

# ASU Nursing

Fall 2006

I N N O V A T I O N S I N R E S E A R C H

COPE Cuts Stress and  
Reduces NICU LOS

PLAY! Counters  
Child Weight

Adolescents Need to  
Get Physical

Katrina's Mental Aftermath

Culture, Spirituality and  
Latino Health

Nursing Home Nutrition  
Needs Culture

Cancer Survivors Can  
Battle Weight

Wellness Motivation for  
Older Women

ASU Researchers Create  
Opportunities for Parent  
Empowerment >



College of Nursing  
& Healthcare Innovation

ARIZONA STATE UNIVERSITY

Dream • Discover • Deliver



# Inside this Issue

## Features

- 1 Dean's Message
- 2 Message from Associate Dean for Research
- 3 **Introduction to Center for Improving Health Outcomes for Children, Teens & Families**
- 4 COPE Intervention Improves Parent Outcomes and Shortens LOS in Premies
- 8 PLAY! Counters Preschoolers Weight
- 9 School-based Obesity Intervention for Middle School Children
- 10 Healthy Lifestyles TEEN Program
- 11 Adolescents Need to Get Physical to Counter Diabetes
- 12 Katrina's Mental Aftermath
- 14 Mother's Voice and Preterm Infants in NICU
- 15 Stress among Abused Women and Their Newborns
- 16 **Introduction to the Center for Healthy Outcomes in Aging**
- 17 Health Empowerment among Homebound Older Women
- 18 Spirituality and Latino Healthcare
- 18 Cultural Nutrition Needs of Mexican Americans in Nursing Homes
- 19 Sleep Disorder Research and Mexican American Health Disparities
- 20 Imaging Physical Activity and Diet of Latina Women
- 21 Battling Weight Gain among Breast Cancer Survivors
- 22 Treating Breast Cancer Survivor Insomnia
- 23 Community-based Wellness Motivation Intervention for Older Women
- 24 **Clinical Track Faculty Research Contributions**
- 26 **ASU Nursing News**
- 33 **Faculty and Staff Appointments**
- 35 **Fundraising Gains Momentum**
- 36 **Alumni News**

*Adolescents don't have to go it alone to achieve healthy lifestyles. See page 10.*



## ASU Nursing

ASU Nursing is published in the spring and fall by the College of Nursing & Healthcare Innovation at Arizona State University for alumni, friends of the college, national nursing leadership, students, faculty, and the media.

Direct comments and inquiries to:  
 COLLEGE OF NURSING &  
 HEALTHCARE INNOVATION  
 R. Terry Olbrysh  
*Director of Marketing and Communications*  
 500 N. 3rd Street  
 Phoenix, AZ 85004-0698  
 Terry.Olbrysh@asu.edu  
 602-496-0877

### WEB SITE

<http://nursing.asu.edu>

### DEAN

Bernadette Melnyk, PhD, RN, CPNP/  
 NPP, FAAN, FNAP

### EDITOR

R. Terry Olbrysh, MA, APR

### DESIGN

Elaine Rettger, Studio 18  
 Elaine@studioeighteen.com

The College of Nursing & Healthcare at Arizona State University operates under a 10-year accreditation through June 2014 granted by the Commission on Collegiate Nursing Education for its baccalaureate and master's degree programs and also is approved by the Arizona Board of Nursing.

### On the cover:

A mother's concern for her premature infant in an NICU illustrates the need for innovative research initiatives for such stressful healthcare settings. This issue's theme of *Innovations in Research* provides a look inside ASU nursing research and how faculty are addressing the needs of youth, the aging, and families.

© 2006 Arizona Board of Regents. All rights reserved. The sunburst logo is a registered trademark, and the word mark is a trademark of Arizona Board of Regents. All other brands, product names, company names, trademarks and service marks used herein are the property of their respective owners. Information in this document is for informational purposes only and is subject to change without notice.

## Dean's Message

*Research initiatives at our College of Nursing & Healthcare Innovation are moving full steam ahead. Our faculty are specifically focused on conducting studies that will have a direct positive impact on clinical care and health outcomes of the people of Arizona as well as those throughout the nation.*



Bernadette Melnyk

We are tackling some of the most pressing health problems facing Americans today, such as reducing overweight and obesity across the life span, promoting healthy aging, decreasing health disparities, and preventing the onset or worsening of mental health problems in both pediatric/ adolescent and adult populations. Many of our researchers are developing and testing interventions within the context of rigorously designed randomized clinical trials that, if found to be effective, can be translated into clinical settings to improve healthcare and patient outcomes.

Our outstanding research infrastructure, housed in our Center for Research & Scholarship, includes a director, research grants coordinator, business manager, editor, two statisticians, a data management and analysis expert, and grant support secretary who provide a high level of technical pre- and post-award grant support. Our two new centers of excellence, the Center for Improving Health Outcomes in Children, Teens & Families and the Center for Healthy Outcomes in Aging, provide a rich research intensive forum to cultivate outstanding interchanges among our faculty and interdisciplinary colleagues to cultivate studies that extend the science and improve outcomes in focused areas of research. This is the first year that these two Centers have both pre- and post-doctoral fellows, who are working with our seasoned researchers on the design and conduct of studies to improve outcomes in children/teens and older adults.

Although billions of dollars are spent on generating research every year, it is recognized that it takes approximately 17 years on average to translate many of the findings from studies into clinical practice to improve patient care. Our college recognizes the critical importance of accelerating the movement of research findings into practice. Through our Center for the Advancement of Evidence-based Practice, we are working at decreasing the 17 year time gap by assisting

nurses and interdisciplinary healthcare providers to develop a spirit of inquiry by asking burning clinical questions, searching for the best available research evidence, rapidly critically appraising and synthesizing that evidence, and moving evidence into action through evidence-based practice.

Not only are we addressing important clinical problems through our studies, but we are actively engaged in improving our teaching strategies through educational research. It is exciting to see both our teaching intensive and research intensive faculty working together and actively engaged in gathering evidence to support the best educational strategies to enhance critical thinking and advance evidence-based practice in our students and practicing nurses throughout the state.

I am very pleased to share with you in this publication many of the exciting research and scholarly initiatives of our faculty. I hope that you will enjoy the stories and passions of our faculty as we continue to dream, discover, and deliver the highest quality research to benefit our students, practicing nurses, and the people for whom we care.

Bernadette Mazurek Melnyk  
PhD, RN, CPNP/NPP, FAAN, FNAP  
Dean and Distinguished Foundation Professor in Nursing

## Message from the Associate Dean for Research

**Arizona State University**

**College of Nursing & Healthcare Innovation**

*Focusing on outcome-determined excellence as a major design imperative for Arizona State University, the College of Nursing & Healthcare Innovation is addressing research initiatives with a commitment to the unique needs of Arizonans, as well as with global partnerships.*



Melissa Faulkner

With its relocation from Tempe to Phoenix, the college is now strategically located in the fifth largest city in the nation. Phoenix resides within Maricopa County, a community that is expected to double its population in the next two decades. The changing demographics of the region reflect increasing numbers of individuals at the opposite extremes of the lifespan, youth under the age of 18 years and older adults over the age of 65 years. As part of the strategic research mission to incorporate social embeddedness within communities, our researchers are tackling the special healthcare needs of persons living in the American Southwest. Over the past year, the Center for Improving Health Outcomes in Children, Teens, & Families, the Center for Healthy Outcomes in Aging, and the Center for the Advancement of Evidence-based Practice are all facilitating and conducting studies that reflect the priorities for promoting and improving the health of our residents. These priorities are consistent with key objectives outlined in Healthy Arizona 2010 (Arizona Department of Health Services) and focus on physical activity, nutrition, mental health, environmental health, and access to healthcare. As part of the goal to transform ASU into an innovative, research-focused academic enterprise that leverages opportunities to embrace the uniqueness of its socio-economic, cultural and geographical locale, investigators are engaging interdisciplinary colleagues to develop use-inspired research to strengthen study designs, methods, and applications of findings that will ultimately improve the overall quality of life for our residents. New ventures for global involvement include the Southwest Borderlands Initiative with the development of studies and a website solely devoted to the healthcare concerns of Mexican Americans; plans for international collaboration with faculty from the Nursing College of Dublin City University, Dublin, Ireland; and approval for the development of a

partnership to advance evidence-based practice in the Americas with the Pan American Health Organization.

During this new era of transformation to an environment that fosters scholarly inquiry to promote and improve health outcomes across the lifespan for individuals locally, nationally and internationally, faculty in the College of Nursing & Healthcare Innovation will be creative in forging new relationships with interdisciplinary partners in research and clinical practice disciplines. Along with residents who can highlight their cultural and personal preferences for developing the best practices for care delivery, our researchers are destined to contribute new knowledge that can enhance our existing systems of healthcare delivery. Commitment and determination to make a difference in improving the quality of life for individuals, families, and communities is what keeps our faculty “swinging the bat.” In the words of George Herman “Babe” Ruth, one should “never let the fear of striking out get in your way” of reaching for your dreams to discover new knowledge and to translate these findings into practice.

A handwritten signature in black ink that reads "Melissa Faulkner".

Melissa Faulkner, DSN, RN, MS  
Associate Dean for Research

# ASU Center for Children, Teens & Families Addresses the Urgent Need to Improve Child and Adolescent Health

*Children are full of promise, hope and curiosity. Curiosity about the world, hope for a good future and promise for a well-lived life. However, children in the United States are suffering from many obstacles, including premature birth, obesity, diabetes, asthma and more. Data from the Annie E. Casey Foundation suggests that 20 to 25 percent of children in the U.S. suffer from a chronic illness, nearly 25 percent are overweight, and 20 percent have a mental health problem.*



*Photo courtesy of Phoenix Children's Hospital*

Arizona is not doing so well either. According to the Annie E. Casey Foundation's annual KIDS COUNT study in 2004, Arizona ranks a disappointing 45 out of the 50 U.S. states on its 10 key indicators of child well-being, which include teen deaths, teen births, infant mortality and children living in poverty. With an estimated 1.4 million children in Arizona, which is 30 percent of the state's population, there is an urgent need to coordinate and intensify efforts to improve child and adolescent health.

Arizona State University's College of Nursing & Healthcare Innovation recognizes this urgent need and established the Center for Improving Health Outcomes in Children, Teens & Families. With this innovative research center, nursing faculty and researchers will have the opportunity to address some of Arizona's most pressing needs for child health services, says the center's director, Dr. Bonnie Gance-Cleveland, PhD, RNC, PNP.

"Most health care research is focused on adults and oftentimes it is believed that because it worked on adults, it should work for kids, but that isn't always the best approach," says Gance-Cleveland. "We must design programs that are developmentally appropriate for children and also help families cope with the situation."

As one of the few national centers to focus on infants, children, teens and families, ASU's center will conduct interdisciplinary research to advance healthcare for children and translate research findings into clinical practices. According to Gance-Cleveland, the center will work to discover new knowledge to educate health professionals, students and the general public about the best possible approaches to improve health outcomes for children and teens.

"The more opportunities we have to develop better approaches to healthcare for children and families, the more nurses can do, along with parents, to take care of these children," adds Gance-Cleveland.

The center, consisting of nursing and interdisciplinary faculty members, as well as doctoral and post-doctoral fellows, will conduct research on a broad range of topics related to children's health, including diabetes, obesity, asthma, risky sexual behavior, premature babies, incarcerated family members and children with addictive parents, among others. Additionally, the center will concentrate studies on high-risk populations in Arizona, such as Hispanics and Native Americans.

"We're currently identifying those issues that are prevalent in Arizona's communities and will develop research to improve health outcomes for children and families in areas such as infant feeding, nutrition, physical activity, obesity, diabetes, family coping, depression and anxiety, and risky behavior in youth," explains Gance-Cleveland.

Gance-Cleveland says the center has established a partnership with Phoenix Children's Hospital and is pursuing additional opportunities with healthcare providers in Arizona. She adds that a national advisory board is being established to collaborate with scientists around the country who are working on these same issues. The center launched in fall 2005 under Dean Bernadette Melnyk's direction and Gance-Cleveland joined as the center director in January.

For more information, visit:

<http://nursing.asu.edu/centers/families/index.htm>.

*Leah Hardesty of ASU Media Relations contributed this article.*

## COPE Program Reduces Premature Infants' Length of NICU Stay and Improves Parents' Mental Health Outcomes

*More than 480,000 premature babies are born every year in the U.S., a 27 percent increase since 1981. Although advances in technology have allowed greater numbers of infants to survive, morbidity remains high and imposes great emotional and financial burdens to families, society, and the healthcare system.*

Studies support that low birth weight (LBW) premature infants experience a host of adverse physical and mental health/behavioral problems (e.g., delays in cognitive and neurological development, behavior problems, attention deficit disorder), which persist well into the school-age and adolescent years. Parents of premies also experience many negative outcomes, such as depressive and anxiety disorders. Furthermore, the costs associated with a neonatal intensive care unit (NICU) stay (approximately \$1,250 to \$2,000 per day) coupled with increased medical care after discharge impose much stress on families and the healthcare system.

However, evidence presented from a funded study by the National Institutes of Health/National Institute of Nursing Research in a recently published article in *Pediatrics* indicates that the delivery of COPE (Creating Opportunities for Parent Empowerment), an educational-behavioral intervention program for parents of premies, can improve their coping and mental health outcomes during and shortly after hospitalization while also reducing length of hospital stay for their infants. This program demonstrates considerable cost savings for NICUs and could save the healthcare system billions of dollars with routine implementation.

Parents of preterms experience high stress levels and feelings of helplessness in the NICU. They often are uncertain about their role and lack adequate knowledge of how to parent and interact with their infants during the hospital stay. Parents typically develop misperceptions of their infants and have difficulty interacting with them in a developmentally sensitive manner. These negative parental-infant interactions often lead to adverse parent outcomes following hospitalization, such as depression, anxiety disorders, and other dysfunctional parenting patterns.

Despite all of the documented negative outcomes for premies and their parents, there has been a lack of theory-based, parent-focused intervention programs initiated early in the NICU stay to reduce parental stress and empower parents to develop healthy perceptions of and interaction patterns with their premature infants. Early intervention may be key to successful programs with parents of preterms because once a negative trajectory of parent-infant interaction is initiated in the NICU, changes are difficult to implement and hard to sustain. Some evidence also supports that mothers who rapidly engage in the care of their infants in the NICU tend to be more sensitive to their infants' cues and have better relationships with them throughout their growing years.

Dr. Bernadette Melnyk, Dean and Distinguished Foundation Professor in Nursing, and her key research collaborators (Dr. Nancy Feinstein, Dr. Linda Alpert-Gillis, Eileen Fairbanks, Dr. Hugh Crean, and Dr. Xin Tu from the University of Rochester, Dr. Leigh

Small from the ASU College of Nursing & Healthcare Innovation, Dr. Robert Sinkin from the University of Virginia Medical Center, Dr. Steve Gross from Crouse Hospital in Syracuse, New York, and Dr. Pat Stone from Columbia University) started their work with

*Below: Preterm infant Sophia Theis sleeps soundly as her mother Jennifer takes a break from talking about the COPE intervention program with Barbara Harvey, manager of the NICU at Phoenix Children's Hospital, and Drs. Bernadette Melnyk and Leigh Small of ASU.*



parents of premature infants in Rochester, New York, almost a decade ago. In a pilot study with 42 mothers of preterm infants that tested the effects of the COPE program findings indicated that mothers who received the program had less stress in the NICU than did mothers who received a comparison program. In addition, their infants scored almost a standard deviation higher in cognitive development than did infants of parents in the comparison group at 6 months corrected age. To confirm findings from this pilot study and further address the gap in preventive intervention work with parents of low-birth weight premature infants, the purpose of the full-scale randomized controlled trial was to evaluate the efficacy of the COPE program in two NICUs in Rochester and Syracuse, New York.

The full-scale trial was conducted in the two NICUs from September, 2001 to November, 2004. All mothers and fathers 18 years of age and older who could read and speak English, who had not had another infant admitted to the NICU, and whose infants met the following criteria were eligible for participation:

- gestational age of 26 to 34 weeks inclusive,
- birth-weight of less than 2500 grams and appropriate for gestational age,
- anticipated survival,
- singleton birth,
- no severe handicapping conditions including Grade III or IV intraventricular hemorrhage (IVH), and born at the study sites.

The final sample was comprised of 260 families, including 258 mothers (147 in the COPE group and 113 in the comparison group) and 154 fathers/significant others (81 in the COPE group and 73 in the comparison group). A randomized controlled trial (RCT) was conducted in which subjects at each of the two study sites were randomly assigned to receive either the COPE program or a comparison intervention program.

COPE (Creating Opportunities for Parent Empowerment) is a 4-phase educational-behavioral intervention program. Each phase provides parents with information on:

- the appearance and behavioral characteristics of premature infants [infant behavior information (IBI)] and how parents can participate in their infants' care, meet their infants' needs, enhance quality of interaction with their infant, and facilitate their infants' development [parent role information (PRI)];
- activities that assist parents in implementing the experimental information, such as recognizing their infants' alert states and stress cues, and identifying special characteristics of their infants.

In order for COPE to achieve widespread diffusion without intensive staff training and time through person-to-person interventions, the intervention package included audio tapes, written information, and prescribed workbook activities so that it could be easily reproduced and administered to all parents of preterms in NICUs at low cost.

Phase I of the COPE program occurred within 2 to 4 days after the infants' admission to the NICU; Phase II occurred 2 to 4 days after the



*While her preterm baby Sophia sleeps in a NICU isolette, mother Jennifer Theis reviews COPE activities with ASU Dean Bernadette Melnyk.*

first intervention; and Phase III was delivered one to 4 days prior to the infants' discharge from the NICU. Phase IV was provided to the parents one week after their infants were discharged from the hospital.

In order to control for time and attention, a comparison intervention program was implemented. The comparison program consisted of a series of audio tapes and written information delivered at the same times as the four phases of the COPE program. The first two tapes of the comparison program provided information about hospital services, the third contained discharge information given to all parents, and the fourth had information regarding immunizations.

## FINDINGS

The 258 mothers ranged in age from 18-43 with an average of 27 years. The racial and ethnic composition of the mothers included: 174 (67.4 percent) White, not Hispanic origin; 58 (22.5 percent) African American, not Hispanic origin; and 26 (10.1 percent) other

## Length of Stay (LOS)

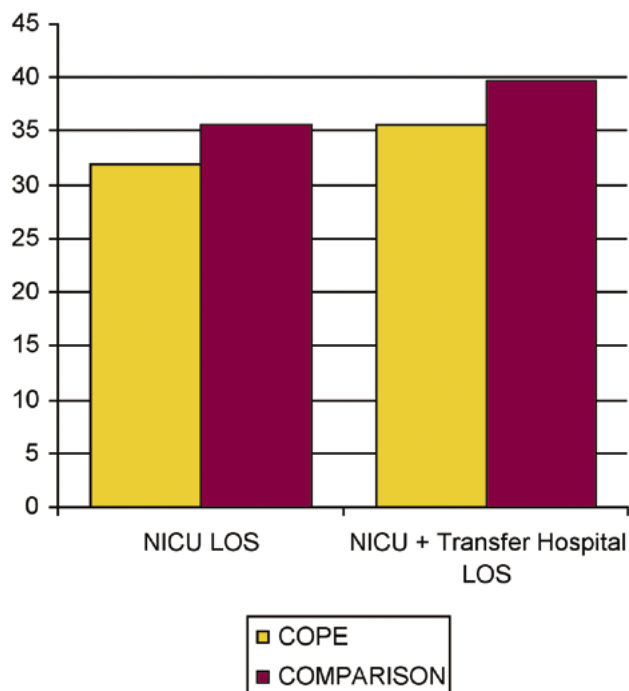


Figure 1: COPE infants had a significantly four day shorter length of stay; eight days for infants less than 1500 grams.

categories (10 Hispanic, 8 Asian, 1 American Indian, and 7 more than one race). The majority of mothers completed at least high school. Household income for families was less than \$20,001 for 82 (31.5 percent), between \$20,001 and \$40,000 for 52 (20.2 percent), greater than \$40,000 for 103 (39.6 percent), and 23 (8.8 percent) families did not report their household income. Eighty six of the mothers (33.3 percent) reported being on public assistance. One hundred and thirty eight (53.4 percent) of the mothers were married, 98 (38.0 percent) had never been married, 11 (4.3 percent) reported some other status (divorced or separated), and 11 (4.3 percent) did not report their status.

The ages of the 155 fathers or significant others ranged from 18-49 with an average of 30 years. The racial and ethnic composition of the fathers was: 115 (76.2 percent) White, not Hispanic origin; 23 (15.2 percent) African American; and 13 (8.6 percent) other (5 Hispanic, 4 Asian, 1 American Indian, and 3 more than one race). The majority of fathers (83.4 percent) completed at least high school. Ninety six (63.6 percent) of the fathers were married, 39 (25.8 percent) had never been married, 7 (3.2 percent) reported some other status (divorced or separated), and 9 (6.0 percent) did not report their status.

The mean gestational age of the premature infants was 31.3 weeks. The mean birth-weight was 1650 grams with 102 (39.2 percent) infants weighing less than 1500 grams, 84 (32.3 percent) infants in the 1500-1999 gram range, and 74 (28.5 percent) infants weighing 2000 or more grams. One hundred and twenty six (48.5 percent) of the infants were males and 134 (51.5 percent) were females. Mean discharge weight from NICU was 2150.3 grams. Total LOS in the NICU averaged 35.2 days with 61 of the infants (24.3 percent) transferred to another

hospital before discharge to home.

Nearly all of the parents reported that the COPE information and activities were helpful. Parents in the comparison group also stated that the information they received was helpful and that they were comfortable with the information.

During the NICU hospitalization, COPE mothers reported significantly less parental stress in the NICU than did comparison group mothers, specifically related to their general NICU stress and their infants' behaviors. Within 2 to 4 days after the Phase I intervention in the NICU, both COPE mothers and fathers reported significantly higher parental beliefs about their role and what characteristics and behaviors to expect from their premature infants than did comparison mothers and fathers. COPE mothers and fathers continued to report significantly higher parental beliefs prior to their infant's discharge from the NICU than did comparison mothers and fathers.

COPE parents (both mothers and fathers) were rated by trained blinded observers as having more positive parenting interactions with their preterm infants in the NICU on face-to-face interaction with their infants when in the quiet alert state. COPE fathers also were more involved in their infants' care and more sensitive to their needs in the NICU than comparison fathers, as rated by blinded staff RNs assigned to the infants' care.

At two months infant corrected age, COPE mothers reported significantly less state anxiety and depressive symptoms than comparison mothers. There were no differences found for fathers' anxiety or depressive symptoms after NICU discharge.

The total NICU infant LOS for the COPE group was 31.9 days or 3.8 days shorter than the length of stay for the comparison group's 35.7 days. In addition, the total length of hospital stay, including days spent in transfer hospitals, was 35.6 days, or 4.0 days shorter for COPE versus comparison infants' 39.6 days. For infants less than 1500 grams, the COPE group had an 8.3 day shorter length of stay than comparison group infants.

This is believed to be the first randomized clinical trial to demonstrate that a reproducible theory-based intervention with parents of premature infants that commences early in the NICU stay results in:

- less parental stress in the NICU,
- more positive parent-infant interactions in the NICU,
- less parental anxiety and depressive symptoms following hospitalization, and
- a reduced length of stay for preterms.

Because mothers and fathers who received the COPE program also reported stronger beliefs in their ability to understand their preterm infants' behaviors and cues as well as how to care for and relate to their infants, they interacted with them in a more developmentally sensitive manner versus parents in the comparison program. Launching of this positive parent-infant interactional trajectory shortly after admission

*Parents of preterms experience high stress levels and feelings of helplessness in the NICU. They often are uncertain about their role and lack adequate knowledge of how to parent and interact with their infants during the hospital stay. Parents typically develop misperceptions of their infants and have difficulty interacting with them in a developmentally sensitive manner. These negative parental-infant interactions often lead to adverse parent outcomes following hospitalization, such as depression, anxiety disorders, and other dysfunctional parenting patterns.*

in the NICU is critical in that prior studies have indicated that early interaction patterns between parents and infants in the NICU are likely to remain consistent over time.

In order to further understand the shortened LOS for COPE infants, discussions were held with unit based neonatal healthcare teams involved in discharge planning of all NICU babies. These teams indicated that criteria for discharge not only includes that the preterm is physiologically stable, but that the parents are ready to assume care for their infants. As a result of stronger beliefs/confidence and participation in their infants' care, COPE parents may have been perceived by staff to be ready and able to take their infants home at an earlier gestational age than comparison parents.

The COPE group's shortened hospital stay resulted in decreased hospital costs of \$5,000 per infant (4 days x \$1,250/day) — a substantial cost savings to an already stressed national healthcare system. If this cost (i.e., \$5,000) is multiplied by 480,000 LBW premature infants born every year in the U.S., it would result in a \$2.4 billion cost-savings for the national healthcare system.

At two months following hospitalization, COPE mothers reported significantly fewer depressive and anxiety symptoms than comparison mothers. This finding may be related to the fact that the COPE mothers had stronger beliefs/confidence about their infants' characteristics and behaviors as well as how to interact and care for them as a result of the information and activities in the experimental program. The research team is continuing to follow these children and their parents to determine if these lower patterns of depressive and anxiety symptoms will continue longitudinally over time through 3 years age or escalate as developmental changes occur and lags in infant development are discovered.

Interventions, such as the COPE program, targeted to lessen depressive symptoms are especially important in that depressed mothers have been found to be less responsive, affectionate, and positive during interactions with their infants which leads to later

adverse child outcomes. Specifically, maternal depression has been empirically linked with family violence, marital discord, impaired cognitive development, child abuse and neglect, and childhood mental health and behavior disorders. Despite the high incidence of maternal depression in women with premature infants, these women rarely seek professional assistance for their condition, often unaware of their symptoms or minimizing them. In summary, the COPE program lessened parent negative outcomes and reduced NICU length of stay. The research team's goal now is to promote standard implementation of COPE in every NICU throughout the country.

### **GOING FORWARD: A Dissemination Study**

This summer, Dr. Melnyk, Jackie McGrath, PhD, RN, NNP of Virginia Commonwealth University, and Tracey Bullock, a developmental specialist in the NICU at Phoenix Children's Hospital of Phoenix received competitive funding from Phoenix Children's Leadership Circle grants to conduct an effectiveness study with COPE to determine how best to disseminate the program in the NICU so that all parents of premature infants receive the intervention. It is well known that it takes, on average, 17 years to translate research findings into practice. Therefore, the team is tackling this research-practice time gap by identifying barriers and facilitators to implementing COPE as well as the best strategies for consistent implementation of the program by nursing staff in order to improve outcomes for this highly vulnerable group of children and parents.

# Tackling the Obesity Epidemic in Children and Teens

*In the first National Health Examination Survey four decades ago, less than five percent of U.S. youth were overweight. The most recent survey found that the total of overweight children (greater than the 95th percentile) in the U.S. has more than tripled to 18 percent.*

Overweight youth are at risk for type II diabetes, cardiovascular disease, hypertension, orthopedic complications, and respiratory problems. Type II diabetes is now reaching epidemic proportions in these age groups.

Preschoolers who are overweight have a greater than 40 percent chance of being obese at age 25 years, and overweight adolescents have a 70 percent chance of becoming overweight or obese adults. Other adverse physical health outcomes associated with obesity include increased asthma symptoms, sleep apnea, hyperlipidemia, hypertension, liver disease, metabolic syndrome, and a shortened life-span. Additionally, overweight children and teens experience adverse mental health outcomes, including depressive and anxiety disorders as well as poor self-esteem and social skills.



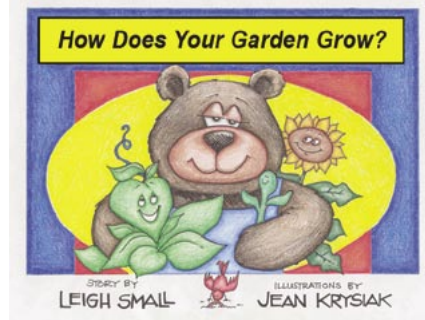
*A research assistant/child nurse works with preschool children to learn about the nutritious foods, exercise, and behavioral skills in a Play! Program class.*

Arizona has rates of adult obesity and overweight (56 percent) that are greater than the national average, having increased by 80 percent over the past 15 years. It is estimated that 24 percent of Arizona's children and teens are overweight (greater than the 95th percentile) or at risk for overweight (between the 85th and 95th percentile). Health disparities exist for childhood and adolescent obesity, with Hispanic, American Indian and African American children having higher obesity rates than Caucasian children. As a result, this unfortunate dilemma further affects the lives and health of many Arizona children and teens.

## Promoting Healthy Lifestyles in Preschool Children and Parents: The Play! Program

In order to address this growing epidemic, a team of researchers in the Center for Improving Health Outcomes in Children, Teens & Families is developing and testing theory-based interventions

to improve physical and mental health outcomes in overweight preschool children and adolescents and those at risk for overweight. One research team, led by Leigh Small, PhD, RN, CPNP, has conducted two pilot studies testing a program focused on developing healthy lifestyles, now called the **PLAY! (Parents Lead Active Youth) Program**, with preschool children who are overweight or at risk for overweight in daycare settings with their parents. Guided by the information-motivation-behavior skills theory, the program guides preschoolers and their parents regarding healthy nutrition and activity behaviors, and cognitive behavioral skills that lead to a healthy lifestyle.



*The PLAY! Program Guide uses "Benton" and his friends in the garden to teach preschoolers good nutrition, exercise, and behavior skills to lead a healthy lifestyle.*

Members of the research team include Bernadette Melnyk, PhD, RN, CPNP, FAAN, FNAP; Mary Mays, PhD, of the ASU College of Nursing & Healthcare Innovation; Dr. Catrine Tudor-Locke, associate professor, ASU Exercise and Wellness; Dr. Jeffery Hampl, associate professor, ASU Department of Nutrition; Dr. Diane Morrison-Beedy, PhD, RN, WHNP, FNAP, at the University of Rochester; and Anne Strasser from the Visiting Nurse Service in Rochester, NY, where the first pilot project was launched and funded by the University of Rochester Medical Center's Project Believe and the New York State Nurses Association Foundation.

## Preliminary Outcomes of Play!

Findings from these studies indicate that the knowledge scores of both children and parents receiving the Play! Program increased during the study period and the parents indicated that their skills of encouraging a healthy lifestyle for their young children increased over time. Parents also reported decreased depressive symptoms and increased self-esteem throughout the study period. Furthermore, the parents reported decreased aggressive and hyperactive behaviors in their children over time. Anecdotally, parents shared that their young children were reminding them of positive healthy behaviors at times, which suggests that involvement of young children may enhance healthy family lifestyle interventions and stimulate genuine health behavior change that could affect both parents and children.

# Obesity Prevention Program Helps Middle Schools with Physical Activity and Nutrition Goals

*In Arkansas – the site of this intervention project – 38 percent of children are overweight or at-risk of becoming overweight.*

With recognition of this health problem and soaring healthcare costs, the state of Arkansas passed Act 1220 – the first legislation in the nation to address the obesity epidemic. The purpose of the legislation is to raise public awareness of this health issue and to address it through a physical activity and nutrition education program. As a result of Act 1220, every Arkansas public school student must have a body mass index (BMI) performed annually for age and gender assessment with the results reported to parents.

A School-based Obesity Prevention Project has been established by Bonnie Gance-Cleveland, PhD, RN, CPNP, associate professor and director of the Center for Improving Health Outcomes in Children, Teens & Families at the College of Nursing & Healthcare Innovation, to meet the Act 1220 mandate to help schools find an effective approach for physical activity and nutrition goals. Dr. Gance-Cleveland started this project when she was the Boyd Family Chair and director of nursing research at Arkansas Children's Hospital and associate professor at the University of Arkansas Medical Sciences College of Nursing. She is continuing as a member of the Community Focused School-based Obesity Prevention project in her research leadership position at ASU.

The goals of the first phase of the project were to pilot test a school-based obesity prevention intervention and evaluate its effectiveness. The intervention included nutrition, exercise and coping skills training and was modified from the work of Dr. Margaret Grey in adolescents at risk for type II diabetes. The intervention consists of weekly group education sessions held during one of the regular gym class times and separate physical activity sessions.

A non-diet, culturally appropriate approach was used as the nutrition education component. Middle school students also met in 30-minute group sessions once per week for 16 weeks to discuss increasing their selection of nutrient-dense foods. Overall, the project team's approach was to empower youth with knowledge about healthy foods so they would make healthier choices. The project focused on energy balance, including increasing physical exercise and decreasing sedentary activities, such as watching television and playing computer games. Exercise classes were held in school four times per week and students were encouraged to exercise on their own three times a week. As an incentive, students received pedometers to track their physical activities.

Coping skills training was added to the curriculum after the first six weeks of nutrition and exercise training. The goal was to increase teens' sense of competence and mastery by retraining coping skills and replacing them with positive styles and behavior patterns. Outcomes targeted were health behaviors, BMI, and psychosocial well being of middle school students. Response to the intervention was compared to youth who received the standard gym/health curriculum.

The findings from the pilot project indicated the intervention and evaluation were feasible and the intervention was well received by



*Middle School students in Arkansas discuss nutrition as part of the School-based Obesity Prevention Project.*

students and teachers. However, significant differences in outcomes were not achieved.

## Next Phase Activities

Additional funding was obtained from the Blue and You Foundation of Arkansas to revise and retest the curriculum. A community-based participatory research (CBPR) method was selected to facilitate appropriate cultural changes and facilitate the recruitment of subjects for a more comprehensive evaluation of the revised curriculum. Phase two of the project began with nine focus group sessions in April – three with teachers, two with parents, and four with middle school students – to learn about their experience with the nutrition and exercise curriculum and trying to implement the behavior changes that they were taught.

Data analysis revealed the following themes: education needs and communication of information with school, parent, teacher and child; adolescent developmental issues; environmental issues such as deficits in availability of exercise, quality of foods, cafeteria management, parent and teacher role modeling; and ethnic disparities in nutrition and exercise opportunities.

The curriculum was revised based upon the focus group findings and is being retested this fall. The community-based participatory method has increased recruitment to over 300 youth for the second phase of the study. Outcomes to be targeted are health behaviors, BMI, and psychosocial well being of middle school students.

Findings from the community preferences for nutrition, exercise, and physical activity components of the intervention and pilot testing outcomes will be shared with educators and school health personnel statewide this year.

Project members will work closely with the school community, including teachers, youth and parents to insure the creation of a statewide curriculum that is feasible, culturally sensitive, and sustainable after the pilot testing is completed.

## Promoting Mental and Physical Health of High-Risk Adolescents: The COPE/Healthy Lifestyles TEEN Program

*The COPE (Creating Opportunities for Personal Empowerment program)/ Healthy TEEN (Thinking-Emotions-Exercise-Nutrition) Program is comprised of nine, 50 to 60 minute sessions that are delivered to high school students, either as a group after school-based intervention or within the context of their health classes.*

Another research team led by Dr. Bernadette Melnyk, with colleagues Dr. Leigh Small (Assistant Professor of Nursing at ASU), Dr. Mary Mays (Associate Professor at ASU), Diana Jacobson, MS, RN, CPNP (doctoral student, ASU), Stephanie Van Blankenstein, MS, RN, FNP (doctoral student, ASU), and Judith O'Haver, MS, RN, FNP (doctoral student, University of Arizona) and faculty from the University of Rochester, including Dr. Dianne Morrison-Beedy, Dr. Hugh Crean, and Dr. Richard Kreipe, as well as Anne Strasser from the Rochester Visiting Nurse Service, has been developing and testing a theory-based cognitive-behavioral skills building intervention program with overweight adolescents and teens at risk for overweight in school-based settings.

The first two pilot studies using this intervention, funded by the University of Rochester Medical Center (Dr. Melnyk's prior affiliation), were conducted with 23 overweight teens in Rochester, New York. The Phase One study used a pre-experimental design with one group of 11 urban adolescents. The Phase Two study was conducted with 12 adolescents using a randomized controlled pilot trial. Experimental group teens received a nine-week, 15 session cognitive-behavioral skills building intervention program that also included physical activity (i.e., COPE) while the comparison group teens received an attention control safety program. Weight change and BMI were the key outcome variables. Findings indicated that the COPE teens experienced a significantly greater reduction in weight and BMI than teens in the

control group, who gained weight over time. Furthermore, in an analysis of the baseline data on these 23 adolescents, the teens with higher state and trait anxiety as well as depressive symptoms had fewer healthy lifestyle beliefs. Teens with higher self-esteem had stronger beliefs about their ability to engage in a healthy lifestyle. Stronger beliefs about the ability to engage in healthy lifestyles

were related to healthier living attitudes and healthier lifestyle choices. Teens who perceived healthy lifestyles as more difficult had less healthy attitudes and reported fewer healthier choices and behaviors. Therefore, including a strong cognitive behavior skills building component into clinical interventions with overweight teens may be key in boosting their beliefs/confidence about being able to engage in healthy behaviors and lessening their perceived difficulty in performing them, which should result in healthier choices and lifestyle behaviors.

Most recently, the COPE/Healthy Lifestyles TEEN intervention was piloted with 19 Hispanic adolescents in an urban high school in Phoenix. Preliminary analysis indicates that teens who received COPE, in comparison to teens who received a comparison intervention program, had less depressive and anxiety symptoms over time as well as a greater commitment to making healthier choices. Further analysis is being conducted on other outcomes of the study. The research team's next step in this program of research is testing the efficacy of the COPE program in the context of a full-scale randomized controlled trial with a much larger sample of adolescents.



*Teens with higher self-esteem had stronger beliefs about their ability to engage in a healthy lifestyle.*

## Personalizing Exercise for Adolescents with Diabetes

*Obesity-related chronic disorders such as cardiovascular disease and type II diabetes were once thought to be exclusive to adult populations. However, with the more than tripling in the number of overweight youth over the last three decades, these disorders have become more prevalent in the pediatric setting.*

According to a recent nationally representative study, nearly 90 percent of overweight youth exhibit at least one risk factor for cardiovascular disease, such as elevated blood pressure or low HDL-cholesterol. Couple this with the increased frequency by which pediatric endocrinologists are diagnosing type II diabetes in children and adolescents, and the healthcare system in America is in for a dramatic increase in the economic burden of obesity-related costs.

### Decline in Youth Physical Activity

A major factor contributing to the increases in obesity and its corresponding co-morbidities in youth is the decline in physical activity observed in this age group. To this end, Dr. Melissa Faulkner, DSN, RN, professor and associate dean for research in the College of Nursing & Healthcare Innovation, has recently secured funding for a R21 study from the National Institute of Nursing Research to establish a feasible exercise strategy for youth with diabetes. Dr. Faulkner and colleagues plan to enroll 40 adolescents with type I or type II diabetes into a 16-week study, which includes a culturally focused personalized exercise prescription (PEP), combined with continued support from research staff. The hope is that incorporating a personalized program based upon participants' preferences in conjunction with encouragement from family and research staff, will promote the otherwise sedentary adolescents to adhere to an exercise program and potentially decrease their long-term cardiovascular disease risk. Ultimately, the program's goal is to foster a lifelong responsibility for an active lifestyle with an improvement in the overall quality of life of the participants from a physiological as well as psychological standpoint.

The project is largely based upon previous work by Dr. Faulkner which found that, compared to type I diabetics; adolescents with type II diabetes were heavier and had fewer positive beliefs about exercise. However, regardless of diabetes classification (both type I and type II), adolescents who performed the least amount of physical activity and had the highest levels of body fat exhibited the lowest levels of cardiovascular fitness. Female adolescents with diabetes and those in poorer glucose control also exhibited lower levels of cardiovascular fitness. Because cardiovascular fitness is a significant determinant of cardiovascular morbidity and mortality in adults, these diabetic adolescents with the lowest fitness levels are at dramatically increased risk of chronic complications associated with their disease. It is these high risk youths that Dr. Faulkner and colleagues hope to target for the proposed personalized exercise intervention.

### Interdisciplinary Team Recruited

Dr. Faulkner has established an interdisciplinary team of investigators to help conduct the project. To assist with the exercise testing and prescription component of the project, Dr. Faulkner recruited Gabriel Shaibi, PhD, PT, a postdoctoral research fellow



*Youth who take responsibility for an active lifestyle can potentially decrease their long-term risk for diabetes and cardiovascular conditions.*

in the college with a background in exercise physiology. Dr. Shaibi has extensive experience in fitness testing and exercise prescription in overweight youth. His research interests encompass the pathophysiology of insulin resistance in overweight populations. Also part of the team from the College of Nursing & Healthcare Innovation is Mary Mays, PhD, who has a background in behavioral psychology with expertise in applied behavioral and clinical research. Dr. Mays will serve as the biostatistician and will direct the statistical analysis and data management of the project. In addition to faculty in the College of Nursing & Healthcare Innovation, Dr. Faulkner will be collaborating with faculty members from various colleges and departments including Kinesiology, Exercise and Wellness, Family and Human Development, and Nutrition, as well as with clinical partners at Phoenix Children's Hospital and Scottsdale Healthcare Endocrinology Institute.

## Surviving Katrina and Its Aftermath

*Media attention on the aftermath of Hurricane Katrina continues unabated even after its first anniversary. Seemingly no aspect of the tragedy has gone unnoticed. However, an ASU interdisciplinary team is breaking new ground in a comparative study of how two vulnerable minority ethnic populations were impacted physically and psychologically and what can be done to improve outcomes in future catastrophes.*



*The Katrina Aftermath research study team's diversity complements its transdisciplinary structure. The team includes from the left, Hanh Nguyen, Dr. Angela Chia-Chen Chen (Principal Investigator), Dr. Wei Li (Principal Investigator), Dr. Verna Keith, and Syed Hussaini. Other members not available for the photo are Dr. Christopher Airriess of Ball State University and Drs. Karen Leong and Karen Adams of ASU.*

“Surviving Katrina and its Aftermath: A Comparative Analysis of Community Mobilization and Access to Emergency Relief by Vietnamese Americans and African Americans in an Eastern New Orleans Suburb” is funded by the National Science Foundation. Angela Chia-Chen Chen, PhD, RN, Psych/NP and assistant professor of the College of Nursing & Healthcare Innovation, Dr. Wei Li, associate professor of the ASU Asian Pacific American Studies and School of Geographical Sciences (Visiting Fulbright Research Chair in Ethnicity and Multicultural Citizenship at Queen’s University, Canada, 2006-2007), and Dr. Christopher Airriess, professor of geography at Ball State University are principal investigators for the 20-month study.

Co-principal investigators include Dr. Karen Leong, ASU Asian Pacific American Study Program and Woman Studies, Dr. Verna Keith, formerly of ASU Sociology, and Dr. Karen Adams of the ASU Southeast Asian Program.

“There is an urgent need to analyze the spatial, socio-economic, and health consequences of Hurricane Katrina and its aftermath to

help prepare emergency relief and health services to respond to the needs of most vulnerable segments of our society,” Dr. Chen said. “As a mental healthcare provider and researcher, I am very concerned about mental health issues of our study population – those who are economically marginalized, racially marked, spatially segregated and linguistically isolated.”

### Transdisciplinary Collaboration

“As transdisciplinary collaboration among Nursing, Geography, Sociology, Ethnic Studies, History, and Linguistics, the Katrina project presents great opportunities and unprecedented challenges in a multi-site, multi-campus setting,” said Dr. Li. “While we researchers come and go, the victims continue to suffer and to struggle to rebuild a life a year after Katrina, regardless of where they reside now. I hope studies like ours can help their voices to be heard, promote more effective and culturally sensitive public policies in disaster preparation, evacuation,



Victims of Hurricane Katrina were airlifted into New Orleans International Airport via U.S. military transport. Search and rescue crews were bringing in wave after wave of evacuees. Emergency medical crews were on hand to provide care to those with special needs. U.S. Air Force photo by Staff Sgt. Jacob N. Bailey © The United States Army.

and rebuilding process toward a more compassionate and just society.”

The research study team wrote the grant application in nine days soon after the hurricane and received notification that the grant was approved by the NSF in October 2005. The team went right to work in an easternmost community of New Orleans that boasted an almost equal distribution of Vietnamese Americans and African Americans. The team was onsite in New Orleans preparing for the first phase of data collection in early December 2005 and have since conducted four follow-up fieldwork visits to the city and to Houston where many Katrina survivors currently reside. Faced with the challenge of the mass evacuation, the team approached potential study participants through different federal and non-profit service organizations, community leaders and residents.

## Study Purposes and Methods

The interdisciplinary team used a mixed-method approach to understand the spatial, socioeconomic, and physical and psychological consequences of Hurricane Katrina and its aftermath on the most vulnerable segments of our society. A convenience sample of 145 Katrina survivors who lived in the neighborhood prior to Katrina was recruited beginning in December 2005. All study materials were translated into Vietnamese and back-translated into English following Brislin’s (1970) model. Two expert panels consisting of researchers, clinicians, and six lay people were formed to ensure the equivalence of conceptual meaning of all written materials.

Four focus group discussions, one each among Vietnamese and African Americans in both New Orleans and Houston, were conducted to understand Katrina survivors’ evacuation experiences and factors

influencing their decision of relocation and/or rebuilding their own communities. The focus groups consisted of five key informants, including religious leaders, community leaders and emergency response team members to understand their experiences of negotiating with emergency relief services during the evacuation process and existing community networks used for relief and relocation assistance. Moreover, the research team used geographic information system (GIS) mapping and field observation to understand demographic and socioeconomic status, business patterns, and timing between the Katrina blood water rise level and evacuation of local residents based on a variety of sources.

In March 2006, the research team also conducted a focus group of college students who survived Katrina and continued their education by enrolling at ASU. The story entitled “Voices from the Storm: Katrina Evacuee Students at ASU” was just published in the *Transcultural Nursing Society of Arizona Newsletter*.

Data collection was originally to be completed in August but the research team decided to continue collecting data beyond that time to capture Katrina survivors’ well-being over a longer period. The interdisciplinary team already has made four presentations on their preliminary findings at national and international conferences with two more conference presentations planned. Furthermore, two book chapters have been accepted to disseminate the preliminary findings of the study.

The pilot phase of the Katrina Aftermath project will be completed by the end of June 2007. The team’s next step will be to seek extramural federal funding to follow up the study participants over a longer term while expanding the current scope to cover other geographic areas where Katrina survivors stay.

## Maternal Voice Studies Indicate Potential for Aiding Preterm Development

*Premature infants are at risk for developmental delays in many areas. Maryann Bozzette, PhD, RN and associate professor at the ASU College of Nursing & Healthcare Innovation, has focused her research on preterm early social development.*



*Maryann Bozzette secures monitoring devices on an infant to test the effects of the mother's voice. Photo courtesy of University of Illinois at Chicago*

Since they are hospitalized and separated from their families, premature infants do not have the same opportunities for the variety of stimulation that normally occurs within the home environment and in particular, the unique experiences that occur during the newborn period within the maternal-child relationship.

Premature infants' responses to taped maternal voice have been investigated in two studies conducted by Dr. Bozzette. The first study "Preterm Infant Responses to Taped Maternal Voice" was funded by a National Research Service Award from the National Institute of Nursing Research (NINR). This study examined physiologic and behavioral responses of healthy preterm infants during the first week of life to tape recordings of their mothers' voices. A small video camera was mounted inside their isolette, and behavioral coding was conducted to determine the infants' behavioral responses. These infants showed signs of attending to the voice and had less body movement and more regular breathing patterns during the maternal tape.

Another study, "Development of Communication in Preterm Infants," which was also funded by NINR, used video taped observations of

preterm infants and mothers on three separate occasions to examine their pattern of early communication. The infants also were compared to a group of infants born full term. This observational study used extensive behavioral coding of discrete behaviors of both infants and mothers. Premature infants in this study showed progression of communication behaviors over the first four months, but they vocalized less than the full term infants and their interactive behaviors developed at a slower rate.

A second maternal voice study was a pilot called "Physiologic Effects of Maternal Voice on Preterm Infants." This study was funded by a P30 grant from the University of Illinois in Chicago. Fifteen medically fragile infants, born between 26 and 32 weeks gestation, were examined for changes in body movement, heart rate, breathing pattern, cerebral blood flow velocities and cortisol levels. Infants served as their own controls and were studied during the first week of life for three times a day on three consecutive days. The results from this study are currently under analysis.

The information learned from these studies is contributing to the development of an intervention using maternal voice within the neonatal intensive care unit. It is hypothesized that providing a type of stimulation that infants would normally receive will offset some of the noxious stimuli from the NICU, be soothing to the infants, and help support their ongoing development. An investigation to test this hypothesis is currently being planned.

Another pilot study with premature infants using Transcranial Doppler (TCD) cerebral blood flow measurements is planned to describe patterns of arterial velocities prior to birth of a preterm infant through the first two weeks of delivery. This study is designed to establish reliability of cerebral blood flow (CBF) measures using Transcranial Doppler and to describe the hemodynamic changes that occur from the time of the pending preterm delivery, immediately after birth, at the first 12 hours of life, and 24 hours of age. Additional CBF measures will occur at seven days and at two weeks of age. Since preterm infants are vulnerable for intracranial hemorrhage and the most susceptible time for occurrence is the first two weeks after birth, TCD may be a useful tool to determine infants most at risk.

*Premature infants in this study showed progression of communication behaviors over the first four months, but they vocalized less than the full-term infants and their interactive behaviors developed at a slower rate.*

## Tracing the Impact of Stress in Abused Women and Their Newborns

*Kathryn Records, PhD, RN, associate professor, has focused her research on abuse and depression for childbearing women and their newborns. This trajectory builds upon her clinical experiences in the neonatal intensive care units and, more recently, in labor, delivery, and postpartum settings.*

Dr. Records' interest in abuse and depression began when observing the difficulty healthcare professionals have assessing these conditions. She became curious about the long-term effects for women and their children. She is a member of the Center for Improving Health Outcomes for Children, Teens & Families at the college.

Dr. Records' initial studies showed different childbearing outcomes for abused and non-abused women. In support of other research findings, abused women have more sexually transmitted diseases, higher rates of antenatal and postpartum depression, and rate their infants' temperaments as more difficult than women without lifetime or current abuse experiences. In addition, a recent study found that newborns of abused women had significantly lower oxygen saturation readings and increased heart rate variability five minutes after a stressor was provided as compared with newborns whose mothers did not have a history of abuse. Given the pervasiveness of abuse in our society, there is the potential for many women and their newborns to be affected by abuse-related stress.

This research trajectory is firmly grounded in neuro-endocrine theory. The hypothalamic pituitary adrenal axis responds to stress, such as that experienced with abuse, and produces stress arousal hormones. Numerous symptoms result from this stress response, including sleep problems, anxiety, increased heart rates, and headaches. The stress response also is associated with various illnesses, such as depression, chronic fatigue syndrome, and chronic pain. For the woman who becomes pregnant, there is evidence that her activated stress response may affect her fetus.

Data from animal models document that activation of the maternal stress response exposes the fetal hippocampus to abnormally high levels of stress hormones during critical phases of development. It is hypothesized that changes in the fetal brain may permanently alter later interactions, problem-solving, and behaviors. Identification of factors that generate the stress response and testing of interventions to counteract that response can result in long-term improvement in health states for mothers and their newborns. Before interventions can be tested, researchers and clinicians need to improve their ability to detect these abusive stress-related physiological changes.

Measurement of abuse is difficult. Currently, we rely on self-report, yet women often fear revealing abuse and may not recognize the behaviors of their partners as abusive. The result is the under-reporting of abuse. If we do not truly know how many women are affected by abuse, we cannot grasp the full extent of the deleterious health outcomes that abused women commonly experience, including high levels of stress. Biophysical measures, which do not



*Dr. Kathryn Records of ASU is improving outcomes for depressed and abused women.*

rely on self-report, hold enormous potential for determining when abuse has occurred. Current research projects continue to refine the knowledge base in this area by testing heart rate variability as a measure of abuse-related stress in mothers and their newborns. Future projects will build on data that identify the associations between lifetime and recent abuse experiences and maternal mood during pregnancy and postpartum.

Dr. Records has worked with colleagues to further our knowledge in these areas, including co-investigators at Washington State University, Washington University School of Medicine in St. Louis, the Mayo Clinic Arizona, Maricopa Integrated Health Systems, and the University of Arizona School of Medicine. She hopes that, together, their findings will ultimately better the lives of abused women and their children.

# New Research Center for Aging Addresses Need for Improved Elder Care

*With an estimated 78.2 million baby boomers approaching retirement age\*, the nation's healthcare industry is bracing itself for a surge in aging individuals looking for answers...Answers to the age-old question: how can one feel young and healthy while aging?*



of health promotion that is research-based and directly applicable to practice. The center emphasizes multidisciplinary, theory-based interventions across a variety of clinical settings targeting aging within a culturally diverse society.

“Healthy aging is defined as when an individual’s senses and cognitive abilities – physical and mental – are all working at optimum level,” says Colleen Keller, PhD, RN, FNP and CHOA director. “Our research will help Arizona and the nation’s aging community better understand how nursing interventions, from sleep disturbances to incorporating daily walking, maintain health while aging.”

The center includes College of Nursing & Healthcare Innovation faculty members, as well as faculty from the departments of psychology, sociology, communications, nutrition, and from the ASU West gerontology program. Additionally, the center consults

The research faculty at Arizona State University’s College of Nursing & Healthcare Innovation is working to find solutions to healthy aging. The college recently established the Center for Healthy Outcomes in Aging (CHOA), which is a research center focused on developing and testing interventions that promote the highest level



ASU Polytechnic Campus nursing students promote the importance of physical activity and good nutrition to healthy aging at a health fair for residents of an assisted living facility.

with a six-member board of nationally-recognized scholars and professionals. Focused research and interdisciplinary partnerships are an important aspect for the college, says Keller.

“Our college has always focused on teaching excellence, advancing the nursing profession and establishing practice clinics for students,” adds Keller. “The new paradigm is to develop research initiatives that involve strong interdisciplinary relationships with faculty, clinicians and students.”

The faculty and students involved with the center, which opened in September 2005, are looking to narrow down research findings to define specific interventions in physical activity and nutritional aspects for aging individuals in a social and cultural setting. The Center plans to disseminate these scholarly studies through publications, national seminars and professional research journals. According to Keller, the center’s goal is to improve the practice of nursing and patient care by identifying new methods for promoting healthy aging.

“As Arizona continues to grow, our center of excellence will help develop research in health promotion to address the accelerating demand for nursing leadership among faculty, clinicians and researchers in delivering culturally responsive health care to the growing population of older Arizonans,” says Keller.

For more information  
visit: <http://nursing.asu.edu/centers/aging/index.htm>

\*Source: U.S. Census Bureau

Leah Hardesty, ASU Media Relations, contributed this story.

## Hair, Hands and Oxygen Tank: The Embodiment of Older Homebound Women

*Empowerment is a familiar term in nursing, however, studying the concept from the perspective of Rogers Science of Unitary Human Beings (Rogers, 1992) has added a new twist. From this perspective, empowerment is not something the nurse bestows on the patient but rather something the nurse facilitates in the patient.*

That ‘something’ is a “process of changing oneself and one’s environment, recognizing patterns, and engaging inner resources for well-being.” Health empowerment involves a belief in one’s ability to purposefully participate in health and healthcare decisions. Identification of relationships facilitating empowerment in homebound older women may be particularly relevant as a basis for clarifying and expanding theory. The ultimate goal of Nelma Shearer, PhD, RN and assistant professor of nursing at ASU, is to refine a theory of health empowerment to guide nursing practice through her research efforts.

Several studies have been conducted by Dr. Shearer to support the existence of a process called health empowerment. The latest research study used phenomenological methodology to discover the lived experience of health empowerment in homebound older women. The study involved interviewing 14 homebound older women, aged 60 to 94 years, accessed through a home meal delivery program. The women were asked to reflect on and discuss a time when they felt able to change, improve, or participate in their health. Their experience of feeling able to change, improve, or participate in their health was a complex process. From the data emerged the themes of personal resources interwoven with an awareness of social contextual resources. Personal resources reflected the woman’s unique characteristic or pattern including self-capacity. Social contextual resources included social networks and social services which helped the women maintain connection with the present and provided tangible and emotional support. The women reinforced their potential for change through the use of these resources.

A secondary data analysis was used to build on this research in which the theme of embodiment emerged as a form of experiencing the world and making meaning through health-related changes in one’s body. Caring for body, viewing body and acknowledging changes emerged as theme clusters explaining a changing self in aging and chronic illness, particularly the role of such changes in health empowerment.

The homebound older women did not view themselves or their bodies as separate from their environment. These findings lend support to the emerging nursing theory of Health Empowerment, which emphasizes the unitary nature of human beings and the idea that health empowerment cannot function when one separates person from their significant environment. This is a key implication for nursing practice and reflects Rogers’ basic idea about the unitary nature of human beings as integral with their environment. That is, health empowerment is viewed as a relational process that emerges from the person’s recognition of their personal resources and social contextual resources. The findings also provide support for nursing practice that deliberately addresses the patient’s environment as well as the patient herself in nursing interventions and daily care-giving.

## Spirituality among Latino Populations is a Key to Healthcare

*Nursing research during the past two decades has shown that utilization of spiritual resources becomes particularly salient for families coping with chronic and life threatening illnesses, during bereavement, and in palliative care contexts.*

Numerous questionnaires have been developed for empirical research exploring how people draw upon spiritual resources during challenging life events. Yet available instruments to study spirituality have not been developed for and adequately tested among Latinos, the largest minority group in the United States.

Spirituality is an important core cultural value among Latinos that often serves as a foundation of strength in coping with life's struggles. While Latinos are not a homogenous group, there are shared historical and cultural influences among Mexican Americans and other Latino sub-groups that must be considered when studying relationships between spirituality and health/illness. Thus, it is essential that empirical measures of spirituality are grounded in and reflective of Latino cultural values and perspectives.

### Lack of Spiritual Assessment Tools

The lack of culturally based spiritual assessment tools for the study of spirituality among Latinos prompted Dr. Maureen Campesino, PhD, RN, PsyNP and assistant professor at the ASU College of Nursing & Healthcare Innovation, to develop the Latino Spiritual Perspective Scale (LSPS). Grounded within Latino/a theological perspectives, the LSPS is designed as a theoretically based, culturally and linguistically relevant instrument to explore spirituality among Latinos in the United States. Two validation studies have been completed with the LSPS. In study one (N= 95 Latina adults in the U.S. mainland and Puerto Rico), exploratory factor analysis revealed that women's relationship with "divine beings" (God, the Virgin Mary, Our Lady of Guadalupe, personal saints) significantly contributed to total scale scores. Demographic characteristics (age, income, education, generation level) had no significant influence in the scale scores, except for language (Spanish speakers had higher scores). Findings from this study and information

on development of the LSPS were published in the January 2006 issue of *Advances in Nursing Science*.

In study two (N= 247 Latino & non-Latino college students), stronger cultural identification as Latino related to higher LSPS scores. Both Catholic and non-Catholic Latinos scored significantly higher on the scale than non-Latino Catholics, indicating that the LSPS is not simply a measure of Catholicism. The factor structure found in study one was replicated. Cronbach's alpha was 0.88 and 0.90 for study one and two respectively. Confirmatory factor analysis is being conducted to further explore performance of individual scale items. In a third ongoing translation study (N= 42 Mexican American adults in South Central Texas), the Spanish version of the LSPS had a Cronbach's alpha of 0.93 and the English version was 0.94. Findings from this study revealed that single translation-back translation procedures are not sufficient to reach semantic, construct and conceptual equivalence.

### Future Plans

Dr. Campesino is preparing a grant proposal to conduct further validation testing among ill Latino populations. The research team will include Dr. Michael Belyea, ASU College of Nursing & Healthcare Innovation, Dr. Ada Maria Isasi-Díaz, Latina, theological scholar, Drew University, and Dr. Betty Ferrell, nurse scientist, City of Hope Cancer Center, Los Angeles. The goal for this research proposal is to develop a theoretically grounded and psychometrically valid measure of spiritual perspectives that will have both research and clinical utility for Latino families experiencing chronic and serious illness, including palliative care contexts.

Dr. Campesino is an affiliate faculty member with the ASU Center for the Study of Mexican & Mexican American Families and the ASU North American Center for Transborder Studies.

## Combining Culture and Nutrition for Mexican American Nursing Home Residents

*The cohort of U.S Hispanics over age 65 is expected to grow faster than any other racial or ethnic group (a 328 percent increase from 1999-2030), tripling in number until there are 13 million by 2050.*

With the growing concern in regard to health disparities, knowledge about nutrition care of 4.5 million Hispanics expected to require nursing home care is urgently needed. Although relinquishing the care of elders to nursing homes is contrary to values of *la familia*, Mexican American family roles often evolve during acculturation to mainstream society. This may mean a diminished ability to provide informal care at home, particularly for daughters who traditionally provided such care. Nursing home placement is especially painful for these families because of their profound sense of respect for elders and interdependence with kin.

We know little about the phenomenon of food and food service satisfaction in nursing home residents, but we do know that many Mexican American families continue to provide food for loved ones. "I will continue to care for my *Tía*, with patience. It's the natural cycle of life," reflects one Mexican American woman who drives every week from Phoenix to Tucson to visit her aunt in a nursing home. Exploring such feelings of obligation could uncover ways to create family-nursing home partnerships which foster culturally congruent nutrition care.

A study by Bronwynne Evans, PhD, RN and associate professor of nursing at ASU, funded by the College of Nursing & Healthcare Innovation Dean's Research Award, is evaluating the nutrition care of underserved older, Mexican American nursing home residents. Dr. Evans, a gerontological clinical specialist with expertise in cultural diversity issues, will examine the level and type of nutrition support that Mexican American families continue to provide for aging family

## Sleep Disorder Research on Mexican Americans Brings Focus to Other Health Disparities

*Carol Baldwin, PhD, RN, CHTP, AHN-BC, associate professor, is the Arizona State University College of Nursing & Healthcare Innovation's first Southwest Borderlands Scholar. Her program of research focuses on diverse populations with a variety of health problems.*

Dr. Baldwin's mixed-methods (quantitative and qualitative) research includes bio-psychosocial correlates of sleep disorders, health disparities and folk practices of Mexican American veterans, quality of life of persons with ostomies, and causes and consequences of unexplained illnesses, including chronic fatigue syndrome, fibromyalgia, multiple chemical sensitivity, and Gulf War Syndrome.

A theme that runs through all of Dr. Baldwin's research is that of sleep disorders, particularly obstructive sleep apnea (OSA: persons who stop breathing, gasp and oftentimes snore loudly during sleep). She has been a co-investigator on the 10-year long NIH NHLBI Sleep Heart Health Study (SHHS) and has published data-based articles in leading sleep and medical journals. Her SHHS studies have shown associations between OSA, insomnia and daytime sleepiness with poorer quality of life indices that are similar to persons with high blood pressure and diabetes. Dr. Baldwin and colleagues also have found differences in the way men and women report daytime sleepiness, suggesting that a diagnosis of OSA may be under-diagnosed in women with the disorder. Her study of veterans with OSA indicates that they are six times more likely to undergo coronary angiography, which highlights the public health cost of the disorder. Dr. Baldwin and colleagues also have found that persons who voluntarily restrict their sleep to six or fewer hours a night show an increased prevalence of type II diabetes, impaired glucose tolerance, and high blood pressure. The findings from these research studies have led Dr. Baldwin to an interest in the roles of obesity and

inflammation in OSA. She is planning a transdisciplinary NIH grant to study these associations.

In her Southwest Borderlands-Nursing role, Dr. Baldwin is committed to reducing health disparities of Mexican Americans who reside in Arizona and along its borders. She recently presented a poster (1 of 29 out of over 300 submitted) on health disparities of Mexican American veterans with type II diabetes at the Department of Health and Human Services Minority Health Conference. Results indicated that elevated body mass index (BMI) puts Mexican Americans at 23 percent greater risk for type II diabetes compared to 10 percent greater risk for non-Hispanic white veterans, a modifiable risk factor for Mexican Americans through culturally responsive health promotion activities. These findings, in combination with the associations between short sleep time and diabetes have led Dr. Baldwin to examine sleep disorders of Spanish-speaking Mexican Americans. Little is known about sleep problems in this population due to the lack of an adequately translated and validated Spanish-language sleep measure. Dr. Baldwin is preparing to launch a study to translate and validate the SHHS questionnaire. This study would assist in determining the prevalence rates of sleep disorders in Mexican American residents, examine associations between sleep disorders, obesity, and diabetes, and provide a foundation for culturally relevant interventions to reduce sleep disorders in this population.



Bronwynne Evans

members after admission to nursing homes. She also will test a Spanish translation of an investigator-developed food satisfaction instrument, arising from a long-standing research partnership with Dr. Neva Crogan from the University of Arizona. Their instrument, the first to assess food satisfaction from the nursing home resident's perspective, was developed from domains identified in a previous qualitative study. Based on instrument results, Dr. Evans also will examine

functional status, and depression in these vulnerable residents.

This project challenges the existing paradigm of food service in nursing homes that is inattentive to Hispanic food preferences. Dr. Evans believes that this study could be used to guide development of a two-pronged intervention program for Mexican American residents. The first program component would assist Hispanic families who provide nutrition support, and the second would entail a systems intervention recognizing cultural and ethnic food preferences as a means of improving nutrition, functional status, mood state, and quality of life. Either of these interventions could effectively produce change in food satisfaction and food intake but combining the two potentially could result in far greater impact.

Broadening the scope of this inquiry, future research also will examine the experience of Mexican American families who continue to care for elders at home and intervene with them to support the continuation of informal care in preference to nursing home admission.

the relationships between food and food service satisfaction and organizational context, food intake, nutrition status, quality of life,

# Using Visual Methods to Uncover Context of Diet and Physical Activity Among Latina Women

*Colleen Keller, PhD, RN, FAHA, FNAP, professor and director of the Center for Healthy Outcomes in Aging, focuses her research on the development, implementation and evaluation of culturally relevant interventions for cardiovascular health among Hispanic women.*



ASU doctoral student Adriana Rivera (left) and a “promotora,” or lay health advisor, take a break from their work on a research study of the diet and nutrition needs of Latina women. The study was conducted at a USPHS health clinic serving south central Phoenix.

Dr. Keller’s latest study, funded by a P-20 mechanism from the National Institutes of Health and the National Institute of Nursing Research, is a collaboration among exercise, wellness and nutrition scientists, Julie Fleury, PhD, RN, FAAN, associate professor and director of the Doctor of Nursing Science Program, and Adriana Rivera, RN, MS, a doctoral nursing student at ASU.

This research utilizes two methods – photo voice in which study participants take photos of topics of research concern, and visual anthropology in which the narratives of the participants become a primary source of data that illuminates the outcome. The purpose of this research was to explore cultural, contextual and social factors that influence dietary intake and physical activity among Hispanic women, using visual methods.

Each participant was given a 24-print disposable camera. Participants were taught how to use the camera, including having a practice session to ensure familiarity with use. They were instructed to take photographs of their 1) diet intake, food preparation, purchases and eating environment for one week, including a week-end day, and 2) physical activity, including work, leisure, household and environment for one week, including a week-end day. Following the return of the cameras and development of the images, the investigators conducted individual qualitative interviews that drew upon participant photographs, choosing six to eight photographs to discuss in the interview. During the interview, the researcher used the photographs as a means to elicit the type, relevance and meaning of resources. For each photograph, participants were asked to describe: (a) the image; (b) what was happening in the photograph; and (c) why the image was important.

Participants provided additional information in follow-up interviews to discuss their photographs of physical activity and dietary intake.

All interviews were audiotaped and transcribed and the transcripts were used for data analysis. The photographs the women produced of their food intake, food preparation, and context of food consumption, such as family gatherings, were described by the women. Data included the photographs, descriptions of how and why each image was obtained, and stories about the photographs. Using this method, the context of dietary intake that considered gender, culture and ethnicity was identified. Accompanying the vocal descriptions of the participants’ narratives of the photos were probing questions concerning the development of eating and food preparation patterns from childhood.

Comfort foods and eating for self-comfort were important sources of increased caloric intake. For some women in this study, the social isolation, removal of extended family, and radical change in lifestyle contributed to overeating and making poor choices in nutrients. For others, socio-economic conditions and family financial needs necessitated working two jobs, reducing time for the preparation of nutritional foods, and increasing the reliance on fast and convenient calorie-dense foods. For a number of these women, the transition from poverty and childhood, in which readily available and abundant foods were scarce, contributed to overeating and inappropriate eating.

Participant photographs showed activities including their children’s school outings and walking their children to and from schools in neighborhoods that were safe or semi-safe. Other women photographed activities such as walking for several hours through Wal-Mart and trips to the local casino as a weekend activity. Despite doing a fair amount of some types of physical activity, these women reported rare “physical activity.” Women acknowledged that their role of caregiver and provider for the family often had a negative impact on the time available to perform structured physical activity.

Stories about the images and the ownership of both the image and the stories can be applied to research and practice in two ways. First, they elicit and produce stories of life that relate life experiences with problems (e.g., dieting and engaging in physical activity) and explore possible solutions to problems based on the participants’ perceptions. Second, they provide tangible and very rich data that assists in the investigator’s self-reflection. Investigator reflexivity strengthens relationships between the investigator and the participant and speaks to the truth in research theory, design and measurement in vulnerable and hard-to-reach groups. The images produced by Hispanic women in this study show that visual methods can be used to extend investigators’ abilities to refine theory in a culturally relevant manner. Visual methods are an extremely potent way to discover new paradigms about research in marginalized, multicultural subgroups.

# Weight Maintenance During Chemotherapy: Effect Of Aerobic and Resistance Exercise

*Survival rates from breast cancer, the second leading cause of death after lung cancer among women, have increased since 1990, according to the National Cancer Institute. The most current American Cancer Society research lists more than 2.3 million breast cancer survivors in the United States.*

As the number of breast cancer survivors increases, health promotion and disease prevention become important considerations during cancer treatment. Weight gain is common during treatment and has many negative health consequences.

Weight gain is a serious side effect of cancer treatment, placing survivors at increased risk for recurrence, death, and other co-morbidities. Exercise is a key component of successful weight loss and maintenance programs. The specific aim of a recently completed study by Dr. Anna Schwartz was to examine differences in weight change among patients receiving chemotherapy who were randomly assigned to usual care control, aerobic (AE), or resistance exercise (RE) interventions.

The five-year study was funded by a \$3.5 million grant from the National Cancer Institute and the National Institute of Nursing Research. Anna Schwartz, PhD, RN, FAAN, Scottsdale Healthcare Cancer Research Endowed Chair at the ASU College of Nursing & Healthcare Innovation, was the principal investigator. Other study team members included Kerri Winters-Stone, PhD of the Oregon Health Sciences University College of Nursing; Janet Bagley, MS, RN, AOCN; and Kathryn Cunningham, BS, both at the University of Washington School of Nursing.

Energy balance and physiology formed the scientific framework for the study. It is theorized that cancer patients become more sedentary during treatment, becoming more fatigued, weak, and gaining weight. Traditionally, cancer patients have been advised to rest and not to begin or continue an exercise program during treatment. Dr. Schwartz proposed that exercise could maintain energy balance and body weight.

## Methods/Analysis

Women newly diagnosed with early stage breast cancer (N=101) were recruited from three major cancer centers and community medical oncology practices. Subjects were followed for one year



*Anna Schwartz, Scottsdale Healthcare Cancer Research Endowed Chair at the ASU College of Nursing & Healthcare Innovation, used bike racing to counter the weight gain she experienced during cancer treatment.*

from the beginning of chemotherapy. After consent was obtained, the patients completed exercise history and physiologic measures of body composition (body weight, DEXA), aerobic capacity (12-minute walk), muscle strength (one repetition maximum). Subjects were provided instruction in these exercise programs. Exercise and body weight data were collected every three months and body composition every six months. Reliability and validity of all measures were established before the study and were high.

## Findings/Implications

Body weight was stable at 6 and 12-months for AE, approaching a significant difference between RE and the CG. Body fat was significantly less in AE than CG at 6 and 12-months. Aerobic capacity significantly improved in AE and RE compared to CG at 6 and 12-months. Regular exercise appears to help maintain body weight, reduce body fat and improve aerobic capacity, which may improve survival, reduce co-morbidities, and improve quality of life. Exercise during and following cancer treatment should become a new standard of care.

The research team has recently submitted a grant application to expand the sample size and purpose of the study. The purpose of further research on exercise as an intervention for cancer patients would be to study if exercise also improves bone density and reduces the rate of osteoporosis in women during recovery from breast cancer.

Dr. Schwartz' research career has been motivated by her personal experience as a cancer survivor. As a 24-year-old nursing student, she was diagnosed with lymphoma. Her experience drove her to focus on life, become a world-class cyclist, and then begin her research on how exercise helps cancer patients during and following cancer treatment. Her program of research has focused on how exercise reduces fatigue, improves quality of life, and now how exercise during treatment may prevent some of the bone loss observed during treatment.

## Insomnia Intervention for Breast Cancer Survivors Studied

*Approximately 51 percent of women treated for breast cancer report symptoms of insomnia, which includes the complaints of trouble falling asleep or returning to sleep after awakening.*

Women diagnosed with breast cancer have about twice the risk of developing clinically significant levels of insomnia when compared to the general population. Women who complain to their healthcare providers about sleep difficulties are often offered sleep medication, or no treatment at all.

ASU College of Nursing & Healthcare Innovation researchers Dana Epstein, PhD, RN, adjunct nursing professor and Associate Chief Nurse for Research at the Carl T. Hayden Veterans Administration Medical Center, and Shannon Dirksen, PhD, RN, associate professor, recently completed an exploratory study funded by the National Cancer Institute in which 72 breast cancer survivors, 18 years and older and three months past completion of primary treatment, received a cognitive behavioral treatment (CBT) to manage their chronic insomnia. The 10 week intervention study consisted of a two week pre-treatment period, six weeks of treatment, and a two-week post-treatment period. During the two week pre- and post-treatment periods, the participants wore wrist actigraphs and kept daily sleep diaries. The structured program included four small group classes conducted by a master's level registered nurse therapist and two individual follow-up telephone calls. The multi-component treatment targeted the factors that maintain an insomnia problem. Specifically each participant was taught to re-associate the bed and bedroom with cues for sleepiness, to restrict the amount of time spent awake in bed; and to establish good sleep practices through sleep hygiene and basic sleep education.

Study results found that CBT significantly decreased the amount of time to fall asleep and the amount of time spent awake during the night. The women also improved their sleep quality. After receiving CBT, participants reported significant decreases in depression, fatigue, anxiety, as well as improved quality of life.



*Drs. Dana Epstein (left) and Shannon Dirksen of ASU are studying insomnia among breast cancer survivors to improve sleep quality.*

Future research will focus on replicating these results in a larger sample of breast cancer survivors, following study participants after treatment ends to determine if the effects of the insomnia intervention are maintained over time, and assessing the efficacy of CBT to reduce insomnia in cancer populations in addition to breast cancer.

## ASU Nursing Professor Appointed Co-Chair of NIH-NINDS Review Group

Anne Wojner-Alexandrov, PhD, CCRN, FAAN, professor of clinical nursing at the ASU College of Nursing & Healthcare Innovation, has been appointed co-chair of a prestigious NIH review group. Wojner-Alexandrov, who also is assistant director of the Center for the Advancement of Evidence-based Practice at ASU, has been named co-chair of the Health Services Implementation Workgroup of the Stroke Progress Review Group II of the National Institute for Neurologic Disorders and Stroke (NIH-NINDS). She is the only nurse at this level position in the group.

A nursing expert at development and implementation of stroke systems of care, Dr. Wojner-Alexandrov was the original reviewer that developed the JCAHO Stroke Center Certification process. The ASU professor of nursing also is a member of the Leadership Committee of the American Stroke Association and has published extensively on physiologic stroke research and in the stroke center development area.



*Anne Wojner-Alexandrov*

# Community-based Wellness Motivation Intervention for Older Women

*Theory-based interventions that incorporate a motivational perspective for the prevention and management of chronic illness are needed for older women.*

In particular, interventions that address the lack of regular physical activity, which is a significant contributor to the burden of chronic illness in this population, are essential. The development and evaluation of theory-based interventions are limited, yet are critical to move the science forward in this specific area of inquiry.

The current work of Julie Fleury, PhD, RN, associate professor and director of the Doctor of Nursing Science Program at ASU, Nelma Shearer, PhD, RN, assistant professor of nursing, and Adriana Rivera, MS, RN, a doctoral student at the College of Nursing & Healthcare Innovation, is focused on the development of the theory-based Wellness Motivation Intervention (WMI), and evaluation of the process of intervention implementation with a sample of community-dwelling older women. The Wellness Motivation theory provided the basis for intervention development focused on promoting the initiation and maintenance of regular physical activity among community-dwelling older women.

## Community-based Sessions

A series of community-based sessions were conducted in a group format and facilitated by trained lay health advisors. Older women met weekly, over the course of 12 weeks, to walk together, and learn and share ways that they could be more active. The session content included social network support, empowering education, and motivational support. Specific motivational strategies were explored in the context of each individual's experiences, relationships, resources, and health status.

Social network support encouraged the formation of supportive relationships and interactions to support physical activity. Empowering education consisted of group identification of needs and strengths, and development of resources to foster physical activity, both for women individually, and for the group and community. Motivational support encouraged the formation and achievement of individually-valued goals, strategies for goal achievement, and self-regulation in the maintenance of goal states.

Intervention implementation has been evaluated specific to treatment fidelity, using the criterion of intervention study design, provider training, treatment delivery, treatment receipt, and enactment of treatment skills.

## Methodology

Sixteen older women participated in the study (Mean age 74.9), widowed (50 percent), retired (81 percent), and lived alone (63 percent). A detailed intervention manual was developed which provided direction for understanding content within each session, and to facilitate intervention delivery. Treatment fidelity was evaluated through audiotape of randomly selected intervention sessions, observational data, process data from intervention sessions, and data collected from participants. Comparison of WMI delivery with that intended for criterion of delivery for the WMI was met. Participants reported understanding content (receipt) (93 percent), evaluated as intervention clarity and helpfulness. Participants planned to use the information provided (enactment) (93 percent), evaluated as intent to use materials. Participants also reported an increased awareness of and resources for engaging in physical activity (87 percent).

The theory-based WMI can be implemented as intended and is ready for implementation in future randomized clinical trials with older adults.



Julie Fleury

*The Wellness Motivation theory provided the basis for intervention development focused on promoting the initiation and maintenance of regular physical activity among community-dwelling older women.*

# Scholarship of Discovery: Clinical Track Faculty Contribute to Research Innovations

*The focus of this publication is research and its positive impact on outcomes. This aspect of scholarship crosses all faculty roles. While the primary focus of clinical track faculty is excellence in teaching, that excellence is maintained through discovery, application and integration of evidence into faculty teaching strategies and evaluation of outcomes.*

The scholarship of discovery among clinical faculty has been and will continue to be a vital part of the culture at ASU College of Nursing & Healthcare Innovation. The American Association of Colleges of Nursing (AACN) states that scholarship includes activities that systematically advance the teaching, research, and practice of nursing through rigorous inquiry that

1. is significant to the profession,
2. is creative,
3. can be documented,
4. can be replicated or elaborated, and
5. can be peer-reviewed through various methods (AACN Position Statement).

Clinical track faculty are dedicated to excellence in discovery and its impact on student, faculty and patient outcomes.

## Clinical Track Studies

*Some examples of the kind of studies that clinical track faculty are conducting include:*

Tenured Associate Professor Evelyn Cesarotti, PhD, RN, is conducting a study with a research team of clinical track investigators,



Rebecca D. Peinhardt

including Clinical Associate Professors Wendee Johnson, MSN, RN and Rebecca D. Peinhardt, MSN, RN; Clinical Assistant Professors Judith Hightower, MS, M.Ed., RN, Barbara Niesel RN, MSN, and Kimberlee Sutter MSN, RN; and Faculty Associates Kimberly D. Vana, MS, APRN, BC, FNP-C, and Roxena Wotring MS, RN. This project involves partnership with Ellen Fineout-Overholt, PhD, RN, director, Center for the Advancement of Evidence-based Practice (CAEP) and ASU librarians

Leslee Shell, MLS, Science and Nursing Librarian, ASU West Campus, and Sheila Hofstetter, MLS, AHIP, Science Reference Librarian Noble Science Library at the Tempe Campus. The purpose of the study is to review the evidence to determine if dimensional analysis is the best method to teach students about medication calculation to reduce errors.

Clinical Associate Professor Sandra Davidson, MSN, RN, CNE is embarking on a qualitative study entitled, *The Lived Experience of Novice Nursing Faculty*. In this study, data will be collected via individual interviews and focus groups to answer the research question, “What is the lived experience of being a novice nurse faculty in an academic setting?”

Clinical Associate Professor Ellen Fineout-Overholt PhD, RN, Director, CAEP and Dean and Distinguished Foundation Professor in Nursing Bernadette Melnyk, PhD, RN, CPNP, NPP, FAAN, FNAP are conducting a study entitled, *Establishing the Psychometric Properties of Scales to Measure Evidence-based Practice Beliefs and Implementation*. The purpose of this study is to establish validity and reliability of the their EBP Beliefs Scale and EBP Implementation Scales for Nurses.

The CAEP faculty team, Drs. Ellen Fineout-Overholt, Alyce Schultz, Bernadette Melnyk and Anne Wojner-Alexandrov are conducting a study entitled, *EBP Mentors: Do They Make a Difference?* The purpose of this study is to determine how the role of EBP mentor influences nurse outcomes such as EBP beliefs and implementation and system outcomes, as well as nurse job satisfaction and group cohesion.

Clinical Associate Professor David P. Hrabe, PhD, RN is principal investigator (PI) of a recently completed study entitled, *Grading Efficiency and Student Response to Written Versus Audio Feedback on Writing Assignments*. The purpose of this study was to compare student satisfaction, faculty grading time, and quantity/quality of feedback using two different grading methods – traditional written feedback using Word’s reviewing function and PALcasting (Personalized Audio Learning). Results indicate that the grading time and student satisfaction did not significantly differ between the two methods but the quality and quantity of feedback was greater with PALcasting than with written feedback.



David P. Hrabe

## Community Connections for Mental Health

Clinical Associate Professor Judy Pickens, PhD, RN is PI of a study entitled, *Community Connections Initiative for People with Serious Mental Illness*, that is funded by St. Luke’s Health Initiatives. The specific purpose of this project is to develop a Community Connections



Judy Pickens

Initiative (CCI) to help facilitate community integration for individuals who are currently enrolled with a behavioral health agency in a serious mental illness program. The CCI will use a nontraditional approach to community integration by developing relationships grounded in the strengths of both individuals and the community.

Clinical Professor and Associate Director, CAEP, Alyce Schultz, PhD, RN, is part of a team of international investigators, including Cheryl

Stetler (PI), Judith Ritchie, Joanne Rycroft-Malone and Martin Charms, who are conducting a multi-method/multi-source explanatory case study funded by the Robert Wood Johnson Foundation. The case study is structured around the theoretical framework of Pettigrew and Whipp and is entitled, *Implementation of Evidence-based Practice at the Bedside: An Organizational Case Study Protocol Using the Pettigrew and Whipp Model of Strategic Change*. The purpose of the study is to better understand key contextual elements and related strategic processes in organizations that seem able to find and use evidence at multiple levels in an on-going, integrated fashion in contrast to those that do not.

Clinical Associate Professors Susan Stillwell, MSN, RN, CNE and Ellen Fineout-Overholt are conducting a study entitled, *The Use of Aesthetic Projects as an Evaluation Method for Integration of EBP into a Core Undergraduate Nursing Course*. The purpose of the multi-method study is to evaluate how students demonstrate assimilation of EBP into their creation of and responses to a final assignment focused on aesthetic knowing.

Clinical Associate Professors Barbara White, MS, RN, CNE; Susan Stillwell, MSN, RN, CNE; Karen Saewert, PhD, RN, CPHQ, CNE; Director, RN-BSN Programs; and Ellen Fineout-Overholt PhD, RN [PI] (part of The ASU College of Nursing & Healthcare Innovation EBP Working Group) are conducting a study entitled, *Integrated Evidence-Based Practice (EBP) Curriculum Influence on EBP Beliefs and Implementation*, to evaluate integration of evidence-based practice (EBP) into the curricula in the baccalaureate nursing program. This study will enable the investigators to determine how curricular/program changes foster sustainability of the use of



Susan Stillwell

evidence by baccalaureate graduates.

Clinical Associate Professor Barbara L. Wilson, MSN, RNC, campus nursing site coordinator, ASU Polytechnic Campus, is conducting a study entitled, *Exploring Maternal and Newborn Outcomes for Elective Labor Induction*, in partnership with Dr. Mary Rimsza, MD, FAAP, professor and co-director of the W.P. Carey School of Business Center for Health Information and Research Center, and Banner Desert Medical Center. The purpose of this study is to determine if there is a difference in birth outcomes for first-time mothers and newborns compared to multiparous mothers following elective induction of labor.

Barbara Wilson, together with a research team of clinical track faculty, including Clinical Assistant Professors Christopher Peluso, MSN, RN; Janice Priest, MSN, RN; and Therese Speer, MSN, RN, and Clinical Associate Professor Jonna Anderson, MSN, RN, has completed a study entitled, *Student Satisfaction and Team Development Outcomes with Pre-assigned Learning Communities*. Findings from this study indicated a) how remaining in the same learning communities (LC) with high team effectiveness throughout a clinical rotation enhances progression in the nursing program and remaining in a LC with low team effectiveness hinders progression through the program, and b) that the longer LCs are together, the more developed the team and the higher the satisfaction with the LC structure. Study findings did not support that keeping baccalaureate nursing students in the same LC throughout their clinical experiences is beneficial to the students in terms of student satisfaction or group dynamics. Evidence from open-ended comments suggests that the longer the LC remains together, the more likely the students are to recommend changing learning communities each semester and the lower the team effectiveness.

## Native American Stroke Study

Clinical Professor Anne Wojner-Alexandrov, PhD, CCRN, FAAN, professor of clinical nursing and assistant director, CAEP, is conducting a study entitled, *Native American Stroke – Prospective Cohort Study*. The purpose of this study is to examine the outcomes of stroke in Native Americans. An expected outcome of this study would be to tailor stroke prevention interventions for Native Americans.

The scholarship of discovery is essential to advancing the profession of nursing and to providing the best education to nursing students and the best care to patients (AACN 1999). As clinical track faculty forge forward with their research, mentorship is an essential element for faculty success. Mentorship of clinical faculty is provided by the Center for the Advancement of EBP, the Center for Evaluation & Educational Research in Nursing, the Center for Research & Scholarship, and individual clinical and tenure track faculty researchers. The positive, mentor-rich environment at ASU in which faculty are encouraged to strive to dream, discover, and deliver will continue to foster the scholarship of discovery by clinical track faculty, with an expected impact on student educational and faculty academic experiences, as well as patient outcomes.

## College Makes Two Major Changes at Once

The ASU College of Nursing changed more than an address with its move to the ASU Downtown Phoenix Campus in August. It also changed its name to the College of Nursing & Healthcare Innovation to emphasize its innovative programs and centers of excellence, as well as commitment to offering evidence-based solutions to improving complex healthcare systems.

Dean Bernadette Melnyk said the name change was made to more accurately reflect and promote the many new educational, research, clinical and healthcare initiatives, as well as strategic partnerships the college has launched in the past 20 months. Several additional initiatives, including a Doctor of Nursing Practice degree program, are scheduled to begin in the 2007-2008 academic year.

### Name Respects Past and Reflects Present and Future

“The change of name respects our past and reflects our present and future innovations,” Dean Melnyk said. “It also differentiates us from other colleges of nursing by demonstrating the value and commitment we place on innovation in academic programs and healthcare.”

The College of Nursing & Healthcare Innovation is one of the first three colleges to occupy the newest ASU campus in downtown Phoenix. The new accommodations provide



*Faculty and staff raise their nonalcoholic toasts to the College of Nursing & Healthcare Innovation's new name and building on the new ASU Downtown Phoenix Campus.*

the college with first-class facilities as well as expanded space to consolidate most activities into one building.

Most of the 180 nursing faculty and staff that moved to the downtown campus are located in a modernized four-story, 80,000 square-foot building in the heart of Phoenix. The college's Learning Resource Center for student clinical practice simulations on the campus is located a short walk away.

The first floor of the main nursing building also houses the ASU Health Center, which provides healthcare for more than 5,000 downtown students, faculty and staff—the first time the college is responsible for the clinical and administrative direction of campus healthcare.

College of Nursing & Healthcare Innovation faculty and staff in the Academy of Continuing Education, Nurse Educator, and RN to BSN programs will remain at an annex office in Tempe. ASU's Polytechnic and West campuses and the Mayo Clinic campus are not affected by the move.

### Second Building Planned

Construction of an adjacent second nursing building at the downtown campus is scheduled to start later this year and be completed for the 2008-2009 academic year.

“Our ambitious strategy, innovative initiatives, new name, and first-class facilities provide the infrastructure and motivation to reach our goal to become a top tier nursing college by 2010,” Dean Melnyk said. “It's the perfect combination at the perfect time for success.”



## Nursing Responsible for Health Center at New ASU Downtown Campus

For ASU students and employees at Downtown Phoenix Campus (DPC) who need assistance with an existing health problem or want to avoid illness, a nurse practitioner will be just around the corner to help. In an ASU first, students at the new DPC can receive healthcare in a new center under the clinical and administrative direction of the College of Nursing & Healthcare Innovation.

Over the years, a number of proposals for alternative methods of providing health services on campus have been studied. College of Nursing & Healthcare Innovation responsibility for the downtown campus health center is the outcome of a proposal that was initially developed by a Faculty Senate committee with representatives from Psychology, Human Health, Accountancy, Nursing, and Human Resources.

“With the ASU Health Center located in the College of Nursing & Healthcare Innovation, healthcare will be available within three to four blocks of any DPC facility,” Denise Link, director of the ASU Health Center, said. “Students from any ASU campus, as well as faculty and staff, will be able to access quality, affordable healthcare while studying or working at the downtown campus.”

The new health center initially has a staff of four healthcare providers, a medical assistant, and an administrative assistant with more staff to be added as utilization increases. The service area includes six exam rooms, a special barrier-free procedure room, two mental health consultation rooms, and space for research, ASU student education, and community education programs.

The ASU Health Center increases the number of academic nursing centers (ANC) managed by the College of Nursing & Healthcare Innovation to five – the others are in Phoenix, Tempe and Scottsdale. A fifth center on the north side of Tempe recently opened. In all five ANCs, nurse practitioners are the primary care providers.



Denise Link

Denise Link, DNS, RNP, who serves as director of the center and is a Clinical Associate Professor in the College of Nursing & Healthcare Innovation, also plans to seek contracts to provide healthcare for companies outside of ASU. “Health Center contracts with other organizations will increase the availability of healthcare to the community and expand the diversity and depth of educational experiences for ASU students from nursing and other



Dean Bernadette Melnyk administers an interdermal TB test for a student in one of the first services provided by the ASU Health Center in the College of Nursing & Healthcare Innovation. Nurse Practitioner Patricia Park (left), Medical Assistant Shannon Namingha and Health Center Director Denise Link observe.

academic programs that play a role in the healthcare delivery system.”

In addition to nursing, students from a wide variety of disciplines and departments – law, exercise and wellness, business, marketing, health administration and others – will be able to use the practice to apply classroom theory to real world situations. In this interdisciplinary learning environment, students will acquire skills in their own major and learn with students from other majors, increasing understanding and knowledge about the diverse professionals who must work together and collaborate to make a healthcare practice successful.

During the first year, the ASU Health Center will implement technology to manage the tasks to operate and maintain the healthcare practice. The NextGen™ automated practice management system for appointment scheduling, billing, referrals, and organizational information will be installed first, followed by NextGen electronic health record software. This HIPAA compliant electronic health practice system will enable clients to communicate with center staff to schedule appointments, obtain test results, update and transport health records, and perform other tasks from residence halls, homes, or workstations.

For more information about ASU Health Center services, call 602-496-0721.

*The 8,000 square-foot ASU Health Center, located on the first floor of the main nursing building at 500 N. 3rd Street, serves the healthcare needs of the downtown ASU campus starting this semester. Faculty and staff from any of the other ASU Campuses can also receive services in the new downtown health center.*

# \$1.3 Million Grant Received for Nurse Retention and Patient Care Project

*The Health Resources and Services Administration (HRSA) has awarded a \$1.3 million grant to the Arizona State University College of Nursing & Healthcare Innovation to fund a project to improve nurse retention and patient care.*



*Above: Arizona Governor Janet Napolitano. Below: David Hrabe of ASU (far right) responds to a question at a news conference in Phoenix to announce the Nurses-to-Nurses Project while (from right to left) Arizona Governor Janet Napolitano, ASU Dean Bernadette Melnyk, and Judy Schueler, chief learning officer of Abrazo Health Care, listen.*

ASU's ultimate goal of the Nurses-to-Nurses project is to implement a working model for creating and sustaining a healthy and effective nursing work environment that can be adapted by health organizations across the United States.



The ASU College of Nursing & Healthcare Innovation will partner with Abrazo Health Care (AHC) of Arizona on the five-year initiative through 2011. Abrazo Health Care employs more than 5,000 employees across Maricopa County, and is experiencing nursing shortages similar to other hospital systems in the state. Abrazo Health Care comprises the Phoenix Health Plan, serving more than 100,000 community residents.

A recent HRSA report noted that Arizona had a 21 percent vacancy rate in 2005, triple the national average. The nursing shortage in Arizona, including Phoenix, is acute because of rapid population growth.

National and local reports indicate 25 percent of new RN graduates leave their positions in one year and up to 50 percent terminate in 18 months, a major cause of the nursing shortage.

The project will employ a comprehensive career development initiative to increase retention and advance skills and competency among Abrazo RN's. David Hrabe, PhD, RN, director of the Academy of Continuing Education at the College of Nursing & Healthcare Innovation and grant project director, said more than 600 nurses, their managers, executives, and administrators will take part in the continuing education workshops presented by ASU faculty in residence at Abrazo. "We're very excited about our partnership with Abrazo," Dr. Hrabe stated. "It will be a high impact project with positive results for both nurses and patients alike."

## Nurses-to-Nurses Objectives

In addition to creating a new "Center for Professional and Clinical Excellence" based on the American Association of Critical-Care Nurses (AACN) Synergy Model, nursing practice and patient outcomes will be enhanced through a variety of activities. The center will offer on-site advisement for Abrazo nurses, encourage specialty certification, and establish a recognition program for outstanding performance. Specialty certification classes will include Medical/Surgical, Perinatal, Critical Adult Care, and Emergency Nursing.

"We are pleased to partner with the College of Nursing & Healthcare Innovation at Arizona State University in this important learning initiative," said Judy L. Schueler, PhD, chief learning officer of Abrazo Health Care. "Through this project, we will collaborate on improving the overall work environment for nurses – and subsequently improve the patient care experience. As we increase the number of new graduate nurses entering our hospitals, we know we will need the support and mentorship of our nursing experts across the system to support their ongoing professional development."



*The first preceptor education program (PEP) cohort of Abrazo Health Care nurses above has completed 17 contact hours of education provided by the ASU College of Nursing & Healthcare Innovation.*

# College of Nursing & Healthcare Innovation Partners with International Health Organization to Improve Nursing and Healthcare in the Pan Americas Through Evidence-based Practice

*Arizona State University College of Nursing & Healthcare Innovation is partnering with the Pan American Health Organization (PAHO) to improve nursing and develop the healthcare workforce in more than 40 countries in the Americas.*

As a first step toward launching the initiative, the Center for the Advancement of Evidence-based Practice (CAEP) in the ASU College of Nursing & Healthcare Innovation will conduct a half-day workshop on Evidence-Based Practice (EBP) in collaboration with the Colombia (South America) School of Nursing at the 10th Regional Research Colloquium in Buenos Aires, Argentina in November 2006.

ASU's College of Nursing & Healthcare Innovation is an international leader in Evidence-Based Practice (EBP), an approach to patient care that incorporates the use of best evidence from well-designed studies, a clinician's expertise, and patient values and preferences.

## The agreement also includes:

- development of an online training course in Spanish on EBP;
- creation of a list serve to disseminate materials and content related to EBP;
- educational and workshop opportunities for nurses and mentors for the purpose of advancing EBP in Mexico, Central and South America, and the Caribbean;
- publication of EBP guidelines and systematic reviews in Spanish to improve health outcomes in children, families, and older adults; and
- coordination of EBP initiatives with PAHO collaborating centers throughout the Americas.

The technical agreement is the result of a proposal developed by Bernadette Melnyk, Dean of ASU's College of Nursing & Healthcare Innovation, Ellen Fineout-Overholt, director of the Center for the Advancement of EBP (CAEP), Carol Baldwin, associate professor and Southwest Borderlands Scholar, and Rojann Alpers, associate professor.

Silvina Malvarez, regional advisor for human resources development, approved the agreement for PAHO at its headquarters in Washington, D.C.



*Silvina Malvarez (second from left) of the Pan American Health Organization and (from left) Dr. Carol Baldwin, Dean Bernadette Melnyk, and Dr. Ellen Fineout-Overholt of ASU discuss partnering to improve nursing and the healthcare workforce in the Americas.*

“Approval of the PAHO technical agreement brings international recognition to ASU and the emphasis our College of Nursing & Healthcare Innovation places on improving healthcare and patient outcomes through evidence-based practice,” ASU President Michael Crow said. “It exemplifies the university’s global engagement and our faculty’s commitment to the development of innovative approaches to universal health challenges.”

“Our agreement with PAHO strengthens our global initiatives, which includes our agreement to collaborate with The Nursing College of Dublin (Ireland) City University to advance EBP and research, as well as our developing international nursing education program,” Dean Melnyk said.

After the second year of the agreement, the College of Nursing & Healthcare Innovation will apply to become a World Health Organization (PAHO/WHO) Collaborating Center. There are approximately 10 such centers in the United States, each focusing on a specific area relevant to global health.

The Pan American Health Organization is an international public health agency with 100 years of experience working to improve health and living standards for the people of the Americas. It serves as the Regional Office for the Americas of the World Health Organization.

## Dean Receives Healthcare Innovator Award

*Dean Bernadette Melnyk of the ASU College of Nursing & Healthcare Innovation was named Health Care Hero Innovator of the Year at a program in Phoenix sponsored by the Business Journal of Phoenix. More than 650 persons attended the program in late August at which awards were presented in 10 healthcare categories.*

An independent panel of healthcare executives chose Dr. Melnyk from among three finalists based on her leadership in launching innovative educational, research and evidence-based practice solutions to improve healthcare. The judges also cited her community involvement.

Dr. Melnyk became dean of the college and Distinguished Foundation Professor in Nursing in January 2005 after serving as Associate Dean for Research at the University of Rochester School of Nursing.

In her first 20 months at ASU, she has implemented many new initiatives designed to make the College of Nursing & Healthcare Innovation one of the top nursing schools in the U.S. Among the accomplishments cited for Dean Melnyk's award were:

- Recruitment of 26 full-time faculty at a time of a shortage of nursing educators,
- Launch of the first dedicated Master's in Healthcare Innovation program in the nation,
- Formation of partnerships with Mayo Clinic, Banner Health, Phoenix Children's Hospital, and the Nursing College of Dublin (Ireland) City University,
- Establishment of ASU as a national leader in evidence-based practice (EBP) through the establishment of the Center for the Advancement of Evidence-based Practice that facilitated the creation of the first statewide consortium of healthcare institutions to advance EBP,
- Creation of research centers dedicated to improve health outcomes for children and teens, and older and aging adults respectively,
- Development of a research infrastructure that generated a 270 percent increase in grant applications to the federal government.

"I am honored to be chosen for the Health Care Heroes Innovator Award but the real winners are our faculty and staff," Dean Melnyk says. "One person cannot implement our ambitious strategy without the superb team with which I have been blessed."

Dean Melnyk's interest in nursing began as a high school freshman as a candy striper at a hospital in a small Pennsylvania town. Her commitment deepened at age 15 with the death of her mother, followed by the loss of a cousin, grandmother, and then her father's heart attack in a four-year span. As quoted in the event award program, "That was a very difficult period in my life and it deepened my passion and commitment to be in a position to really help other people."

'Bern,' as she prefers to be called, is no stranger to major awards. In 2003, she received the Audrey Hepburn Award from the nursing honor society Sigma Theta Tau International for substantially improving the health of children globally. She also received the Jessie M. Scott Award from the American Nurses Association in 2004 for accomplishments demonstrating the interdependence of practice, education, and research in significantly improving nursing and healthcare.

An RN as well as a Pediatric and Child-Family Psychiatric Nurse Practitioner, Dr. Melnyk founded and currently directs KySS<sup>SM</sup> (Keep your children/Yourself Safe and Secure), a national mental health promotion program for children and teens sponsored by the National Association of Pediatric Nurse Practitioners.

In addition to her demanding job as dean, Dr. Melnyk also continues to conduct her own research and mentors doctoral students and nurses committed to delivering better quality health outcomes through an evidence-based practice approach.

"I am so glad to have had the opportunity to join ASU," Dr. Melnyk states. "This is the right place at the right time to be innovative — a unique place where "if you can think it — you can do it!"



*The first cohort for the Master's in Healthcare Innovation Program gather during an immersion session. Students in the program include (left to right) Crystal Jenkins, Belinda Jaramillo, Tami Longo, Paula Hughes, Fred Kermes, Joan Llewellyn, and Les Wilson.*

## ASU Nursing has First Fulbright Scholar

*The ASU College of Nursing & Healthcare Innovation has the distinction of having its first Fulbright Scholar, Manal Al-Zadjali from Oman. She is enrolled in the Master of Science in Community Health program and will become the first masters-prepared community health nurse in her country upon graduation.*

Al-Zadjali is currently working with Gail Petersen, MS, RN and director of the Breaking the Cycle (BTC) Community Healthcare Clinic, an ASU Academic Nursing Center in downtown Phoenix. As a component of her course work, she developed a research-based intervention for obesity for the primarily Hispanic population that receives reproductive healthcare services at the center. Research on obesity is accelerating in response to its rise as a major public health crisis. It is one of the major causes of death in the United States and Oman, which impacts all racial, ethnic and socio-economic groups and can significantly contribute to a variety of chronic diseases.

More than 95 percent of BTC's clients are Hispanic, live below the federal poverty guidelines, and have no health insurance. These health disparities put them at even greater risk for chronic disease.

During the Spring 2006 semester, Al-Zadjali calculated Body Mass Index on a random sample of 10 percent of the health records of clients who accessed care at BTC in 2005. Her study found that approximately 33 percent of center clients were obese or overweight respectively. She analyzed her findings, comparing them to national, state and local statistics. Her next step will be to design an evidence-based, culturally appropriate intervention to reduce obesity in BTC's population.

The ASU College of Nursing & Healthcare Innovation's five ANCs are sites in which faculty and students can cultivate research and evidence-based interventions that will ultimately improve the health and well-being of the community. The BTC center provides clinical rotations and mentorship for more than 50 graduate students each year.

Al-Zadjali's goal is to return to Oman with an education that will enable her to develop evidence-based practice interventions that will reduce chronic disease in her country, particularly diabetes. "My career goal is to work in a profession in which I can serve people who need it the most," the student said.

Al-Zadjali graduated as the salutatorian of her class at the Muscat Nursing Institute in Oman and then received a scholarship from Oman's Ministry of Health to study for her BSN at Villanova University. Graduating with a bachelor's degree in 2002, she taught at the Oman Nursing Institute for three years after which she received a Fulbright Scholarship to obtain a master's degree in nursing. Al-Zadjali began her study at East Carolina University as a distance learning student but transferred to ASU to receive classroom and community-based experience.



*Manal Al-Zadjali (right), a citizen of Oman, is the first Fulbright Scholar to study at the ASU College of Nursing & Healthcare Innovation. She discusses a client at the ASU Breaking The Cycle Academic Nursing Center with Yesenia Ortega, nursing assistant and interpreter at the center.*

"ASU has become my favorite place because it cares about its students and their needs," the Fulbright Scholar said. "My education at ASU will improve my ability to advocate for my people in my future role with the Ministry of Health."

Al-Zadjali plans to return to Oman when she graduates in Spring 2007. She hopes to expand her role by working in Community Health to further develop the healthcare system of her country. "I would like to teach community health nursing at all levels in our nursing education system, as well as advance the role of the nurse in primary healthcare," she stated.

Manal Al-Zadjali will be the first master's prepared community health nurse when she returns to her country. She will take what she has learned at ASU back to Oman to focus her efforts on, as she states it, "Health for All."

*More than 95 percent of BTC's clients are Hispanic, live below the federal poverty guidelines, and have no health insurance. These health disparities put them at even greater risk for chronic disease.*

## Grow by Degrees: ASU/Maricopa Nursing Alliance



Cecelia Fiery

The Maricopa Community Colleges and Arizona State University, under a partnership called the Alliance, have joined forces to enhance transfer programs for students in five academic areas, including honors, interdisciplinary studies, nursing, elementary education and manufacturing technology.

In 2006, ASU and MCCC faculty, staff and administrators launched the Nursing Alliance, a student-focused transfer program which targets

Maricopa Community Colleges nursing students currently pursuing or who have previously earned an Associate in Applied Science (AAS) degree in Nursing from one of the Maricopa Community Colleges and desire to earn a Bachelor of Science in Nursing (BSN) degree from ASU.

“The Alliance is an intentional initiative between the Maricopa Community Colleges and Arizona State University to increase the number of associate and baccalaureate degrees conferred by each academic institution,” stated Kate Dillon-Hogan, District Director of Transfer and Articulation, Maricopa Community Colleges.

“Thanks to close collaboration with our MCCC nursing colleagues, we have created an Alliance that has the best interests of the students at its core,” said Mary Killeen, PhD, RN and associate dean for academic affairs. “It is a concrete step in support of their lifelong learning.”

ASU and Maricopa Community Colleges have developed a web site [www.maricopa.edu/alliance](http://www.maricopa.edu/alliance) that offers an online application to join the Alliance. The number of prospective students joining the Nursing Alliance through the site continues to grow on a daily basis. Nursing currently leads the Alliance programs in the number of individuals declaring their interest and intent to participate as follows: [honors (9), interdisciplinary studies (23), nursing (288), elementary education (192), and manufacturing technology (3)]. These results can be credited in part to the energetic and student-centric efforts of Cecelia J. Fiery, MA and assistant director of Student Services for RN Baccalaureate Program Tracks.

A Student Services Office academic advisor in the College of Nursing & Healthcare Innovation since October 2001, Fiery was promoted and reassigned in May 2006 to the position of Assistant Director of Students Services for RN Baccalaureate Programs. This newly created position, made possible in part by funding provided by ASU University College, makes possible the ability to provide dedicated, effective, and timely advising services; and meet unique advising needs of registered nurse students. “My job is to help students take the most efficient route to the BSN by being smart about their choice of courses at the community college,” states Fiery who enjoys knowing she is a part of making registered nurse student dreams to earn a BSN come true. “The rewards are tremendous when I see the Nursing Alliance students dreaming, discovering, delivering, and, best of all, sharing their dreams with each other.”

For additional information see: <http://www.maricopa.edu/alliance/nursing/> or contact Cecelia Fiery by phone 480-965-7787 or by e-mail at [Cecelia.Fiery@asu.edu](mailto:Cecelia.Fiery@asu.edu).

## ASU College of Nursing & Healthcare Innovation has new web site

### User Friendly Navigation

While the updated look of the new ASU nursing web site is impressive, the most beneficial improvements for visitors to the site are in navigation (i.e., getting from one part of the site to another). The changes, mainly the incorporation of a new universal navigation system with drop-down menus enable users to more quickly access key areas of the site such as academic programs, student resources, and the four centers of excellence. In addition, the home page of the site changed significantly. Notably, the large slide show at the top of the page dynamically changes and each “spotlight” is clickable to take the user to that key content area. The new home page also features expanded areas to present the college feature news, events, and highlights. The new Dean’s Message will change every 6 - 8 weeks and focus on current topics of major interest to nursing and healthcare. This part of the site is designed to encourage interaction with visitors and two-way communications through a mailbox.

A web user survey, conducted in spring 2006, resulted in some of the enhancements to the new site. Web developer Julie Leuthard devoted several hundred hours to building and designing the new site.

Please visit the site at [nursing.asu.edu](http://nursing.asu.edu).

# Appointments

## Assistant Professor Joins ASU

Kimberly J. Arcoleo has been named Assistant Professor in the ASU College of Nursing & Healthcare Innovation. She will serve as faculty and a member of the Center for Research and Scholarship.

Dr. Arcoleo joins ASU from the School of Nursing at the University of Rochester where she served as senior health project coordinator and senior research associate since 1989.

A graduate of the State University of New York in Buffalo with a Bachelor's in Biology, Dr. Arcoleo also earned a Master's of Public Health in 1996 and a PhD in Health Services Research in 2006 at the University of Rochester School of Medicine and Dentistry, Department of Community and Preventive Medicine.

In 1997, Arcoleo received the Health Care Research Award for Maternal and Child Health Care from the National Institute of Health Care Management (NIHCM) and in 2005 was awarded the Ellen Rudy Clore Excellence in Research Writing Award from the *Journal of Pediatric Health Care*.

Dr. Arcoleo's research interests are in maternal and child health with a focus on nurse home visiting services for first-time mothers, childhood asthma, and unintentional injuries among children. She has expertise in research survey design, development and implementation of data entry and management systems, and statistical analyses of the data.



Kimberly J. Arcoleo

Nursing in Little Rock where she served as an assistant professor for the past six years.

"Johannah Uriri-Glover is a wonderful addition to our center's research faculty," said Dr. Colleen Keller, center director. "Her research interests in issues regarding older persons and long-term care really lend depth to our research center scope."



Johannah L. Uriri-Glover

A graduate of University of the University of Arkansas for Medical Sciences College of Nursing with a BSN and Nurse Practitioner certificate, she received her Master's of Nursing Science in Gerontological Nursing and Nursing Administration from the University of Arkansas for Medical Sciences Graduate School and her PhD from the Oregon Health and Sciences University. Dr. Uriri-Glover also has a Master's of Science in Clinical Research from the Medical University of South Carolina.

Dr. Uriri-Glover received NIH funding for her research training (T32, NRSA) and a NIA fellowship from the Institute for Research Minority Training in Mental Health and Aging for her postdoctoral work in aging. She has received pilot funding from the National Institute of Nursing Research (P20 Center Grant) and most recently from the Arizona Department of Human Services to continue her work.

## Guthery Joins ASU in PNP/PsychNP Specialty Track

Ann Guthery has joined the College of Nursing & Healthcare Innovation as a clinical associate professor in the PNP/Psych Specialty Track. A Psychiatric Nurse Practitioner, she has been in private practice since 2003 and prior to that worked at Phoenix Children's Hospital. A graduate of ASU with a MS and Psych/MH NP, Guthery earned her BSN from the University of Northern Colorado. She is currently working on a PhD in Nursing at the University of Arizona.

In private practice, Guthery specializes in the treatment of children and adolescents with ADHD, depression, anxiety, OCD, bipolar D/O, autism, among other psychiatric conditions.

## ASU West Clinical Track Appointment Announced

Dr. Shirley Brydie has been appointed a clinical assistant professor in the nursing program at ASU West Campus. She most recently served as an associate faculty member at Northland Pioneer College.

Dr. Brydie has a BSN and MS in Community Health Education from New Jersey City University, and a PhD in nursing from Alabama University. She is a registered nurse in Arizona and New Jersey. Dr. Brydie also has completed post graduate studies in Holistic Stress Management, Administrative Leadership, as well as being a certified Legal Nurse Consultant. She is currently enrolled at the University of Phoenix in the Family Nurse Practitioner Program and is scheduled to graduate in 2008.

Most recently, Dr. Brydie was selected as an Ambassador to Cuba for the People to People Program.

## Gerontologist Joins ASU Center for Aging

Johannah L. Uriri-Glover has joined the ASU College of Nursing & Healthcare Innovation as an assistant professor in the Center for Healthy Outcomes in Aging.

A gerontological Clinical Nurse Specialist, Dr. Uriri-Glover joins ASU from the University of Arkansas for Medical Sciences, College of

## Kimberly Horns Named to Lead Neonatal Track

Kimberly M. Horns has been appointed a Clinical Professor and Specialty Track Coordinator for the Neonatal Nurse Practitioner Program at the ASU College of Nursing & Healthcare Innovation. She has been a neonatal nurse for 30 years and an advanced practice neonatal nurse since 1979.

Horns received a BSN from Montana State University, a MSN from University of Arizona, and her NNP clinical post-graduate degree and PhD from the University of Utah.



Kimberly M. Horns

# Appointments *contd.*

She has been clinically active throughout her career as an Outreach Coordinator, clinical nurse specialist, neonatal nurse practitioner and Program Director of the NNP programs at Wayne State University and University of Utah. She helped to start the program at the University of Washington in 1982 and consulted with the initial development of the NNP program at Arizona State University.

Formerly Chapter President for the Northwest Association of Neonatal Nursing, Horns also previously served as a board member and Chair of the Research Committee for the National Association of Neonatal Nursing. She is widely published in the milieu of the micro-environment for extremely low birth weight infants and their care-giving. This year she received a Top Ten publications citation in the *Journal of Perinatal Neonatal Nursing* for her article on “Being in-tune Caregiving.”

## Business Operations Manager Named

Hope McKiernan has been appointed Business Operations Manager of the College of Nursing & Healthcare Innovation, replacing Bonny Wakefield who retired after 22 years at ASU.



Hope McKiernan

Most recently McKiernan served as the Manager of Payroll Services for the Medical University of South Carolina in Charleston, South Carolina.

She relocated to Tucson, Arizona in 1999 and joined Pima County Community College District as Director of Financial Operations and oversaw the Bursar’s Office, Accounts Payable, and Payroll. In 2003 she was named the first Director of the Employee Service Center which combined Payroll and Employee Benefits to provide enhanced customer service to the more than 3,000 faculty, staff and student employees.

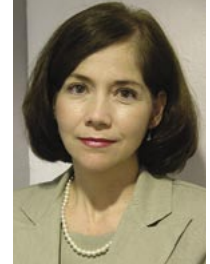
A Rhode Island native, McKiernan earned a B.S. in Business Administration from the University of Rhode Island and an MA degree in Educational Psychology – Counseling from the University of Connecticut. She worked for the State of Connecticut Department of Mental Health & Addiction Services for 19 years in a variety of capacities including, Coordinator of Vocational Rehabilitation, Assistant Director of Psychosocial Rehabilitation, Assistant Director and Director of Program Management Services, Assistant Director of the Greater Bridgeport Community Mental Health Center and Agency Budget Director.

## Second Southwest Borderlands Faculty Member Appointed

Graciela E. Silva, PhD, MPH, MT, has joined the ASU College of Nursing & Healthcare Innovation as its second Southwest Borderlands Scholar for Nursing (SWB-N). Dr. Silva is a graduate of the Autonomous University of Guadalajara with a BS in

Pharmacobiological Chemistry and has a PhD in Epidemiology and Master of Public Health from the University of Arizona.

She joins ASU from the Arizona Respiratory Center (ARC) at the University of Arizona Health Sciences Center. She was awarded a National Institutes of Health (NIH)/National Heart, Lung, and Blood Institute (NHLBI) Minority Fellowship to perform a longitudinal study of relationships between asthma as a risk factor for the development of chronic obstructive pulmonary disease.



Graciela Emilia Silva

Subsequently, Dr. Silva was awarded an NIH/NHLBI Research Supplement to Promote Diversity in Health-Related Research Postdoctoral Fellowship to investigate associations between sleep disordered breathing in pre-adolescent children and their neuro-cognitive performance.

Dr. Silva is developing an online epidemiology course that will be offered in the spring semester of 2007 under the College of Nursing & Healthcare Innovation’s Community and Public Health Practice Graduate Certificate Program. She is a co-author of the Healthy Border 2010 interim report, a report on the health of people living along the US-Mexico border region. Results from this report will be incorporated in the online course as part of the ASU SWB-N activities. Dr. Silva has also completed the Evidence-based Practice (EBP) Mentor Program in order to provide mentor support for the college’s technical agreement with the Pan American Health Organization to disseminate EBP in Spanish throughout the Americas.

She is a member of the American Thoracic Society, the American Public Health Association, and the American Society for Microbiology.

Carol Baldwin, PhD, RN, CHTP, AHN-BC, associate professor, also is a Southwest Borderlands Scholar for the College of Nursing & Healthcare Innovation.

**ASU Also Welcomes...** its first two postdoctoral students, Gabriel Shaibi and HyeA Yeom. Dr. Shaibi joins the College of Nursing & Healthcare Innovation from the University of Southern California where he completed his PhD in Biokinesiology. He is working as a research associate with Associate Dean for Research Melissa Faulkner. Dr. Yeom completed her PhD at the University of Rochester and is working with Drs. Colleen Keller and Julie Fleury in the Center for Healthy Outcomes in Aging.

The college also welcomes the following faculty associates: Angela Allen, Michelle Bolz, Freya Brewer, Jennifer Brown, Dorilee Farnsworth, Tracy Gillespie (nee Willaims), Sheri Granelli, Kristen Green (ASU Polytechnic and ASU West Campuses), Ginger Logan, Kathy Scott, Melissa Tinneland (ASU West and Banner Healthcare), and Ann Tyrell (ASU West Campus).

# Fundraising Efforts Gain Momentum

## Total Fundraising in 2005-2006: \$460,000

The College of Nursing & Healthcare Innovation received \$460,000 in private funding for Fiscal Year 2006 (July 1, 2005 – June 30, 2006). Sources of giving included individuals, foundations, corporations and other organizations, which designated their gifts primarily to the college's Second and Third Fulton Challenges, scholarships, our academic health centers and research.

## Helene Fuld Health Trust Grants \$550,000 Scholarship Award

A prestigious grant of \$550,000 was awarded for baccalaureate nursing scholarships by the Helene Fuld Health Trust, HSBC Bank USA, N.A. Trustee. Arizona State University College of Nursing & Healthcare Innovation was honored to be one of 16 schools of nursing invited by the Fuld Trust to apply for this grant-making cycle, and one of only 11 to be awarded the grant. Scholarships will be awarded for the senior year on a competitive basis to a select group of nursing students with the greatest potential for impact on the field of nursing. The recipients will be known as the Helene Fuld Healthcare Innovation Scholars. Dr. Mary Killeen, associate dean for Academic Affairs, and Dr. Karen Saewert, director, RN-BSN-MS Program, spearheaded writing the grant application.

In 1935, Dr. Leonhard Felix Fuld and his sister, Florentine, created a foundation in honor of their mother, Helene Shwab Fuld, who died in 1923. The Helene Fuld Health Trust is the nation's largest private funder devoted exclusively to nursing students and nursing education. As nursing education has evolved, so has the grant-making of the Fuld Trust. Dr. Fuld developed his interest in supporting student nurses at a time when most nursing education was given in hospital-based diploma programs. Today, the Fuld Trust continues to award grants to leading nursing organizations and academic institutions which undertake innovative programs designed to develop and expand the profession and leadership skills of nursing

students, faculty and administrators.

The grant will be paid over a three-year pledge creating a \$500,000 scholarship endowment for baccalaureate nursing students enrolled at ASU College of Nursing & Healthcare Innovation. Over the same time frame, \$50,000 will be made in installments to the school to begin financial assistance while the endowment continues building.

## BHHS Legacy Foundation Awards Scholarships to ASU West Students

Fifty-thousand dollars was awarded to the ASU West campus for RN-BSN nursing students pursuing their degree at an accelerated pace. Demonstrated community service, good academic standing and intent to serve or work in the health profession in Arizona, preferably Maricopa County, are additional requirements of the new scholarships. BHHS Legacy Foundation is an Arizona nonprofit dedicated to improving community health and access to healthcare for Arizona children, families and seniors.

## Third Fulton Challenge Met

In the spring, alumni, faculty including professors emeriti, and staff gave \$27,816, surpassing Ira Fulton's Third Challenge for the college. Funds from the Fulton Challenges enable Dean Melnyk to invest in academic excellence, increase access for students and make a positive impact on community health and clinical care. Thank you to everyone who made a charitable contribution and to our dedicated faculty and Dean Melnyk, who ran a successful phone campaign.

## New Barbara Browne Connors Scholar Named: Cristina Chiaburu

Dean Melnyk selected Cristina Chiaburu to receive the current Barbara Browne Connors Scholarship, designated for a new



Cristina Chiaburu

RN-BSN student. She has been an RN since 1999, and is currently employed at Children's Rehabilitative Services Clinics at St. Joseph's Hospital and Medical Center. Her career goal is to become a Pediatric Nurse Practitioner.

## Development Priorities

The College of Nursing & Healthcare Innovation seeks to secure \$56 million in private funding – investments of a transformative nature providing the college with stable sources of income to achieve its vision. The endowments comprise our college's principal naming opportunities below and will allow us to recruit senior faculty educators, researchers and other national healthcare leaders to educate more students; launch and implement new, innovative healthcare initiatives to address issues facing our complex healthcare system; fund research that improves healthcare and enhances patient outcomes; and to award vital scholarships and fellowships.

- College of Nursing & Healthcare Innovation – \$25 million endowment
- Institute of Community Health & Wellness, including our five Academic Health Centers – \$10 million endowment
- Center for Improving Health Outcomes in Children, Teens & Families – \$5 million endowment
- Center for Healthy Outcomes in Aging – \$5 million endowment
- Center for the Advancement of Evidence-based Practice – \$5 million endowment
- Chair in Pediatrics Research – \$3 million endowment
- Chair in Healthy Aging Research – \$3 million endowment
- Research Seed Funds – \$25,000 each
- Graduate and Doctoral Nursing Student Fellowships – \$10,000 each for a one-year fellowship or \$300,000 for a fellowship in perpetuity
- Purchase of two simulation infants for Learning Research Center – \$75,000 total

## Development *contd.*

### Support the Exciting Initiatives of the College of Nursing & Healthcare Innovation

If you wish to make a charitable contribution, please make a gift online by visiting [www.asufoundation.org](http://www.asufoundation.org) and clicking on “Invest in ASU.” Or, please make your check payable to “ASU Foundation,” and in the check’s memo line indicate your preferred designation, such as Learning Resource Center, research, or scholarships, etc. Please mail your gift to:

Laurel Van Dromme  
 Director of Development  
 ASU College of Nursing &  
 Healthcare Innovation  
 500 N. 3rd Street  
 Phoenix, AZ 85004\*

\*The address is new, now that the college has relocated to the new ASU Downtown Phoenix campus.

If you have any questions or wish to direct your gift elsewhere in the College of Nursing & Healthcare Innovation, you may contact Laurel at 602-496-0879, [laurel.vandromme@asu.edu](mailto:laurel.vandromme@asu.edu), or at the above address.

### Note

The ASU Foundation reaches out to alumni and donors via mail, professionally trained callers and directors of development. If you have any questions or comments about solicitations that you receive on behalf of ASU College of Nursing & Healthcare Innovation, please contact Laurel Van Dromme, director of development, at 602-496-0879, [laurel.vandromme@asu.edu](mailto:laurel.vandromme@asu.edu), or 500 N. 3rd Street, Phoenix, AZ 85004. All funds will be deposited with the ASU Foundation, a separate nonprofit organization that exists to support ASU.

## Alumni News

**1991: Lynn J. Hughes** completed her Master’s in Nursing at Montana State University in August 2005. She received certification as a family nurse practitioner in the fall of 2005 and works at First Med Clinic in McMinnville, OR. She is a member of the American Academy of Nurse Practitioners, the American Nurses Association, Phi Kappa Phi and Sigma Theta Tau; e-mail [lynn.hughes@triadhospitals.com](mailto:lynn.hughes@triadhospitals.com).

**1995: Dan Roper, RN, CEN, CFRN**, is Bioterrorism Program Manager for Navajo County. On May 18, 2006, he received the Mary T. Klinger Award for his commitment to aerospace medicine, including his service as a flight nurse instructor and a member of the Department of Defense Space Shuttle Support Team at White Sands. The honor was awarded at the 77th Annual Scientist Meeting of the Aerospace Medical Association; e-mail [rsqcfrn@earthlink.net](mailto:rsqcfrn@earthlink.net).

**1997: Lu Ross** has worked at Banner Thunderbird Medical Center in the Emergency Department since her graduation. She and her husband have been traveling full time since June 2006, but she will return to Banner Thunderbird during the winter; e-mail [lrlrn@hotmail.com](mailto:lrlrn@hotmail.com).

**2001: Colleen McLaughlin Hadden** works in Children’s Oncology at Dallas Children’s Hospital; e-mail [ColleenEMcLaughlin@hotmail.com](mailto:ColleenEMcLaughlin@hotmail.com).

**2003: Carolyn Salibay Barr** works as an ICU nurse at University Medical Center, Tucson, AZ; e-mail [csalibay@hotmail.com](mailto:csalibay@hotmail.com).

### In Memoriam

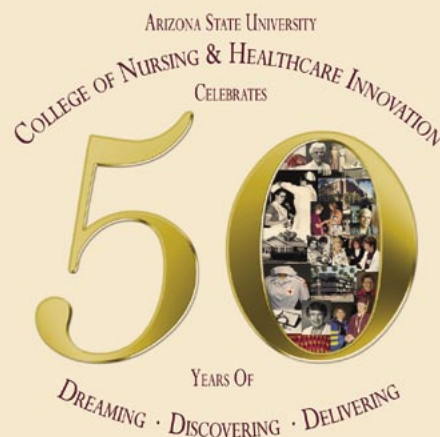
**Katherine Pearce Baxter**, a 1933 graduate of Arizona State Teachers College (former name of ASU), passed away July 30, 2006, on her 94th birthday. The Katherine Pearce Baxter Scholarship Fund has been established in her honor to support students at the College of Nursing & Healthcare Innovation.

**Pamela Sue (Beyer) Talent**, a 1983 graduate of ASU College of Business and a 1994 graduate of the ASU College of Nursing, passed away August 1, 2006.

## College to Celebrate 50 Years Of Dreaming, Discovering, And Delivering

The College of Nursing & Healthcare Innovation will celebrate Fifty Years of Dreaming, Discovering, and Delivering during the 2007-2008 academic year. Special events will include the Alumni Reception, co-sponsored by Mayo Clinic, Scottsdale Healthcare, and St. Luke’s Health Initiatives, Fall 2007; National /International Evidence-based Practice Conference in February 2008; and the 50th Anniversary Gala Dinner, Biltmore Resort, April 25, 2008.

Co-chairs of the anniversary committee are Dr. Colleen Keller, director, Center for Healthy Outcomes in Aging, and Joey Ridenour, RN, MN, executive director, Arizona State Board of Nursing. Contact person for the committee is Shannon Hodge, 602-496-0884, or [Shannon.Lunsford@asu.edu](mailto:Shannon.Lunsford@asu.edu).



### Alumni Relations

Contact:  
 Laurel Van Dromme  
 602-496-0879  
[laurel.vandromme@asu.edu](mailto:laurel.vandromme@asu.edu)

# ASU College of Nursing & Healthcare Innovation

PRESENTS

## Two Innovative Offerings

Innovation in an evidence-based practice environment is a core principle of Arizona State University College of Nursing & Healthcare Innovation's strategy. As part of the implementation of this strategy, the college is pleased to offer the following two programs that can make a difference in your professional practice and career:

### 8th Annual Evidence-Based Practice Conference Translating Research into Best Practice with Vulnerable Populations

February 22 – 23, 2007

Pointe South Mountain Resort ■ Phoenix, Arizona

Sponsored by the Center for the Advancement of Evidence-Based Practice at the ASU College of Nursing & Healthcare Innovation and Sigma Theta Tau International

Advanced practice nurses, staff nurses, physicians, and other healthcare providers are striving to deliver evidence-based care while managing demanding patient loads and attempting to keep pace with the latest research and information related to their clinical practices. The purpose of this is to assist healthcare providers in evaluating and applying critical evidence to address issues relevant to practices in targeted areas.

#### EBP Workshops – Thursday, February 22

- Foundations of Evidence-Based Practice (EBP)
- Teaching EBP for Educators
- Making EBP a Reality in Your Organization
- Using Outcomes to Guide Clinical Practice

#### EBP Conference Specialty Track Sessions and Breakouts – Friday, February 23

- Acute/Critical Care
- Aging
- Children, Teens & Families
- Psychiatric Mental Health
- EBP Implementation Strategies

\*AzNA Contact Hours Pending

\*The Arizona State University College of Nursing & Healthcare Innovation Academy for Continuing Education is an approved provider of continuing nursing education by the Arizona Nurses' Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

**Register Early! Limited Seating! Registration fee: \$385 before December 15 (fees increase after this date). Full-time student discount available.**

FOR MORE INFORMATION ON THE CONFERENCE AND HOTEL

Web: <http://nursing.asu.edu/caep/conference/index.htm>

Phone: 602-496-2237 ■ E-mail: [caep@asu.edu](mailto:caep@asu.edu)

**ASU** College of Nursing  
& Healthcare Innovation

ARIZONA STATE UNIVERSITY  
D r e a m • D i s c o v e r • D e l i v e r

### Designing, Conducting, Analyzing and Funding Intervention Studies: A Research Intensive Workshop

December 6 – 8, 2006

A 3-day workshop at the ASU Tempe Campus to prepare doctorally prepared nurses, advanced practice nurses, doctoral students, and professionals from other health disciplines who seek to acquire or enhance their knowledge and critical skills to design, conduct, analyze, and fund intervention studies.

#### Faculty

Expert faculty in theory-based intervention studies who will present at the workshop:

**Michael Belyea, PhD**

**Melissa Faulkner, DSN, RN**

**Julie Fleury, PhD, RN, FAAN, FAHA**

**Colleen Keller, PhD, RN-C, FNP**

**Mary Mays, PhD**

**Bernadette Melnyk, PhD, RN, CPNP/NPP, FAAN, FNAP**

**Diane Morrison-Beedy, PhD, RN, WHNP, FNAP**

**Anna Schwartz, PhD, FNP, FAAN**

\*AzNA-ASU-5376-06 Contact Hours: 18.6

#### APPLY TO:

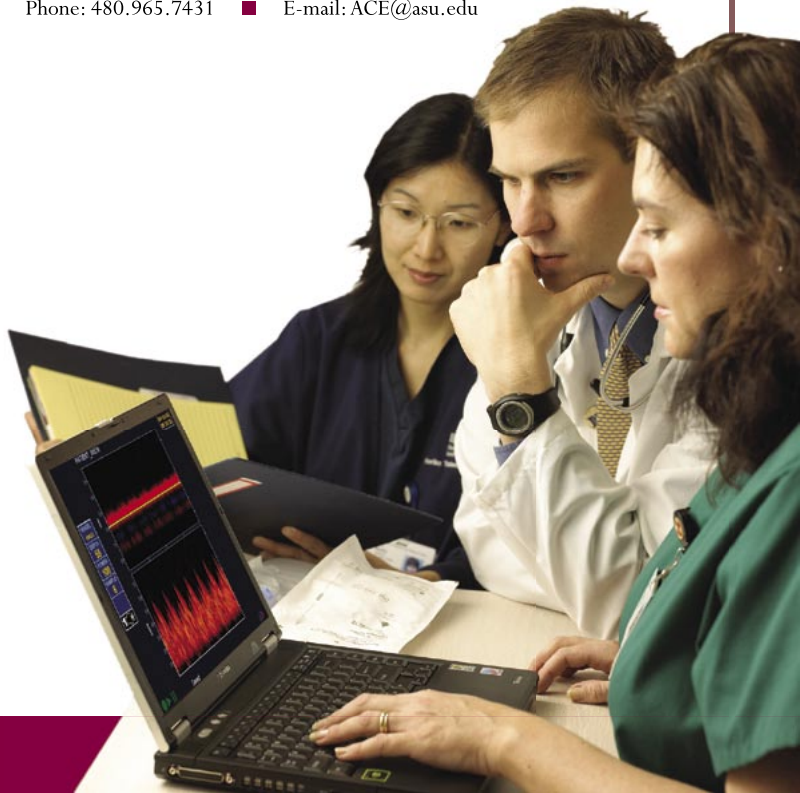
The Academy for Continuing Education

ASU College of Nursing & Healthcare Innovation

PO Box 873008 • Tempe, AZ 85287-3008

Web: <http://nursing.asu.edu/ace>

Phone: 480.965.7431 ■ E-mail: [ACE@asu.edu](mailto:ACE@asu.edu)



# ESP in LRC Expands at DPC



*At left: Junior 1 students participate in an Educational Simulation Program (ESP) clinical lab involving SimMan™, a full-body, anatomically accurate manikin with software programmed physiological vital signs. A doubling of student enrollments, shortages of clinical placements, and the increasing acuity or severity of patient health needs today are reasons for the increasing importance of ESP in the ASU College of Nursing & Healthcare Innovation curriculum.*

Clinical practice ensures that nursing students learn best practices to deliver quality care during their education. The saying “practice makes perfect” certainly applies in the Learning Resource Center since it provides expanded simulation space for College of Nursing & Healthcare Innovation students.

Manager Ruth Brooks said the move to the downtown campus enabled the LRC to double the size of its facilities to nearly 12,500 square feet. The expansion was required due to increased emphasis on simulation lab practice that is driven by doubling of student enrollments, shortage of clinical placements and the increasing acuity or severity of patient health needs today. The new LRC facility now has a fully equipped 2,500 square-foot Computer Library Commons that has additional simulation software programs for individual student use.

The new LRC facilities are located in the Mercado complex, a short walk from the Nursing & Healthcare Innovation Building. Improvements in the new downtown location compared to the former facility at the Tempe Campus include four fully mediated simulation rooms compared to one, 22 lab beds compared to 7, 12 health assessment lab beds compared to 8, and 40 percent increase

in storage space. These additions provide realistic clinical practice for 240 undergraduate and over 50 graduate students a semester at the Downtown Phoenix Campus.

A recent and important addition to the LRC is the Educational Simulation Program—ESP. Simulation Coordinator Beatrice (Bunny) Kastenbaum explained SimMan™ – a full-body, anatomically accurate manikin with software programmed physiological vital signs – provides students practice to detect serious complications and helps them gain clinical, decision-making, and communication skills through realistic patient care scenarios in a safe environment. SimMan breathes, has a blood pressure, heart and breathing sounds, has pulses and veins, and speaks. The lab coordinators on all campuses work together sharing patient care scenarios and ideas to increase the realism of practice for the students.

In spring, 2007 SimBaby™ will join SimMan to enhance pediatrics and obstetrics clinical labs in the College of Nursing & Healthcare Innovation Undergraduate curriculum.

The SimBaby manikin is small but expensive. The College of Nursing & Healthcare Innovation plans to obtain SimBaby manikins for the nursing programs at the ASU West and ASU Polytechnic campuses in the near future.

In the midst of the intense activity of the move downtown, the LRC staff found the time to have an impact on the community. Several staff have played a leadership role in forming the Arizona Simulation Network, a group of over 38 healthcare providers and educators across the state interested in advancing the use of simulation in their facilities.

**ASU** College of Nursing  
& Healthcare Innovation

ARIZONA STATE UNIVERSITY  
Dream • Discover • Deliver

500 N. 3rd Street, Phoenix, AZ 85004-0698

Non Profit Org.  
U.S. Postage  
PAID  
Arizona State  
University