examine the impact of exercise on psychological well-being, functional capacity, and immune responses in breast-cancer patients.”

Dr. An’s research has focused on cardiovascular patients, examining issues related to delays in seeking care. “One goal of the postdoctoral training is for her to gain bench skills for biological assays,” Dr. Kang says. “This will allow her to incorporate appropriate biological indices to conduct biobehavioral research in the future.”

Dr. Dashiff hopes Dr. Kim and Dr. An are leading the way for a long line of postdocs at the School of Nursing. “Our PhD program is research-oriented, and adding postdoctoral training to that would bring high-quality students who want to study in a specific area where we have unique expertise,” Dr. Dashiff says. “Usually, you build a strong doctoral program before adding a layer of postdoctoral study. Our PhD program was developed to move us more strongly into the area of research, and providing more postdoc opportunities is the next logical step.”
Optimism: the belief that careers will prosper, marriages will succeed, and adolescents will thrive even though the road might be rocky and the destination unknown. Optimism buoys the present and anticipates the future.

In the case of breast-cancer risk, optimism plays a significant role in improving immune-system response where perceived risk challenges well-being.

Na-Jin Park, MSN, is the recipient of a Department of Defense Breast Cancer Predoctoral Training Grant, studying the interplay of subjective and objective risk, emotions, and their influence on immune response.

In cancer patients, immune response includes natural killer-cell activity (NKCA) and lymphokine-activated killer-cell activity (LAKCA), both important tumor-defense mechanisms. When women experience psychological distress based on their subjective assessment of exaggerated risk for developing breast cancer, it negatively affects their immune response.

Health and History

Ms. Park’s exploratory study, “The Impact of Breast Cancer Risk, Psychological Distress, and Dispositional Optimism on Immune Responses in Healthy Women,” includes a target sample of 126 subjects, with and without family histories of breast cancer. Family breast-cancer history, especially in first-degree relatives, is a commonly understood risk factor for developing the disease.

Subjects were screened for all cancers, immune disorders, substance abuse, and current infections, even colds. Participants were assessed in a questionnaire for both objective and subjective risk, including sections on psychological stress regarding breast cancer and general optimism. In addition, a blood test measured killer-cell activity.

Preliminary analysis indicates that optimism moderates psychological distress in women’s subjective assessment of their breast-cancer risk. Ms. Park’s research suggests that psychological-immune interactions in healthy women warrant further study in the reduction of breast cancer.

“Na-Jin’s research is highly important in that she not only compares the levels of breast-cancer risk women perceive they have with the actual levels of breast-cancer risk, but she also examines what impact such assessment has on psychological stress and how psychological stress influences immune function,” says School of Nursing faculty member Duck-Hee Kang, PhD. “Some women may experience increased levels of stress from over-assessment of their breast-cancer risk. Because stress can have negative effects on immune function, we need to learn more about this phenomenon and develop appropriate strategies for better outcomes.”

Na-Jin Park draws heavy interest from potential volunteers when she announced the study. An unexpected finding showed that African-American women, unlike all other ethnic groups, knew few details of a family member’s illness, indicating a cultural difference regarding health that could affect their risk assessment.

Close to Home

A native of South Korea, Ms. Park developed an interest in health prevention and promotion after several years of clinical work. She received her MSN in South Korea and came to the School of Nursing for her doctorate, where she joined Dr. Kang in research on immune-system defenses of breast-cancer patients.

Ms. Park’s mother is a breast-cancer survivor, and that helped spark her interest in the disease. Ms. Park plans to teach and conduct research in the United States, citing the value of interdisciplinary relationships here between schools of nursing and schools of medicine.

“This research should help clients improve immune response through stress reduction, realistic risk perception, and increased optimism,” Ms. Park says. “However, too much optimism can work against good health, especially if healthy behaviors are not practiced and risk is ignored. Some stress is good for improving patient commitment to positive behaviors.”
Providing Care, Seeking Answers

As cardiothoracic-transplant coordinator at UAB Hospital, Connie White-Williams has the difficult task of assessing quality of life and long-term survival chances for patients awaiting heart or lung transplantation. Together with a team of nationally recognized physicians and clinicians, Ms. White-Williams manages care for about 150 patients—just part of a larger UAB program providing care for more than 600 transplant patients.

With more than $3.5 million in funding from the National Institute of Nursing Research (NINR), Ms. White-Williams and her colleagues study quality of life for patients who ultimately receive the green light for transplant surgery.

In a 10-year study (1987-1997) examining quality of life before heart-transplant surgery and up to five years following surgery, Ms. White-Williams and other researchers found only 17 percent of patients were employed prior to transplantation as compared to 26 percent one year after surgery.

The study found pre-transplant nonworking patients were hospitalized more, were more physically disabled, experienced more symptom distress, and rated their health as poorer versus working pre-transplant patients. Additionally, post-transplant nonworking patients suffered more rejection, infection and medical complications, and chalked up more hospital days than did their working counterparts.

In another NINR-funded study, exploring quality of life at five years and greater post-transplant, working patients reported lower physical functional disability, and fewer gastrointestinal, neuromuscular, and oncological problems compared to nonworkers.

Armed with research supporting the health benefits of returning to work following surgery, Ms. White-Williams urges her patients to seize their second chance at life and assists them in securing gainful employment.

Ms. White-Williams says her motivation for conducting research comes from the opportunity to apply her findings in a real, life-changing way. “My goal,” she says, “is not only to help my patients live a longer life through transplantation, but also a better one.”

Women’s Health: Overcoming the Barriers of Language

By Marti Webb Slay

“We’re going to start an IV.”
“I’m your nurse. My name is . . .”
“Would you like to hold your baby?”

These words are uttered countless times in hospitals every day. But when nurses and patients don’t speak the same language, a hospital stay can become difficult and frustrating.

Clinical Nurse Specialist Freda Centor, RN, MS, wanted to help Spanish-speaking new mothers in UAB Women’s and Infants Services. She was concerned that those mothers missed out on the postpartum-discharge class.

Ms. Centor secured a grant from the March of Dimes and organized several programs to alleviate the communication gap. Her efforts have paid off. Nurses in Women’s and Infant’s Services at UAB Hospital are now offered an eight-week course in Spanish for health-care workers. In its third year, the program is growing quickly.

Cheryl Smith, RN, a lactation consultant, says she uses Spanish every day. Some days, she has as many as 10 Spanish-speaking patients. And while Smith is far from fluent, she is sometimes called upon by other nurses to help communicate with Hispanic patients.

In addition, a Spanish Phrase of the Week program reinforces the Spanish classes. Ms. Centor maintains a list of phrases identified by nurses as being most helpful. Each week, the department hangs banners featuring an English phrase along with its Spanish translation. Nurses can even call a telephone number to hear the correct pronunciation.

Spanish-speaking patients now have a postpartum class of their own to attend before they are discharged from the hospital. While many English-speaking mothers don’t take advantage of their class, many Spanish-speaking moms do, Ms. Centor says.

There have been some difficulties, mainly in finding sufficient funding. But Ms. Centor says the program has been valuable. “It’s been a lot of fun. We’ve all learned together. Our goal is for our Spanish moms to know how to take care of themselves and their babies when they get home, and that is being realized.”
Domestic violence and depression are sensitive issues that dramatically affect the lives of many women around the globe.

The two most recent speakers at UAB Nurse Scholar Day are on the front line of efforts to address these complex problems.

Nurse Scholar Day, sponsored each year by the Center for Nursing Research at the School of Nursing at UAB, features a visiting nurse scholar who makes a presentation about his or her program of research.

ASSESSING FOR ABUSE

Jacquelyn Campbell, PhD, is a professor and associate dean at the Johns Hopkins University School of Nursing. Her research focuses on family violence and violence against women.

“We estimate that about 8 percent of American women, ages 18 and above, have been physically abused by someone in a close relationship to them in the previous year,” Dr. Campbell says. “That’s alarming prevalence. Based on that figure, nurses should be identifying about one in every 12 women they see in emergency rooms or clinics as being abused.”

Dr. Campbell has studied the health effects of domestic violence, particularly its impact on the immune system and neurological outcomes. She also has studied links between domestic violence and stress-related conditions such as chronic irritable-bowel syndrome and chronic pain.

She is particularly interested in abuse related to pregnancy. “Poverty is a major risk factor in this type of abuse,” Dr. Campbell says. “Postpartum can be a key time period. Even if the intimate partner says he wants the baby, the birth can trigger jealousy.

“In situations where the intimate partner is normally abusive, the pregnancy doesn’t seem to have much to do with it. But from the nursing perspective, pregnancy is an important time because that’s when we see these women.”

Nurses can play a vital role in dealing with domestic violence, Dr. Campbell says. “We’ve learned the importance of assessing for abuse, and we know that any woman can be abused. We can’t assess just certain women. The majority of abused women manage to leave the relationship or make the violence end, and nursing care can be an important part of reaching that outcome.”

RETHINKING DEPRESSION

Ann R. Peden (DSN, 1991) is a professor at the University of Kentucky College of Nursing. Her research focuses on depression in women, examining the use of positive self-talk as an intervention for patients with depressive symptoms.

“Depression is the number-one mental illness in the world, and it is roughly three times more prevalent in women than it is in men,” Dr. Peden says. “It is very common, but also very treatable.”

The development of new medications over the past 10 to 15 years has dramatically improved the treatment of depression, Dr. Peden says. But her work goes beyond the biological components of depression.

“I’m interested in the way depressed people think,” Dr. Peden says. “When I was working on my dissertation at UAB, I interviewed women who were recovering from depression, trying to understand how they had done it. I kept hearing that the most difficult thing they had to overcome was their negative thinking. Affirmations, which are positive statements about the self, and a technique we call ‘thought stopping’ were two of the most effective strategies. Thought stopping involves training the brain to stop when you find yourself thinking negatively.”

Dr. Peden has developed a six-week group intervention for patients with depressive symptoms. “The first thing we do is to help people recognize that they do think negatively and to see how that causes them to make a lot of errors in their thinking,” Dr. Peden says. “Once they recognize what they are doing, we help them stop it and replace the negative thought with an affirmation.”

The results have been encouraging. “We have been able to reduce negative thinking and depressive symptoms in our research of at-risk college women and low-income single mothers. It’s all about preventing the development of depressive illness.”

Nurses can play a major role in the treatment of depression. “We as nurses need to realize that depression is very common, and it is often not diagnosed,” Dr. Peden says. “If you are in the clinical setting, always be aware of how people are responding. Are they giving you cues that maybe they are depressed? Are they using a lot of negative thinking?

“The evidence is continuing to grow—cognitive-behavior techniques are effective in both preventing and treating depression.”

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Biology & Behavior

MANAGING STRESS IN HIV PATIENTS

By Terianne Latsis

"PNI has been around for 20 years now, but if we’re talking about Eastern medicine, it’s many centuries old, so there is a body of evidence behind it."

You might say that Nancy McCain’s life’s work developed right along with her field of study—the relatively new field of psychoneuroimmunology (PNI).

PNI focuses on the interaction between the brain and emotions and the immune system. While lay people might believe there is a mind-body link, investigators in the field of PNI look for proof. At the forefront of PNI research is School of Nursing alumna Nancy McCain (DSN, 1983). In honor of Dr. McCain’s contributions to the field of PNI, the School of Nursing named her its Distinguished Alumna for 2004.

Dr. McCain became interested in issues related to stress, coping, and health while pursuing her master’s degree in the 1970s. But it wasn’t until the early to mid-1980s that PNI started to become a recognized field of study. Dr. McCain considers it a stroke of good fortune that in 1992 she landed a three-year fellowship to study PNI and HIV with Janice Zeller, PhD, of Rush University in Chicago. That experience, Dr. McCain says, gave her a firm footing in the developing field.

STRESSING STRESS MANAGEMENT

In 2000, Dr. McCain and her colleagues at the Virginia Commonwealth University School of Nursing landed a $1.5-million NIH grant to establish the new Center for Biobehavioral Clinical Research. She is the principal investigator for the center grant, leading new and experienced investigators in the development of biobehaviorally focused nursing research.

Dr. McCain is completing her second NIH-funded RO1 study of the impact and stress and coping skills on the health of persons with HIV infection. Participants in the study, divided into three groups, learn a variety of stress-management skills. The comparison group learns traditional cognitive-behavior techniques, such as meditation, relaxation, and mental imagery. Another group receives tai chi training, and a third focuses on spiritual growth. To test whether these short-term interventions—and benefits—can be prolonged and sustained, the study will also take a look at booster strategies.

Persons with HIV disease caught Dr. McCain’s attention because “they are a group you’d expect to be highly stressed,” she says. “There’s a threat to immune function by virtue of the disease itself, but also the treatment and management of the disease is fraught with major stressors.”

In 2004, Dr. McCain and her team were awarded yet another NIH grant to study the effects of complementary strategies for stress management in women with breast cancer. Consistent with her PNI focus, these participants are being evaluated for psychosocial as well as biobehavioral effects of stress management in the form of tai chi training or spiritual-growth groups.

THE CORTISOL CONNECTION

One of the main culprits wreaking havoc on the health of individuals with HIV infection or cancer is cortisol, a known immunosuppressant. People who are stressed have elevated levels of the hormone, and that may further compromise an already compromised immune system by reducing the number and function of immune cells such as NK cells and T-lymphocytes. Testing of cortisol levels, therefore, is one measurement of the efficacy of intervention. Investigators will also study their patients’ psychosocial functioning, focusing on perceived stress, coping patterns, social support, and psychological distress. And they will look at quality-of-life factors, such as spiritual well-being.

Dr. McCain stresses that these are complementary, not alternative, therapies. “We strongly encourage participants to continue their regular medical treatment,” she says. “That’s very important.”

And how does the medical establishment accept this nontraditional notion of enhancing health? “I’ve found no hesitation in the medical community in accepting these approaches,” Dr. McCain says. In fact, she says this type of treatment is becoming more mainstream. And as she points out, “PNI has been around for 20 years now, but if we’re talking about Eastern medicine, it’s many centuries old, so there is a body of evidence behind it.”

Still, much work remains to be done, Dr. McCain says. “To make this kind of intervention more mainstream, we need more research. This study will be valuable in documenting biobehavioral results.”
**JOURNAL ARTICLES**


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**BOOK CHAPTERS**


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Senior Scientist, Center for AIDS Research

Anne Turner-Henson
Scientist, Center for Health Promotion
Scientist, Cystic Fibrosis Center
Scientist, Center for the Advancement of Youth Health
Scientist, Lung Health Center

Mary Umlauf
Scientist, Center for Outcomes and Effectiveness Research and Education
Scientist, Center for Aging
Scholar, Sparkman Center for International Public Health Education
Senior Scientist, Minority Health and Research Center
Scientist, Comprehensive Cancer Center

Michael Weaver
Senior Scientist, Center for Outcomes and Effectiveness Research and Education
Senior Scientist, Center for Health Promotion
Scientist, Center for Education and Research Therapeutics
Senior Scientist, Arthritis and Musculoskeletal Diseases Center
Professor, Division of Preventive Medicine, School of Medicine
Professor, Department of Biostatistics, School of Public Health

Anne Williams
Associate Scientist, Center for Aging

Barbara Woodring
Scholar, Sparkman Center for International Public Health Education

Penelope Wright
Associate Scientist, Comprehensive Cancer Center

CENTER INVESTIGATORS
(FUNDED PROJECTS)

Kathleen Brown
Investigator, UAB Center for Education and Research on Therapeutics of Musculoskeletal Disorders

Marti Rice
Investigator, Comprehensive Youth Violence Center

Anne Turner-Henson
Investigator, Gregory Fleming James Cystic Fibrosis Research Center

Michael Weaver
Investigator, UAB Center for Education and Research on Therapeutics of Musculoskeletal Disorders

CENTER ADVISORY COMMITTEE

Rachel Booth
Internal Advisory Committee, Center for Education and Research on Therapeutics of Musculoskeletal Disorders
Advisor, Civitan International Research Center
Internal Advisory Committee Clinical Research Training Program (K30)
Member, Advisory Committee, Center for Aging
Member, Institutional Advisory Committee, Center for Health Promotion
Internal Advisory Committee, Center for Emergency Care and Disaster Preparedness

Barbara Habermann
Steering Committee, Center for Aging

Lynda Harrison
Advisory Board, Center for Outcomes and Effectiveness Research and Education

Jacqueline Moss
Health Informatics Unit Steering Committee, Center for Outcomes and Effectiveness Research and Education

CNR SCIENTISTS 2004-05

Senior Scientist
Norman W. Weissman, PhD
Professor of Health Services Administration and Medicine, UAB
Director, Center for Outcomes and Effectiveness Research and Education

Scientists
Hussein Abdullahif, MD
Associate Professor of Pediatrics, UAB
Children's Hospital of Alabama

Timothy R. Elliott, PhD
Associate Professor of Rehabilitation Medicine, UAB
Department of Physical Medicine and Rehabilitation
Spain Rehabilitation Center

Kenneth G. Saag, MD, MSc
Associate Professor of Medicine, UAB
Director, UAB CERTs for Musculoskeletal Disorders
Division of Clinical Immunology and Rheumatology

Associate Scientist
Edward G. Walsh, PhD
Research Assistant Professor, UAB
Department of Biomedical Engineering
RACHEL BOOTH RETIRES AS DEAN

Dean Rachel Z. Booth, PhD, has announced her retirement as dean of the School of Nursing, effective September 1. She served almost 18 years in the position.

Dr. Booth has received many honors and awards during her career as a nursing educator, researcher, and administrator. These include designation as distinguished practitioner by the National Academy of Nursing Practice; receipt of an honorary doctoral degree, presented to her in 1999 by King Bhumibol Adulyadej of Thailand; induction into the Alabama Nursing Hall of Fame; and being named a Health Care Hero of Birmingham by the Birmingham Business Journal. She was the first foreigner in Thailand’s history to receive an honorary doctoral degree in nursing.

“Rachel Booth has served UAB and her profession with great distinction during some of nursing education’s most trying years, dominated by a nationwide nursing shortage and many challenges in U.S. health care, generally,” UAB president Carol Garrison, PhD, says. “She has strengthened the School of Nursing at UAB on every possible front and will leave it as dean of what is now, thanks in large part to her leadership, one of the top nursing schools in America.”

Dr. Booth is a native of Seneca, South Carolina, and started working as a nurse at the Veterans’ Affairs Hospital in Murfreesboro, Tennessee. She joined the UAB faculty in 1987 after nearly four years as assistant vice president for health affairs and dean and professor of the School of Nursing at Duke University. For 17 years before that, she held senior administrative and faculty positions at the University of Maryland, ending in 1983 as associate dean for undergraduate nursing studies.

During her tenure as dean at UAB, Dr. Booth spearheaded creation of Alabama’s first PhD in nursing program; the program’s first class of students was enrolled in 1999. Additionally, in 1993 the school received designation as a World Health Organization Collaborating Center for International Nursing, one of just 12 in the nation and 36 worldwide. She also oversaw inception of a long-term collaborative relationship in nursing education with Chiang Mai University in Thailand.

The UAB School of Nursing, established in 1950, has witnessed steady upward movement in its rankings during Dr. Booth’s years as dean. Today, its master’s degree program in nursing education ranks 19th according to U.S. News & World Report, and overall the school is 16th in research funding by the National Institutes of Health. In addition, the school’s endowment grew to $8 million, funding more than 40 scholarships annually.

SCHOOL OF NURSING INTRODUCES NEW MASTER’S OPTION

Today’s increasingly complex medical care requires highly skilled and educated nurses to produce optimal patient outcomes. As part of its response to this challenging environment, the School of Nursing at UAB has become the first in the nation to offer a master of science in nursing (MSN) program to prepare registered nurse first assists (RNFAs). RNFAs directly assist surgeons during the perioperative period and provide preoperative and postoperative care.

“Certification programs for RNFAs have been offered for approximately a decade,” says SON Dean Rachel Booth, PhD. “This degree, which will be a new option in our existing MSN program, will ensure consistent education and training and raise the level of professional performance.”

Currently, RNFAs must complete a one-semester didactic session for which continuing education hours are awarded, complete 2,000 clinical hours, and receive certification from the Association for Perioperative Registered Nurses (AORN). “Most RNFAs get the bulk of training on the job,” explains Marie Garner, RN, MSN, University Hospital administrative director of perioperative nursing.

Garner and Elizabeth Stullenbarger, DSN, SON associate dean for graduate programs, developed the curriculum for the new advanced-degree option. “Dr. Stullenbarger, a member of the Alabama Board of Nursing, noticed a growing interest in formalizing RNFAs education to ensure consistency, patient safety, and quality outcomes,” Garner says. “RNFAs are already well-prepared, but this program will increase the scope and depth of training and provide an opportunity to earn a master’s degree.

“We envision two tracks. The first will be broader in scope and educate individuals to work as clinical nurse specialists in perioperative nursing. The second track will lead to RNFA certification.”

Garner and Dr. Stullenbarger say the first students are set to begin the program in September 2005.